SCHEME : K

Name : _____

Roll No. : _____Year : 20____ 20____

Exam Seat No. :_____

LABORATORY MANUAL FOR
WEB PAGE DESIGNING
(312004)

COMPUTER ENGINEERING GROUP

MAHARASHTRA STATE BOARD OF
TECHNICAL EDUCATION, MUMBAI
(Autonomous) (ISO 9001: 2015) (ISO/IEC 27001:2013)

VISION

To ensure that the Diploma level Technical Education constantly matches the latest requirements of technology industry and includes the all-round personal development of students including social concerns and to become globally competitive, technology led organization.

MISSION

To provide high quality technical and managerial manpower, information and consultancy services to the industry and community to enable the industry and community to face the changing technological & environmental challenges.

QUALITY POLICY

We, at MSBTE are committed to offer the best in class academic services to the students and institutes to enhance the delight of industry and society. This will be achieved through continual improvement in management practices adopted in the process of curriculum design, development, implementation, evaluation and monitoring system along with adequate faculty development programmes.

CORE VALUES

MSBTE believes in the following:

- Education industry produces live products,
- Market requirements do not wait for curriculum changes.
- Question paper is the reflector of academic standards of educational organization.
- Well designed curriculum needs effective implementation too.
- Competency based curriculum is the backbone of need based program.
- Technical skills do need support of life skills,
- Best teachers are the national assets.
- Effective teaching learning process is impossible without learning resources.

A Laboratory Manual
for

Web Page Designing

(312004)

Semester-II

(AI/ AN/ BD/ CM/ CO/ CW/ DS/ HA/ IF/ IH)

Maharashtra State

Board of Technical Education, Mumbai

(Autonomous) (ISO 9001:2015) (ISO/IEC
27001:2013)

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Mr. / Ms. …………………………………………… Roll No. ………., of Second Semester of Diploma in………………….. …………………………………… of Institute,………………………. …………………………. (Institute Code: ……………...) has completed the term work satisfactorily in course **Web Page Designing (312004)** for the academic year 20…….. to 20…….. as prescribed in the curriculum.

Place: ……………   Enrollment No:.……………
Date: ……………   Exam. Seat No: ……………

Subject Teacher   **Head of the Department**   **Principal**

Seal of

Institution

Preface

The primary focus of any engineering laboratory/field work in the technical education system is to develop the much needed industry relevant competencies and skills. With this in view, MSBTE embarked on this innovative 'K' Scheme curricula for engineering diploma programmes with outcome-based education as the focus and accordingly, relatively large amount of time is allotted for the practical work. This displays the great importance of laboratory work making each teacher, instructor and student to realize that every minute of the laboratory time need to be effectively utilized to develop these outcomes, rather than doing other mundane activities. Therefore, for the successful implementation of this outcome-based curriculum, every practical has been designed to serve as a *'vehicle'* to develop this industry identified competency in every student. The practical skills are difficult to develop through

'Chalk and duster' activity in the classroom situation. Accordingly, the 'K' scheme laboratory manual development team designed the practical to *focus* on the *outcomes*, rather than the traditional age old practice of conducting practical to 'verify the theory' (which may become a byproduct along the way).

This laboratory manual is designed to help all stakeholders, especially the students, teachers and instructors to develop in the student the pre-determined outcomes. It is expected from each student that at least a day in advance, they have to thoroughly read through the concerned practical procedure that they will do the next day and understand the minimum theoretical background associated with the practical. Every practical in this manual begins by identifying the competency, industry relevant skills, course outcomes and practical outcomes which serve as a key focal point for doing the practical. The students will then become aware about the skills they will achieve through procedure shown there and necessary precautions to be taken, which will help them to apply in solving real-world problems in their professional life.

This manual also provides guidelines to teachers and instructors to effectively facilitate student-centered lab activities through each practical exercise by arranging and managing necessary resources in order that the students follow the procedures and precautions systematically ensuring the achievement of outcomes in the students.

Website design is a broad term that encompasses a wide variety of tasks, all involved in the formation of web pages. There are essentially two types of web design approaches, which are dynamic and static design. Static web design is typically based on basic HTML code.

It is essential for diploma student to learn HTML since the task of static website design is performed

by using HTML coding. Even in dynamic websites, the task of presentation of content is handled through HTML coding. This course introduce web page design using HTML and also give emphasis on learning Cascading Style Sheets (CSS) which is a stylesheet language used for describing the presentation of a document written in a mark- up language for formatting and styling of content. This learning enables students to design static web sites and host it on Internet/Intranet.

Although best possible care has been taken to check for errors (if any) in this laboratory manual, perfection may elude us as this is the first edition of this manual. Any errors and suggestions for improvement are solicited and highly welcome.

Program Outcomes (POs) an Program Specific Outcomes (PSOs) to be achieved through the Practical's of this course

PO1. Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2.Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3.Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4.Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5.Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

PO6.Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

PO7.Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes (PSOs):

PSO1. Modern Information Technology: Use latest technology for operation and application of information.

PSO2. Information Technology Process: Maintain the information process using modern information and communication technologies.

- - -

Practical- Course Outcome matrix

Course Outcomes (COs)						
a. Use block level formatting tags to present content on web page.						
b. Use text level formatting tags to present content on web page.						
c. Apply hyper-linking on web page.						
d. Organize the content using table and frames.						
e. Apply presentation schemes on content using CSS.						
f. Publish websites on Internet or Intranet.						
Sr. No.	Title of the Practical	CO1	CO2	CO3	CO4	CO5	CO6
1	Work with basic HTML	√					
2	Use of heading tags in web page	√					
3	Work on paragraph in web page	√					
4	Work with block level tags in web page	√					
5	Work with text level tags in web page	√					
6	Implement the border properties in web page	√					
7	Use of special characters in Web page.	√					
8	Work with ordered and unordered List.		√				
9	Create a web page to use different types of list in web page.		√				
10	Work on HTML web page link.		√				
11	Use of links in web page.		√				
12	Use of links with images in web page		√				

13	Use of colors for links in web page		√				
14	Insert image on web page foreground and background with various attributes			√			
15	Insert image with hyperlink and set image width and height property of image.			√			
16	Work with different background properties in web page.			√			
17	Work on HTML table in web page				√		
18	Create table within table and insert images in tables.				√		
19	Work on row and column attributes of table.				√		
20	HTML frame in web page				√		
21	Create different elements in web page.				√		
22	Create CSS by applying style sheets.					√	
23	Work on RWD (Responsive Web Design) Templates in HTML					√	
24	Hosting of website on open source platform.						√
25	Create a web site to represent portfolio						√

Industry / Employer Expected Outcome

The aim of this course is to help the student to attain the student to attain the following industry identified outcomes through various teaching learning experiences:

'Develop and host the static website as per industry requirement.'

1. Use HTML formatting tags to present content on web page.

2. Develop web page using list and hyperlink.

3. Develop web pages using images, colors and backgrounds.

4. Design HTML forms using table and frames.

5. Apply presentation schemes on content using CSS.

6. Publish websites on Internet or Intranet.

<u>Guidelines to Teachers</u>

1. For incidental writing on the day of each practical session every student should maintain a dated logbook for the whole semester, apart from this laboratory manual, which s/he has to submit for assessment to the teacher in the next practical session.

2. Teachers should give opportunity to students for hands-on after the demonstration.

3. Assess the skill achievement of the students and COs of each unit.

4. Explain prior concepts to the students before starting of each experiment.

5. List of few sample questions for reference are given. Teachers must design more such questions so as to ensure the achievement of identified CO.

6. Teacher should ensure that the practical skill and competencies are developed in the students after the completion of the practical exercise.

7. Teacher may provide additional knowledge and skills to the students even though it's not covered in the manual but are expected from the students by the industries.

8. Teacher may suggest the students to refer additional related literature of the Technical papers/ Reference books/ Seminar proceedings, etc.

9. Teacher shall assess the performance of students continuously as per norms prescribed by MSBTE.

10. During assessment teacher is expected to ask questions to the students to tap their Achievements grading related knowledge and skills so that student can prepare while submitting record of the practical focus should be given on development of enlisted skills rather than theoretical knowledge.

Instructions for Students

1. Understand the purpose of practical and its implementation.

2. Student shall develop practical skills as expected by the Industries.

3. Listen carefully to the instructions given by the teacher about importance of relevant program outcomes, relevant course outcomes, practical significance, competency and practical skills, practical outcome and the theoretical background during the practical session.

4. Write the answers of the questions allotted by the teacher during practical session.

5. Student should develop the habit of group discussion related to the practical, so that exchange of knowledge/skills could take place.

6. Student shall attempt to develop related hands-on-skills to gain confidence.

7. Student shall refer technical magazines, websites related to the scope of the course.

8. Student should develop habit to submit the practical, exercise continuously and progressively on the scheduled dates and should get the assessment done.

9. Student should be well prepared while submitting the write up of the exercise.

10. Student should not hesitate to ask any difficulty faced during conduct of practical.

Content Page

List of Practical and Progressive Assessment Sheet

Sr. No.	Title of the Practical	Page No	Date of Performance	Date of submission	Assessment marks (50)	Dated sign. of teacher	Remarks (if any)
1	Work with basic HTML	1					
2	Use of heading tags in web page	7					
3	Work on paragraph in web page	11					
4	Work with block level tags in web page	16					
5	Work with text level tags in web page	20					
6	Implement the border properties in web page	25					
7	Use of special characters in Web page.	29					
8	Work with ordered and unordered List.	33					
9	Create a web page to use different types list in web page.	37					
10	Work on HTML web page link.	42					
11	Use of links in web page.	48					
12	Use of links with images in web page	52					
13	Use of colors for links in web page	56					
14	Insert image on web page foreground and background with various attributes	60					

15	Insert image with hyperlink and set image width and height property of image.	64						
16	Work with different background properties in web page.	68						
17	Work on HTML table in web page	73						
18	Create table within table and insert images tables.	77						
19	Work on row and column attributes of table.	84						
20	HTML frame in web page	89						
21	Create different elements in web page.	98						
22	Create CSS by applying style sheets.	106						
23	Work on RWD (Responsive Web Design) Templates in HTML	112						
24	Hosting of website on open source platform.	119						
25	Create a web site to represent portfolio	123						

Note: Marks to be transferred to Performa of (CIAAN-K format.

Practical No.1: Work with basic HTML tags

I   **Practical Significance**

A web page is a HTML document accessible on the World Wide Web (WWW).Hypertext Markup Language (HTML) is the most commonly used markup language for creating web pages. This practical is useful for creating web page using HTML, which display a sample message.

II   **Industry/ Employer Expected Outcome**

This practical is expected to develop the following skills for the industry identified Competency 'Develop and host static interactive web-site as per requirement'.

1. Create Web page by using basic HTML tags.
2. Save HTML document with proper extension on specified location.
3. Display HTML document on web browser.

III   **Course Level Learning Outcome**

Use HTML formatting tags to present content on web page.

IV   **Laboratory Learning Outcome**

Create a Web Page using structure tags to display sample message.

V   **Relevant Affective domain related Outcome(s)**

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   **Relevant Theoretical Background**

Structure HTML tag	Description
<html>…..</html>	Declares the Web page to be written in HTML.
<head>…..</head>	Delimits the page's head.
<title>…..</title>	Defines the title.
<body>…..</body>	Delimits the page's body.

HTML Attributes:

- All HTML elements have attributes.
- Attributes provide additional information about elements.
- Attributes are always specified in the start tag.

- Attributes usually come in name/value pairs like: name="value"

<body> Attributes

Attribute	Value	Description
background	URL	It determines the background image for the document. (Not supported in HTML5)
bgcolor	color	It determines the background color of the content.
text	color	It determines the color of the text in the document.

How to use attributes in <body> tag?

<body background="C:\\desktop\\a.jpeg" bgcolor="red" text="green">

Paragraph Tag:

The <p> tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening <p> and a closing </p> tag.

Line Break Tag
Whenever you use the <br> element, anything following it starts from the next line.

Centering Content
You can use <center> tag to put any content in the center of the page or any table cell.

Preserve Formatting
Sometimes, you want your text to follow the exact format of how it is written in the HTML document. In these cases, you can use the preformatted tag <pre>.

Example of Web page structure:

Create a Web page to display sample message "Web Page Designing using HTML"

Steps:

Step 1) Open any editor.

Step 2) Type following sample code in notepad.

```
<html>
<head>
<title>Horizontal Line Example</title>
</head>
<body>
```

```
        <p>This is paragraph one</p>
        <hr>
         Experiment 1
        <pre>
        Government Polytechnic Building,
        49, Kherwadi,
        Aliyawar Jung Marg,
        Bandra (E),
        Mumbai 400 051,India
        </pre>
        <p>A HTML heading or HTML h tag can be defined as a title or a subtitle
        which you want to display on the webpage.<br> it is displayed on the
        browser in the bold format and size of the text depends on the number of
        heading.</p>
        </body>
        </html>
```

Step 3) Save above program with file name "sample.html" in "C:\Users\hp\3D Objects\ Desktop \sample.html". (Student should save html file anywhere in the machine.)

Step 4) Run this program using web browser with the path specified as follows: "C:\Users\hp\3D Objects\Desktop\sample.html"

Output:

```
This is paragraph one
_____

Experiment 1

Government Polytechnic Building,
49, Kherwadi,
Aliyawar Jung Marg,
Bandra (E),
Mumbai 400 051,India

A HTML heading or HTML h tag can be defined as a title or a subtitle which you want to display on
the webpage.
it is displayed on the browser in the bold format and size of the text depends on the number of
heading.
```

VII   Exercises

1. Create a web page to display name of your college, address of college and save the page with your name.

2. Create a web page by using structure tags to display "Welcome to HTML World" and apply background color as yellow and text color as per student choice.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Required Resources

Sr.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

……………………………………………………………………………………

……………………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. State the role of browser and List names of various browsers.
2. State the use of Horizontal Rule <HR> tag with example.
3. What is the web page? State example of web pages.

[Space for Answer]

……………………………………………………………………………………

……………………………………………………………………………………

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

………………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

XIII   References / Suggestions for   further Reading Software/Learning Websites

1. https://www.tutorialspoint.com/html/html_basic_tags.htm
2. https://www.w3schools.com/html/html_basic.asp

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.2: Use of heading tags in web page.

I   Practical Significance

The HTML heading tags are used to define the headings of a page. Headings are important for highlighting the topics. Heading tags provide valuable information and specifiers about the structure of the document. Search Engines use headings for indexing the structure and organizing the content of the webpage.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified Competency 'Develop and host static interactive web-site as per requirement'.

1. Formatting HTML document using heading tags as per the requirement.

III   Course Level Learning Outcomes

Use HTML formatting tags to present content on web page.

IV   Laboratory Learning Outcome

Create a Web Page, which display a string "Maharashtra State Board of Technical Education, Mumbai" in all <h1> to <h6> header tags.

V   Relevant Affective domain related Outcome(s)

- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI   Relevant Theoretical Background

The HTML heading tag is used to define the headings of a page. There are six levels of headings defined by HTML. These 6 heading elements are h1, h2, h3, h4, h5, and h6; with h1 being the highest level and h6 being the least.

- <h1> is used for the main heading. (Biggest in size)
- <h2> is used for subheadings, if there are further sections under the subheadings then the <h3> elements are used.
- <h6> for the small heading (smallest one).

You can set the background color, text color and align of headings:

<h1 style="background-color:Blue;">Hello World</h1>

```
<h2 style="color:Green;">Hello World</h2>
```

```
<h2 align="right">Hello World</h2>
```

VII   **Exercises**

1. Write HTML Code to set the background color, text color of heading tag.
2. Create a web page to display string in center "Maharashtra Board of Technical Education, Mumbai" using all heading tags. (see the output.)

Maharastra State Board of Techncal Education, Mumbai

Maharastra State Board of Techncal Education, Mumbai

Maharastra State Board of Techncal Education, Mumbai

Maharastra State Board of Techncal Education, Mumbai

Maharastra State Board of Techncal Education, Mumbai

Maharastra State Board of Techncal Education, Mumbai

3. Create a web page for following output:
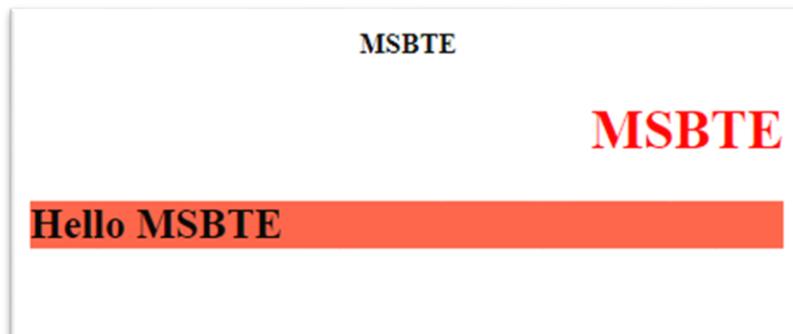
```
                    MSBTE

                              MSBTE

 Hello MSBTE
```

VIII   **HTML' Code**

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX   **Resources Required**

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with	One computer system for each student	

		basic configuration		
2	Software Package	Text editor, Web browser		

X **Precautions to be Followed**

1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI **Conclusion**

……………………………………………………………………………………

……………………………………………………………………………………

XII **Practical Related Questions**

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. State the importance of heading in HTML.
2. State the correct HTML tag to change text color as green for <h4> tag.

[**Space for Answer**]

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

XIII **References / Suggestions for further Reading Software/Learning Websites**

    a.   https://www.w3schools.com/tags/

    b.   https://www.geeksforgeeks.org/html-heading/

XIV **Assessment Scheme**

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.3: Work on paragraph in web page

I   Practical Significance

A paragraph is usually a block of text. A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.

II   Industry/ Employer Expected Outcome

This practical is expected to develop web page with <p> tag.
Use different values to set alignment for <p> tag.

III   Course Level Learning Outcomes

Use HTML formatting tags to present content on web page.

IV   Laboratory Learning Outcome

Design a web page with two paragraphs each of 8-10 lines. Assign title to web page. Practice formatting tags for bold, italics, underline, center, break, space, horizontal lines, span tag, pre tag etc.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   Relevant Theoretical Background

The <p> tag in HTML defines a paragraph. These have both opening and closing tags. So anything mentioned within <p> and </p> is treated as a paragraph. A paragraph is a block-level element so a new paragraph always begins on a new line, and browsers naturally put some space before and after a paragraph to make it look neat and easy to read.

A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.

The HTML <p> tag supports the following attribute −

align-specifies text alignment within a paragraph.

Values are-left, right, center, justify

Text Formatting tag

Text Formatting tag	Description
------	To bold the text in HTML
<i>-------</i>	To italic the text in HTML

<u>-------</u>	To underline the text in HTML
<center>------- </center>	to set the alignment of text into the center
<pre>-------</pre>	defines preformatted text
	A non-breaking space is a space that will not break into a new line.
<hr>	<hr> is used to insert a horizontal rule or a thematic break in an HTML page to divide or separate document sections.

Example:

HTML Code:

```
<html>
<body>
<p>
The Maharashtra State Board of Technical Education (MSBTE) is an
autonomous board of education in the state of Maharashtra, India. It
designs and implements diploma, post diploma and advanced diploma
programs to affiliated institutions. Diploma courses are an excellent
choice as they allow transferable credits towards higher education such
as a degree or master's program.MSBTE loacted at:Government
Polytechnic Building, 4th floor, 49, Kherwadi, Bandra (E), Mumbai-
400051.
</p>

<p align="justify">
The <center>Maharashtra State Board of Technical Education
(MSBTE) </center>is an autonomous board of education in the state of
Maharashtra, India. It designs and implements <b>diploma </b>,
<i>post diploma </i>and <u>advanced diploma programs</u> to
affiliated institutions. Diploma courses are an excellent choice as they
allow transferable credits towards higher education such as a degree or
master's program.
MSBTE located at:
<pre>Government Polytechnic Building,
4th floor,
49, Kherwadi,
Bandra (E),
Mumbai-400 051.</pre>

<p>
The<strong> Maharashtra </strong>State Board    of Technical
Education (MSBTE) is an autonomous board of education in
the state of Maharashtra, India.
</p>
```

```
</body>
</html>
```

Observe the output carefully.

First <p> tag is without alignment. Second paragraph is displayed with Justify alignment   and third paragraph as you can see, all the extra lines and unnecessary spaces are removed by the browser.

Output:

The Maharashtra State Board of Technical Education (MSBTE) is an autonomous board of education in the state of Maharashtra, India. It designs and implements diploma, post diploma and advanced diploma programs to affiliated institutions. Diploma courses are an excellent choice as they allow transferable credits towards higher education such as a degree or master's program.MSBTE loacted at:Government Polytechnic Building, 4th floor, 49, Kherwadi, Bandra (E), Mumbai-400051.

The

Maharashtra State Board of Technical Education (MSBTE)
is an autonomous board of education in the state of Maharashtra, India. It designs and implements **diploma** , *post diploma* and advanced diploma programs to affiliated institutions. Diploma courses are an excellent choice as they allow transferable credits towards higher education such as a degree or master's program. MSBTE located at:

```
Government Polytechnic Building,
4th floor,
49, Kherwadi,
Bandra (E),
Mumbai-400 051.
```

The **Maharashtra** State Board of Technical Education (MSBTE) is an autonomous board of education in the state of Maharashtra, India.

VII   Exercise

Design a Web Page to implement paragraph tag with following formatting tags :<b>, <i>, <u>, <br>,<center>,<pre> and <hr>

VIII   'HTML' Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   **Precautions to be Followed**
     1. Handle computer system with care.
     2.Be cautious while performing files related operations in
       computer system. Closely observe and remember the
       file name and its folder.

XI   **Conclusion**
………………………………………………………………………….
………………………………………………………………………….

XII   **Practical Related Questions**
Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.
1. Write 3 paragraphs about "HTML-The easy Language". First paragraph should be in Center, 2nd paragraph should aligned in Right side and 3rd paragraph's text color should be in Red color. Also use formatting tags.

[**Space for Answer**]

………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….
………………………………………………………………………….

XIII   **References / Suggestions for further Reading Software/Learning Websites**

1. https://www.tutorialspoint.com/html/html_p_tag.htm
2. https://www.javatpoint.com/html-paragraph

XIV   **Assessment Scheme**

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.4: Work with block level tags in web page

I   Practical Significance

HTML uses block-level tags are used for designing a web page. A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element. This practical is useful for applying various tags like Block Quote, Preformatted tag, Address tag and HR tag on web page.

II   Industry/Employer Expected Outcome

This practical is expected to develop the following skills

1. Prepare Web page using different Block level tags like <blockquote>, Preformatted tag <pre>,Address tag <address> and HR tag<hr>.

2. Formatting HTML document using Block level tags as per the requirement.

III   Course Level Learning Outcome

Use HTML formatting tags to present content on web page.

IV   Laboratory Learning Outcome

Create a web page for displaying a paragraph using block level and **<hr>** tags.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   Minimum Theoretical Background Block Level tags:
   Following are different Block Level tags:

Tags	Description	Example
<blockquote>	The <blockquote> tag specifies a section that is quoted from another source.Browsers usually indent <blockquote> elements.	<blockquote> Here is a long quotation here is a long quotation. </blockquote>
<pre >	The <pre> tag used for indicating preformatted text.	<pre> The pre formatting tag usedfor indicating

		preformatted text.</br></pre>

<address>	The <address> tag provides contact information for a document. The text in the <address> element usually renders in *italic.*This information includes name, email address, postal address, and phone number and so on.	<address></br>order@sample.com</br> John babbage</br> Box 212,Disneyland</br> USA</br> </br></address>
<hr>	The <hr> tag represents a horizontal rule. The <hr> tag is used to separate content in an HTML page. It has align, no shade, size, width and color attributes.	<body></br><hr>HR tag</hr></br>The horizontal rule tag represents a horizontal rule.</br><hr></br></body>

VII   Exercise

Design a Web Page of your Department by using blockquote tag, preformatted tag, address tag and applying attributes of HR tags.

VIII   'HTML' Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.

2.Be cautious while performing files related operations in
   computer system. Closely observe and remember the
   file name and its folder.

XI   Conclusion

…………………………………………………………………………………
…………………………………………………………………………………..

XII   Practical Related Questions

*Note: Below given are few sample questions for reference.
Teachers must design more such questions to ensure the
achievement of identified CO.*

1. Enlist different attributes of <hr> tag.
2. Name the tag used to display preformatted output on a web page.
3. Differentiate between block quote and address tag.
4. Explain the use of address tag.

[**Space for Answer**]

…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..
…………………………………………………………………………………
…………………………………………………………………………………..

…………………………………………………………………………….

……………………………………………………………………………..

…………………………………………………………………………….

……………………………………………………………………………..

…………………………………………………………………………….

……………………………………………………………………………..

XIII   References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/html/html_quotation_elements.asp
2. https://www.geeksforgeeks.org/html-block-and-inline-elements/

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.5: Work with Text level tag in web page

I **Practical Significance**

HTML Text level tags are used to format the appearance of the text on web page. The basic idea behind text formatting is to make a web page more attractive by using tags like bold, italic or underline. There are several HTML elements that are used for defining text with a special meaning. These are the parsed tag that are used to display the importance of the text. This practical is useful for formatting a text of a web page using text level tags.

II **Industry/ Employer Expected Outcome**
This practical is expected to develop the following skills
 1. Format web pages using Text level tags.

III **Course Level Learning Outcomes**
Use HTML formatting tags to present content on web page.

IV **Laboratory Learning Outcome**
Create a Web Page using Text level tags.

V **Relevant Affective domain related Outcome(s)**
 1. Follow safety practices.
 2. Follow ethical practices.

VI **Relevant Theoretical Background**

Text Level Tags:

Tag	Description
…	Text that appears within ... element, is displayed in bold.
<i> …</i>	Text that appears within <i>...</i> element is displayed in italic.
<u>…</u>	Text appears within <u>...</u> element is displayed with underline.
<tt>...</tt>	The content of a <tt>...</tt> element is written in monospaced font.
<strike>... </strike>	Text that appears within <strike>...</strike> element is displayed with strikethrough.
^{...}	The content of a ^{...} element is written in superscript.
_{...}	The content of a _{...} element is written in

	subscript.
…	The <div> elements allow to group together several elements to create sections or subsections of a page.

Example:

```
<html>
<body>

<p><b>This text is bold</b></p>
<p><i>This text is italic</i></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

</body>
</html>
```

Output:

This text is bold

This text is italic

This is subscript and superscript

VII Exercise

Execute following HTML code and attached the output.

```
 <html>
<body>
<p><b>This text is bold</b></p>
<p><i>This text is italic</i></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>
</body>
</html>
```

VIII   HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.

1. What is the use of HTML text formatting?
2. Explain the meaning of the following code.
   <div id="menu" align="middle" >
3. Write entity number and entity name to insert a copyright symbol on a browser page?
4. What is the difference between bold and strong tags in HTML?

[**Space for Answer**]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

XIII   References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/html/html_quotation_elements.asp
2. https://www.geeksforgeeks.org/html-block-and-inline-elements/

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.6: Implement the border properties in web page

I   Practical Significance

The HTML border attribute is used to set the visible border width to most HTML elements within the body. Adding borders around elements on a web page is an important feature of web design. Borders can be used to separate the contents of a web page, making it easier for user to interpret the information presented on the page. This practical is useful for applying border to web page, to specific paragraph or to specific elements in html.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills

- Apply page border
- Apply border to <div> and <p> tag

III   Course Level Learning Outcomes

Use HTML formatting tags to present content on web page.

IV   Laboratory Learning Outcome

Create a Web Page using to insert a border property in html statements.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Follow ethical practices.

VI   Relevant Theoretical Background

The CSS border properties are used to specify the style, color and size of the border of an element. The CSS border properties are given below:

- border-style
- border-color
- border-width
- border-radius

There are some border style values, which are used with border-style
Property to define a border.

Value	Description
dashed	It is used to define a dashed border.
solid	It is used to define a solid border.
double	It defines two borders with the same border-width value.
dotted	It is used to define a dotted border.

Example:

<html>

<head>

aa

</head>

<body style="border:double;">

<p style="border:double;">Double border.</p>

<div style="border:1px solid black;"> HELLO </div>

</body>

</html>

VII   Exercise

Design a web page to apply border to paragraph and web page with different border styles.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

3. Handle computer system with care.
4. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.

1. What is the use of border property?
2. How to apply the width of border?
3. Can we apply color to border? If yes, how?

[<u>Space for Answer</u>]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

....

....

....

....

....

XIII   References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/
2. https://www.geeksforgeeks.org/

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.7: Use of Special characters in Web Page

I   Practical Significance

Special characters are specific pieces of HTML code designed to display characters that are used in the HTML code or to include characters that are not found on the keyboard in the text the viewer sees. This practical is used for special characters in paragraphs.

II   Industry/ Employer Expected outcome

This practical is expected to develop the following skills for the display Special Characters using HTML entity name or the HTML entity number.

III   Course Level Learning Outcomes

Use HTML formatting tags to present content on web page.

IV   Laboratory Learning Outcome

Create a Web Page using Special Characters.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Follow ethical practices.

VI   Minimum Theoretical Background

Many mathematical, technical, and currency symbols, are not present on a normal keyboard.

To add such symbols to an HTML page, you can use the entity name or the entity number (a decimal or a hexadecimal reference) for the symbol.

Character	Entity Number	Entity Name	Description
"	"	"	quotation mark
'	'	'	apostrophe
&	&	&	ampersand
<	<	<	less-than
>	>	>	greater-than
©	©	©	copyright
®	®	®	registered trademark
←	←	←	left arrow
→	→	→	right arrow

You can insert various Emojis are characters from the UTF-8 character set.

```
<html>
```

```
<body>
<p>I will display &#128512;</p>
<p>I will display &#x1F60E;</p>
</body>
</html>
```

Output:

HTML Special Characters:

```
<html>
<body>
<p>I will display &#169;;</p>
<p>I will display &copy;</p>
<p>I will display&#174; </p>
<p>I will display &reg;</p>
</body>
</html>
```

Output:

VII   Exercises

1. **Execute following HTML code and attached the output.**

```
<html>
<body>
<p>I will display &#8707;</p>
<p>I will display &empty;</p>
<p>I will display  &sum; </p>
```

```
<p>I will display &#8595;</p>
<p><b>This text is bold</b></p>
</body>
</html>
```

2. Write HTML code to display any 5 mathematical symbols in a web page.

VIII HTML Code

>   Write HTML code for above exercise on the blank pages
>   attached at the end of practical.

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

……………………………………………………………………………

……………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Write entity number and entity name to insert a copyright symbol on a browser page?
2. What is the entity number and entity name for INDIAN RUPEE SIGN?

[Space for Answer]

……………………………………………………………………………

…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………

XIII   Software/Learning Websites

1. https://www.w3schools.com/charsets/ref_utf_symbols.asp
2. https://www.html.am/reference/html-special-characters.cfm

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.8: Work with ordered and unordered list

I   **Practical Significance**

Lists are used to create a well-structured and easy-to-maintain document. It is group of related pieces of information and clearly associated with each other, which are more accessible. This practical is useful for organizing contents of the page by implementing different types of Lists.

II   **Industry /Employer Expected Outcome**

This practical is expected to develop the following skills for the industry identified outcomes through various teaching learning experiences: 'Develop static interactive web-sites'.

1. Implement different types of list in web pages.
2. Able to combine different types of list together for grouping the information.

III   **Course Level Learning Outcomes**

Develop a web page using list and hyperlinks.

IV   **Laboratory Learning Outcome**

Design a web page for implementing ordered list and unordered list.

V   **Relevant Affective domain related Outcome(s)**

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   **Relevant Theoretical Background**

Different Lists types:

Tag	Description
…	An unordered list. This will list items using plain bullets.
…	An ordered list. This will use different schemes of numbers to list your items.

Example

```
<html>
<body>
    <ol>

        <li>First item</li>
```

```
        <li>Second item</li>

        <li>Third item</li>

      </ol>

      <ul>

        <li>Item 1</li>

        <li>Item 2</li>

        <li>Item 3</li>

      </ul>

  </body>
  </html>
```

Output:

1. First item
2. Second item
3. Third item

- Item 1
- Item 2
- Item 3

VII   Exercises

1) Write HTML code for following output using different types of lists.

2) Create an ordered list with lowercase roman numbers.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

…………………………………………………………………………

…………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference.
Teachers must design more such questionsso as to ensure the
achievement of identified CO.

1. State the purpose of list in web page.
2. Write different ways to implement unordered list.

[**Space for Answer**]

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

XIII   **References / Suggestions for further Reading Software/Learning Websites**

1. https://www.w3schools.com/html/html_lists.asp
2. https://www.tutorialspoint.com/html/html_lists.htm

XVII   **Assessment Scheme**

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.9: Create a web page using Different types of Lists in HTML

I **Practical Significance**

HTML lists allow web developers to group a set of related items in lists. A list is a record of short pieces of related information or used to display the data or any information on web pages in the ordered or unordered form. This practical is used for organizing the data into various list formats.

II **Industry/ Employer Expected Outcome**

This practical is expected to develop the following skills for the industry identified outcome 'Develop static interactive web-sites'.
1. Implement different types of list in web pages.
2. Able to combine different types of list together for grouping the information.

III **Course Level Learning Outcomes**

Develop a web page using list and hyperlinks.

IV **Laboratory Learning Outcome**

Design a web page for implementing
1. Ordered list within unordered list
2. Unordered list within ordered list
3. Ordered list within ordered list
4. Unordered list within unordered list

V **Relevant Affective domain related Outcome(s)**

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI **Relevant Theoretical Background**

Different Lists types:

Tag	Description
…	An unordered list. This will list items using plain bullets.
…	An ordered list. This will use different schemes of numbers to list your items.
<dl>…</dl>	A definition list. This arranges your items in the same way as they are arranged in a dictionary.
<dt>…</dt>	Defines a term in a description list.
<dd>…</dd>	Describes the term in a description list.

Type attribute of Ordered List:

The type attribute of the <ol> tag, defines the type of the list item marker:

Type	Description
type="1"	The list items will be numbered with numbers (default)
type="A"	The list items will be numbered with uppercase letters
type="a"	The list items will be numbered with lowercase letters
type="I"	The list items will be numbered with uppercase roman numbers
type="i"	The list items will be numbered with lowercase roman numbers

Type attribute of Unordered List:

Type	Description
type="disc"	Sets the list item marker to a bullet (default)
type="circle"	Sets the list item marker to a circle.
type="square"	Sets the list item marker to a square
type="none"	The list items will not be marked

Example 1):

```
<html>
<head>
<title>Nested list</title>
</head>
<body>
<p>List of Indian States with thier capital</p>
<ol>
<li>Delhi
<ul>
<li>NewDelhi</li>
</ul>
<li>Maharashtra
<ul>
<li>Mumbai</li>
</ul>
</li>
<li>Uttarpradesh
<ul>
<li>Lucknow</li></ul>
</li>
```

```
</ol>
</body>
</html>
```

Output:

List of Indian States with thier capital

1. Delhi
   o NewDelhi
2. Maharashtra
   o Mumbai
3. Uttarpradesh
   o Lucknow

Example 2)

```
<html>
<body>
<h2>A Description List</h2>
<dl>
 <dt>Coffee</dt>
 <dd>- black hot drink</dd>
 <dt>Milk</dt>
 <dd>- white cold drink</dd>
</dl>
</body>
</html>
```

Output:

A Description List

Coffee
      - black hot drink
Milk
      - white cold drink

VII   Exercises

1) Create ordered list within unordered list.
2) Create unordered list within ordered list.
3) Create ordered list within ordered list.

4) Create unordered list within unordered list.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X Precautions to be Followed
1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI Conclusion

…………………………………………………………………………

…………………………………………………………………………

XII Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.
1. State the purpose of type attribute in ordered and un-ordered list.
2. Implement definition list in HTML.

[**Space for Answer**]

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

XIII   **References / Suggestions for further Reading Software/Learning Websites**

1. https://www.w3schools.com/html/html_lists.asp
2. https://www.tutorialspoint.com/html/html_lists.htm

XVII   **Assessment Scheme**

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.10: Work on HTML web page link.

I   **Practical Significance**

Hyperlink is an element in HTML document that is used to link one web page to another web page or different web page. This practical is useful to link different web pages of same site, link different locations on the same web page as well as specific location on different web page of same site.

II   **Industry/ Employer Learning Outcome**

This practical is expected to develop the following skills for the industry-identified outcome 'Develop static interactive web-sites as per requirement'.
1. Understand the concept of URL and Hyperlink.
2. Able to apply link and use their attributes in a web pages.
3. Able to link one web page to another Web page.

III   **Course Level Learning Outcomes**

Develop web page using list and hyperlinks.

IV   **Laboratory Learning Outcome**

Create a web page to link-
1. A different web page of same site.
2. A different location on the same web page
3. A specific location on different web page of same site.

V   **Relevant Affective domain related Outcome(s)**

3. Follow safety practices.
4. Maintain tools and equipment.
5. Follow ethical practices.

VI   **Relevant Theoretical Background**

URL: Every document on the Web has a unique address. This address is known as **U**niform **R**esource **L**ocator (URL).Example of URL is as follows: http://www.student.com/index.com

Hyperlink:

The <a > Tag: The anchor element is used to create hyperlinks between a *source anchor* and a *destination anchor*. The source is the text, image, or button that links to another resource and the destination is the resource that the source anchor links to.

The Most Important Anchor Attributes: There are anchor attributes to create functional hyperlinks. These attributes are href, target. An href can do a lot more than just link to another website.

- It can be used to link directly to any element on a web page that has been assigned an id.
- It can be used to link to a resource using a protocol other than http.
- It can be used to run a script.

Example:

second page

Adding a target attribute and _blank attribute to the link will tell the visitor's browser to open the link in a new (blank) browser tab or window to render that code in the browser, when a visitor clicks the link, which will open in a new tab.

Procedure to create a different web page of same site

Step1) Create one folder-"website" on Desktop

Step 2) Create following two html pages and run.

`<html>`
`<body>`
`<h1>The anchor tag</h1>`
`<a href="maths.html">Maths page</a>`
`</body>`
`</html>`
	Save this file as english.html in "website" folder	Output:
		← → C ⓘ File C:/Users/hp/3D%20Objects/Desktop/La_Manual_WPD_MSBTE/english.html
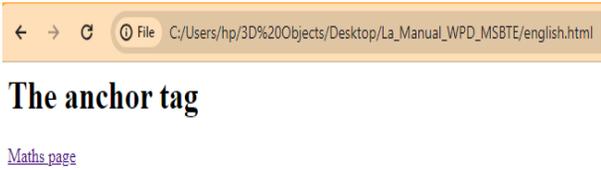		
		The anchor tag
		
		Maths page

`<html>`
`<body>`
`<a href="english.html">Redirect to english page</a>`
`</body>`
`</html>`
	Save this file as maths.html in "website" folder	Output:
		← → C ⓘ File C:/Users/hp/3D%20Objects/Desktop/La_Manual_WPD_MSBTE/maths.html
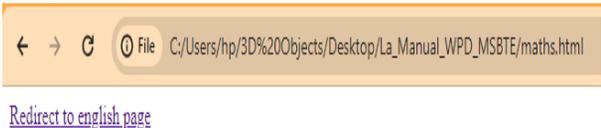		
		Redirect to english page

<u>Procedure to create hyperlink to take you to another location of the same HTML document</u>

Create following html page with code:

```
<html>
<head>
<title>How to create a hyperlink to take you to another location of the same HTML document</title>
</head>
<body>
<a href="#bottom">Go the bottom</a>
<p id="up">Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>
<p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>
  <p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>
  <p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>
  <p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially
```

unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>

<p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.</p>

  <p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

  <a href="#up"></p><p id="bottom">Bottom</p>
</body>
</html>

VII **Exercise**

Create web pages for different branches of your college Link them on the home page. Apply linking within a page and linking a specific location within different pages.

VIII **'HTML' Code**

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX **Resources Required**

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X **Precautions to be Followed**

1. Handle computer system with care.
2. Be cautious while performing files related operations in computer

system. Closely observe and remember the file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Write procedure for linking to a document in a different folder.

2. Write attributes of anchor tag with their meaning.

3. How to create a hyperlink to take you to another part of the same HTML document?

4. How to open a linked document in a separate browser tab?

[Space for Answer]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3resource.com/html-css-exercise/basic

2. https://www.w3schools.com/tags/tag_a.asp

XVII Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.11: Use of links in web page.

I   Practical Significance

When creating a website, there are several things one must have on each Web page. HTML links are one of those things. HTML links do a variety of things for website. Without HTML links one can't have a "website" and can't show visitors more information on the subjects that one want to talk about.

There are 3 major types of HTML links; external links, internal links, and links within the same page. External HTML links are those HTML links that go to another website. Email and color tag for links are also used in this process. This practical demonstrate the use of hyperlink in a web page.

II   Industry/Employer Expected outcome:

This practical is expected to develop the following skills for the industry-identified outcome 'Develop static interactive web-sites as per requirement'.
1. Able to link created website with external websites
2. Able to apply mailto tag.

III   Course Level Outcome

Develop web page using list and hyperlinks.

IV   Laboratory Learning Outcome

Create a web page to link-
1. An external page of different web site
2. To an email ID

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   Relevant Theoretical Background

1. Create a web page to link an external page of different web site

External pages can be linked with a full URL.
Following example shows a full URL to link to a web page:

HTML Concepts

2. Create a web page to link to an email ID:

Link to email ID allows visitors to send email from your website. It is easy for

your visitors to send questions or comments. While using <a> tag as an email tag, you will use mailto:email address along with href attribute.

An email link would require the following code:

Email Me

Following code combine all the options and allow visitor to send email with the address, subject and text already entered.

Email Me

VII   Exercise
Write a HTML code to link an external page of different web sites like yahoo.com or google.com using URL and link web page to your mail address.

VIII   'HTML' Code
Write HTML code for above exercise on the blank pages attached at the end of practical.

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed
1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI   Conclusion
………………………………………………………………………………

………………………………………………………………………………

XII   Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Differentiate between active link and visited link.
2. List different types of URL?
3. How to open a linked document in a separate browser tab?

[Space for Answer]

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

XIII   References / Suggestions for further Reading Software/Learning Websites

1. https://www.geeksforgeeks.org/how-to-redirect-to-a-particular-section-of-a-page-using-html-or-jquery/

2. https://www.w3schools.com/tags/tag_a.asp

XVII   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.12: Use of links with images in web page.

I Practical Significance

Images and graphics can be embedded into pages. It improves the appearance of the web pages. We can add image as a link and other HTML elements as a link. A link is a connection from one Web page to another web page. This practical is useful for inserting an image in web page and formatting the images with various attributes.

II Industry /Employer Expected Outcome

This practical is expected to develop the following skills for the industry-identified outcome 'Develop static interactive web-sites as per requirement'.
1. Insert Images in web page with ALT property on the left, right and center.
2. Insert a webpage to set picture in left, right, and middle alignment.

III Course Level Learning Outcomes

Develop web page using list and hyperlinks.

IV Laboratory Learning Outcome

1. Create a web page, which includes photos, and align with the ALT property on the left, right and center.
2. Create a web page to set picture in left, right and middle alignment.

V Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI Relevant Theoretical Background

1. Inserting Images in HTML Documents:
In HTML, images are defined with the <img> tag.The syntax of <img> tag can be given with:

Attributes	Description
src	The 'src' attribute contains a path pointing to the image which is inserted into the page.
alt	The 'alt' attribute is a mandatory attribute which specifies an alternate text for an image, if the image cannot be displayed.

Image formatting Attributes:

Attributes	Description
width	To set image width.
height	To set image height.
align	By default image will align at the left side of the page, 'align' tag used to align attribute to set it in the center or right.
border	Use to specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.
hspace	To insert the horizontal margin around the image. 'hspace' used for setting space left and right of image.
vspace	To insert the vertical margin around the image. 'vspace' used for setting space above and below the image.

Example:

```
<html
<head>
 </head>
 <body>
  <a href="https://msbte.org.in/" target="_blank">
<img border="5" alt="Mumbai Worli" height=200 width=200 src="mumbai.jpg">
  </a>
 </body>
</html>
```

Run above code and click on image, it will open **msbte.org.in** web site.

VII Exercise

Design a web page using images and apply image-formatting attributes on it.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	

2.	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Explain the tag used to insert image in a web page with height and width 250.
2. Name the tag with attribute used to change the size of image.
3. Write procedure to insert border and alternative text to the image?

[Space for Answer]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/tags/tag_img.asp
2. https://www.javatpoint.com/html-image

XVII   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.13: Use of colors of links in web page.

I   Practical Significance

There are three major types of HTML links; external links, internal links, and links within the same page. External HTML links are those HTML links that go to another website. When users visit any link, user can differentiate visited links with different color.

II   Industry/Employer Expected outcome

This practical is expected to develop the following skills for the industry identified outcome 'Develop static interactive web-sites'.

1. Add various links in a web page
2. Able to change color of visited links

III   Course Level Learning Outcomes

Develop web page using list and hyperlinks.

IV   Laboratory Level Outcome

Demonstrate to change colors of links on a web page.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   Relevant Theoretical Background

   Tags to change colors of links:

By default, a links will appear as follows (in all browsers):

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

Example

```
<html>
<head>
<style>
a:link { color: green;}
a:visited {color: pink;}
a:hover {color: blue;}
a:active {color: yellow;}
</style>
```

```
</head>
<body>

<p>You can change the default colors of links</p>
<a href="http://www.yahoo.com" target="_blank">HTML Images</a>
  <a href="http://example.com/" style="color:rgb(0,255,0);">GreenLink</a>
   <a href="http://example.com/" style="color:red;">Red Link</a>


</body>
</html>
```

VII   Exercise

Write a HTML code to link an external page of different web sites like yahoo.com or google.com using URL and link web page to your mail address. Apply tags to change colors of links.

VIII   'HTML' Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One c omputer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI   Conclusion

…………………………………………………………………………

…………………………………………………………………………

XII **Practical Related Questions**

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Differentiate between active link and visited link.
2. Explain the use of Title attributes of anchor tag.

[Space for Answer]

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

XVII   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.14: Insert image on web page foreground and background with various attributes.

I   Practical Significance

Image can be set as a background in a web page to make site more attractive. This practical demonstrate the use of image for linking web page with other web page and as background in web pages.

II   Industry/ Employer Expected outcome

This practical is expected to develop the following skills for the industry identified outcome 'Develop static interactive web-sites'.

1. Use Images as background and foreground in the web page.
2. Use images with height and width.

III   Course Level Learning Outcomes

Develop web pages using images, colors and backgrounds.

IV   Laboratory Learning Outcome

Insert images on web page using various attributes and set image as background.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practice.

VI   Relevant Theoretical Background

Set image as background:

The background attribute can also be used to set the background of web pages. To set an image in background of a web page, the valid source of image is required.
Following is the syntax to set image in background of page attribute

with a body tag.

<body background ="valid source path of image">

For example:

<body background="mypattern.gif">

Set image as foreground:

A background image can be specified for almost any HTML element. To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property:

60

Add a background image on a HTML element:

<p style="background-image: url('img_girl.jpg');">

Example:

```
<html>
<body background="bangalore.jpg">
<p>A background image for a p element:</p>
<p style="background-image: url('mumbai.jpg');">
You can specify background images<br>
for any visible HTML element.<br>
In this example, the background image<br>
is specified for a p element.<br>
By default, the background-image<br>
will repeat itself in the direction(s)<br>
where it is smaller than the element<br>
where it is specified. (Try resizing the<br>
browser window to see how the<br>
background image behaves.
</p>
</body>
</html>
```

VII   Exercise

Design a web page to set any image as a background and foreground to the page.

VIII   HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer

system. Closely observe and remember the html file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Describe the use of images in web pages.
2. Write the use of background attribute.
3. Explain the attributes used for setting the center alignment to the image.

[Space for Answer]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

XIII   References / Suggestions for further Reading SOFTWARE/LEARNING WEBSITES

1. https://www.w3schools.com/html/html_images_background.asp
2. https://www.javatpoint.com/how-to-add-background-image-in-html

XVII Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.15: Insert image with hyperlink and set image width and height property of image.

I   Practical Significance

Images and graphics can be embedded into pages. It improves the appearance of the web pages. This practical is useful for inserting an image in web page and formatting the images with height and width attributes.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills
1. Insert Images in web page with height and width property.
2. Insert a webpage to set image as link.

III   Course Level Learning Outcomes

Develop web page images, colors and background.

IV   Laboratory Learning Outcome

Insert image with hyperlink and set image width and height property of image.

V   Relevant Affective domain related Outcome(s)

1. Follow safety practices.
2. Maintain tools and equipment.
3. Follow ethical practices.

VI   Relevant Theoretical Background

1. Image formatting Attributes:

Attributes	Description
width	To set image width.
height	To set image height.
align	By default image will align at the left side of the page, 'align' tag used to align attribute to set it in the center or right.
border	Use to specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.
hspace	To insert the horizontal margin around the image. 'hspace' used for setting space left and right of image.
vspace	To insert the vertical margin around the image. 'vspace' used for setting space above and below the image.

Example:

```
 <html>
 <head>
 </head>
 <body>
  <a href="https://msbte.org.in/" target="_blank">
  <img border="5" alt="Mumbai Worli" height=200 width=200
src="mumbai.jpg">
  </a>
 </body>
</html>
```

Run above code and click on image, image will appear as per height and width and when user clicks on that image, it will open **msbte.org.in** web site.

VII   Exercise

Design a web page using images and apply image-formatting attributes on it.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX   Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing html files related operations in computer system. Closely observe and remember the html file name and its folder.

XI   Conclusion

………………………………………………………………………………………

………………………………………………………………………………………

XII   Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.
1. Explain the tag used to insert image in a web page with height and width 150.
2. Name the tag with attribute used to change the size of image.

[Space for Answer]

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………

XIII   References / Suggestions for further Reading Software/Learning Websites
1. https://www.w3schools.com/tags/tag_img.asp
2. https://www.javatpoint.com/html-image

XVIII   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2.	Answer to sample questions	20%
	Total 50 Marks	**100%**

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.16: Work with different background properties in web page.

I   Practical Significance

Using background properties such as colors, gradients, images, and patterns can enhance the visual appeal of a web page. This practical demonstrates the different background properties in web page.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified Competency 'Develop and host static interactive web-site as per requirement'.

Apply CSS background properties on a web page.

III   Course Level Learning Outcomes

Develop web pages using images, colors and backgrounds.

IV   Laboratory Learning Outcome

Create a web page with background properties
- Set the background color of the page to line n.
- Set border to h1 tag.
- Set background image to a page and to a paragraph.

V   Relevant Affective domain related Outcome(s)

Follow safety practices.
Maintain tools and equipment.
Follow ethical practices.

VI   Relevant Theoretical Background

The **HTML <body> background attribute** is used to specify a background image or color for the entire web page's body. You can provide either a URL for an image or a color code to customize the background of the HTML body element.
Note: It is not supported by HTML5 Instead of using this attribute we use CSS background property.

Set the background Image:

Syntax:

<body background="URL">

Example:

```
<html>
 <head>
   <title>
      HTML body Background Attribute
   </title>
</head>
 <body background="rk.png">
        <h1>Hello All</h1>
        <h2>HTML
        <body> background Attribute
     </h2>
             Welcome to Web Page Designing
       </body>
</html>
```

Output:
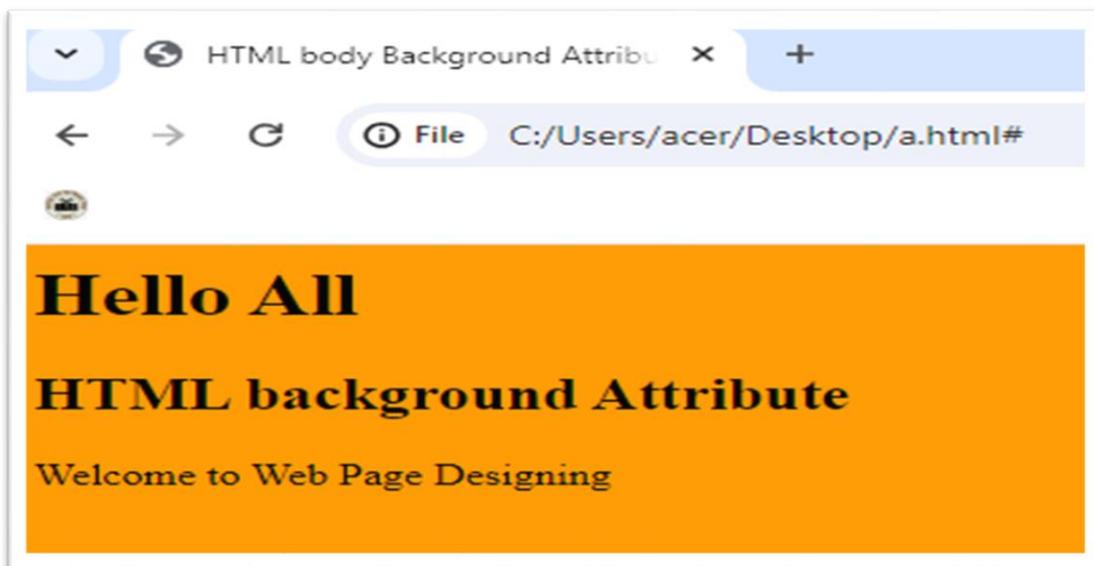
Set background color:

Setting the background color of a web page or an element on the web page, enable us to create unique layouts for the web page.

To set the background color in HTML, use the style attribute, with the CSS property

background-color inside the body tag of the HTML document.

HTML5 do not support the <body> tag bgcolor attribute, so the CSS style is used to add background color. The bgcolor attribute deprecated in HTML5.

We can change the background color by overriding the property with the other property.

Syntax:
   <body style="background-color:red;">

Example:

```
<html>
<body style="background-color:red;">
  <h1>HTML Articles</h1>
</body>
</html>
```

Output:

VII Exercise

   Create a web page with background properties:
   - Set the background color of the page to line n.
   - Set border to h1 tag.
   - Set background image to a page and to a paragraph.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX   Required Resources

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X   Precautions to be Followed
- Handle computer system with care.
- Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI   Conclusion

…………………………………………………………………………………

…………………………………………………………………………………

XII   Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.

1. List different background tags available

[Space for Answer]

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

XIII   References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/css/css3_backgrounds.asp
2. https://www.geeksforgeeks.org/css-background/

XIV   Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.17: Work on HTML table in web page.

I   Practical Significance

HTML Table is an arrangement of data in *rows* and *columns* in tabular format. Tables are useful for various tasks such as presenting text information and numerical data. A table is a useful tool for quickly and easily finding connections between different types of data. Tables are also used to create databases. This practical demonstrates the use of tables in we page.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified Competency 'Develop and host static interactive web-site as per requirement'
1. Apply table attributes to organize data on a web page.
2. Use the given table attribute to change default table setting.

III   Course Level Learning Outcomes

.   Design HTML forms using table and frames.

IV Laboratory Learning Outcome

Create a web page to implement Table.

V   Relevant Affective domain related Outcome(s)
- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI   Relevant Theoretical Background

In HTML, table is represented with the <table> tag. Each table row is defined with the <tr> tag. A table heading is defined with the <th> tag. By default, table headings are bold and centered. A table data/cell is defined with the <td> tag. Use rowspan and colspan tags.

Table 1:Table tags

<table>...<table>	Indicates a table. The tags surround the entire table.
<tr>..</tr>	Indicates a table row. The tags surround the entire row.

<td>...</td>	Indicates table data or a cell. The tags surround the entire cell.
<th>...</th>	Indicates table Heading

```
<table>
<tr>
<th>Name</th>
<th>Class</th>
<th>Marks</th>
</tr>
<tr>
<td>ABC</td>
<td>FY</td>
<td>50</td>
</tr>
</table>
```

VII Exercise
1) Create a mark sheet of first semester using table tag.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed
1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

…………………………………………………………………………………………

…………………………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. List attributes used for formatting table.
2. Write a procedure to align a table to left or right.
3. Define cell padding and cell spacing.

[Space for Answer]

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/html/html_tables.asp
2. https://www.tutorialspoint.com/html/html_tables.htm

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.18: Create table within table and insert images in tables.

I   Practical Significance

Nested tables can be effective for presenting complex data sets in a structured format. Placing images within tables, helps organize content visually, especially when presenting data or information alongside corresponding images. This practical demonstrate table within the table and how images are inserted into table in a we page.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry-identified competency 'Develop static interactive websites.

1. Knowledge of the <table>, <tr>, <td>, and <img> tags.
2. Understand how rowspan and colspan attributes impact the responsiveness of tables on different screen sizes

III   Course Level Learning Outcomes

.

Design HTML forms using table and frames.

IV   Laboratory Learning Outcome

Create a web page to make effective use of rowspan and colspan attributes.

V   Relevant Affective domain related Outcome(s)

- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI Relevant Theoretical Background

To create a nested table, we need to create a table using the <table> tag. This table is known as the outer table. The second table that will be the nested table is called the inner table.

Example:

```html
<html>
 <head>

   <title>Nested Tables</title>
   <style>
       table table {
         border: 2px solid blue;
      }
       td {
         padding: 10px;
         text-align: center;
      }
   </style>
</head>

<body>
   <h1 style="color: green;">Nested Tables</h1>
   <table border="2">
     <tr>
        <td>Table 1</td>
        <td> Table 1
           <table border="2">
             <tr>
                <td>Table 2</td>
                <td>Table 2</td>
             </tr>
             <tr>
                <td>Table 2</td>
                <td>Table 2</td>
             </tr>
           </table>
        </td>
     </tr>
     <tr>
        <td>Table 1</td>
        <td>Table 1</td>
     </tr>
   </table>
</body>
 </html>
```

Output:

Insert Images in tables:

Use the <img> tag to add an Image inside the <td> element in HTML.

```
<html>
 <body>
  <table border="4px">
   <tr>
      <th>Sr. No.</th>
      <th>Name</th>
      <th>Photo</th>
   </tr>
   <tr>
      <td>1</td>
      <td>Rose</td>
      <td><img height="100" src="rose.jpg" width="100"></td>
   </tr>
</table>
 </body>
</html>
```

Output:
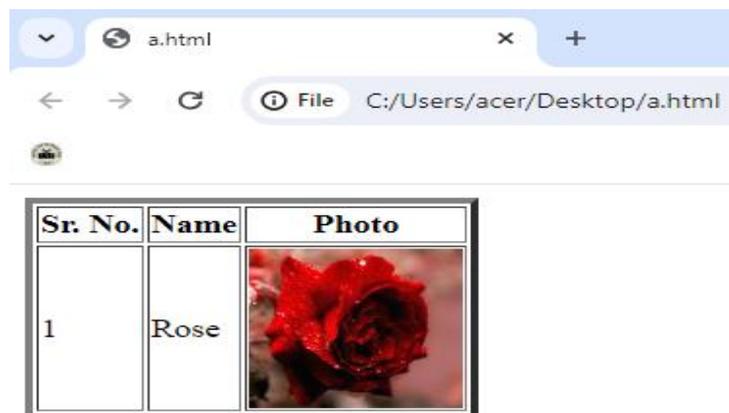
VII Exercise

1) Design a following table using different table tags.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X   Precautions to be Followed

1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

………………………………………………………………………………

………………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.

1. Write a code for obtaining following output:

[Space for Answer]

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1) https://www.geeksforgeeks.org/how-to-create-nest-tables-within-tables-in-html/#:~:text=To%20create%20a%20nested%20table,must%20be%20kept%20in%20mind.

2) https://www.3schools.in/2022/08/add-image-inside-table-cell-in-html.html

XIV Assessment Scheme

Performance indicators	Weightage
Process related: 30 Marks	**60%**
1. Debugging ability	20%
2. Correctness of Program codes	30%
3. Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks	40%
1. Completion and submission of practical in time	20%
2 Answer to sample questions	20%
Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.19: Work on row and column attributes of table.

I Practical Significance

The row and column attributes of a table in HTML is essential for creating well-structured, visually appealing tables that effectively communicate information to users. This practical demonstrates the use of colspan and rowspan attribute of table tag in web page.

II Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified. competency 'Develop static interactive websites.

1. Use <th> ,<tr> tag.
2. Understand how rowspan and colspan attributes impact the responsiveness of tables on different screen sizes

III Course Level Learning Outcomes
.
Design HTML forms using table and frames.

IV Laboratory Learning Outcome

Create a web page to make effective use of rowspan and colspan attributes.

V Relevant Affective domain related Outcome(s)

1) Follow safety practices.
2) Maintain tools and equipment.
3) Follow ethical practices.

VI Relevant Theoretical Background

An HTML table consists of one <table> element and one or more <tr>, <th>, and <td> elements.

The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell.

```
<html>
<head>
<style>
table, th, td {
```

```
  border: 1px solid black;
}
</style>
</head>
<body>

<h1>Colspan and rowspan</h1>

<h3>Cell that spans two columns:</h3>
<table>
 <tr>
   <th>Name</th>
   <th>Email</th>
   <th colspan="2">Phone</th>
 </tr>
 <tr>
   <td>abc</td>
   <td>abc@example.com</td>
   <td>123-45-678</td>
   <td>212-00-546</td>
 </tr>
</table>

<h3>Cell that spans two rows:</h3>
<table>
 <tr>
   <th>Name:</th>
   <td>abc</td>
 </tr>
 <tr>
   <th>Email:</th>
   <td>abc@example.com</td>
 </tr>
 <tr>
   <th rowspan="2">Phone:</th>
   <td>123-45-678</td>
 </tr>
 <tr>
   <td>212-00-546</td>
 </tr>
</table>

</body>
```

```
</html>
```

Output:

VII Exercise

Develop a web page following web site page.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical**.**

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed

1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

……………………………………………………………………………

……………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1. Create a webpage that displays first year timetable.

[Space for Answer]

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

……………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1) https://www.tutorialspoint.com/html/html_frames.htm

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		40%
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.20: HTML Frame in web page.

I   Practical Significance

HTML frames provide flexibility in designing the layout of a webpage. By dividing the browser window into frames, developers can arrange content in different sections, such as a navigation frame, a main content frame, and a sidebar frame. The practical show that, how web browser window is divided into columns and rows using frame and frameset tag.

II   Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified competency 'Develop static interactive web-sites'.
1. Describe <frameset> and <frame> tag.
2. Use different form attributes

III   Course Level Learning Outcomes

Design HTML forms using table and frames.

IV Laboratory Learning Outcome

Create a web page to implement frame tags

V Relevant Affective domain related Outcome(s)
1) Follow safety practices.
2) Maintain tools and equipment.
3) Follow ethical practices.

VI Relevant Theoretical Background

<frameset> tag

HTML <frameset> tag is used to contain the group of frames which can be controlled and styled as a unit. The <frameset> element also specifies the number of rows and columns in the frameset, and how much space they will occupy in a frame.

Syntax
<frameset cols=" ">............</frameset>

<frame> tag

HTML <frame> tag defines the particular area within an HTML file where another HTML web page can be displayed.

A <frame> tag is used with <frameset>, and it divides a webpage into multiple sections or frames, and each frame can contain different web pages.

Syntax:
< frame src = "URL" >

Example 1

Create Vertical frames:

```
<html>
<head>
        <title>Frame tag</title>
</head>
 <frameset cols="25%,75%">
        <frame src="frame1.html" >
        <frame src="frame2.html">


 </frameset>
</html>
```

Frame1.html:

```
<html>
<head>
   <style>
     div{
       background-color: #7f4dd4;
       height: 500px;
       }
   </style>
</head>
<body>
   <div>
      <h2>This is first frame</h2>
   </div>
 </body>
</html>
```

Frame2.html:

```
<html>
<head>
   <style>
     div{
       background-color: #ff45fd;
       height: 500px;


     }
   </style>
</head>
<body>
   <div>
      <h2>This is Second frame</h2>
   </div>
 </body>
</html>
```
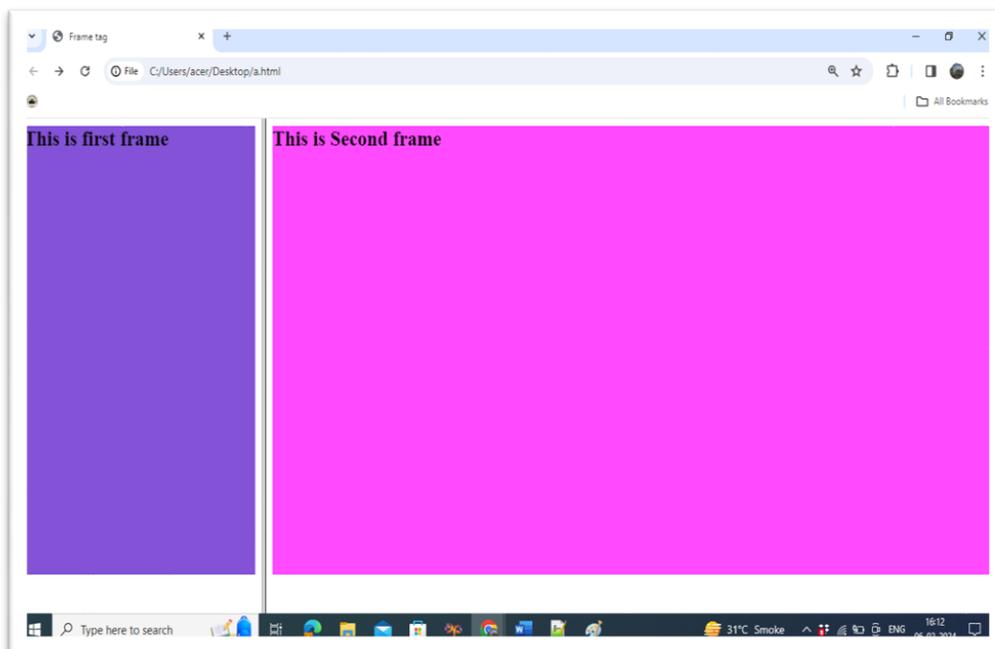
Output:

Example 2:
Create Horizontal frames:

```
<html>
<head>
   <title>Frame tag</title>
</head>
 <frameset rows="30%, 70%">
  <frame name="top" src="frame1.html" >
  <frame name="main" src="frame2.html">


 </frameset>
</html>
```

Frame1.html:

```
<html>
<head>
   <style>
    div{
      background-color: #7f4dd4;
      height: 500px;
      }
   </style>
</head>
<body>
   <div>
     <h2>This is first frame</h2>
   </div>
 </body>
</html>
```

Frame 2.html:

```
<html>
<head>
  <style>
    div{
      background-color: #ff45fd;
      height: 500px;


    }
  </style>
</head>
<body>
  <div>
    <h2>This is Second frame</h2>
  </div>
 </body>
</html>
```

Output:

Note: Do not use HTML <frameset> element as it is deprecated and not supported by HTML5, but you can use <iframe> tag instead.

HTML iframes

HTML iframe is used to display a nested webpage (a webpage within a webpage). The HTML <iframe> tag defines an inline frame, hence it is also called as an Inline frame.

An HTML iframe embeds another document within the current HTML document

in the rectangular region.

The webpage content and iframe contents can interact with each other using JavaScript.

Syntax:
<iframe src="URL"></iframe>

Example:

```
<html>
<body>
<h2>HTML Iframes example</h2>
<p>Use the height and width attributes to specify the size of the iframe:</p>
<iframe src="https://msbte.org.in/" height="300" width="400"></iframe>
</body>
</html>
```

Output:

VII Exercise

Develop a web page following web site page.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed

1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

………………………………………………………………………………

………………………………………………………………………………

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1) Develop a web page containing four frames vertically.
2) Develop a web page by using iframe.

[Space for Answer]

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1) https://www.tutorialspoint.com/html/html_frames.htm

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.21: Create different elements in web page.

I Practical Significance

An HTML form is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc. An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. This practical demonstrates how to create different form elements in a web page to submit the user-entered information.

II   Industry/Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified competency 'Develop static interactive web-sites'.

1. Describe the basic form elements.
2. Use Textbox, Button, CheckBox, RadioButton etc to design form.
3. Create basic form using different form fields and Button tags.

III Course Level Learning Outcome

.

Design HTML forms using table and frames.

IV Laboratory Learning Outcome

Create a webpage that provides a form for filling information.
The webpage must contain following elements:

- Buttons (Submit/Reset)
- Text area
- Textbox for passwords

V   Relevant Affective domain related Outcome(s)

1) Follow safety practices.
2) Maintain tools and equipment.
3) Follow ethical practices.

VI   Relevant Theoretical Background

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

<form> element:
The HTML <form> element is used to create an HTML form for user input:

Syntax:

<form>

.

formelements

.

</form>

The <input> Element

The HTML <input> element is the most used form element.
An <input> element can be displayed in many ways, depending on the type attribute.
Here are some examples:

Type	Description
<input type="text">	Displays a single-line text input field
<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button

Text Fields:
The <input type="text"> defines a single-line input field for text input.
Example:

```
<html>
<body>
<h2>Text input fields</h2>
<form>
  <input    type="text"    id="fname"    name="fname"
value="abc"><br>
  <input    type="text"    id="lname"    name="lname"
value="xyz">
</form>
</body>
</html>
```

Output:
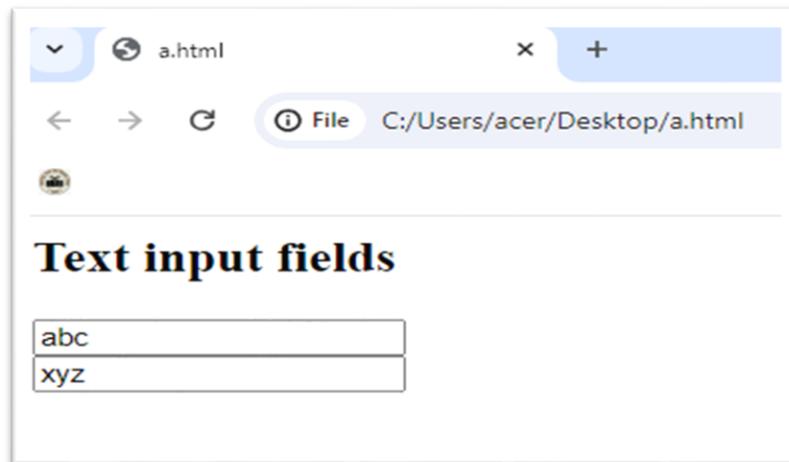
The <label> Element:

The <label> tag defines a label for many form elements.
The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focuses on the input element.

Radio Buttons :

The <input type="radio"> defines a radio button.
Radio buttons let a user select ONE of a limited number of choices.

Example:

```
<html>
<body>
<h2>Radio Buttons</h2>
<p>Choose your favorite City:</p>
<form>
  <input type="radio" id="mumbai" name="fav_language" value="Mumbai">
  <label for="mumbai">Mumbai</label><br>
  <input type="radio" id="delhi" name="fav_language" value="Delhi">
  <label for="delhi">Delhi</label><br>
  <input type="radio" id="kerla" name="fav_language" value="Kerla">
  <label for="kerla">Kerla</label>
</form>
</body>
</html>
```

Output:
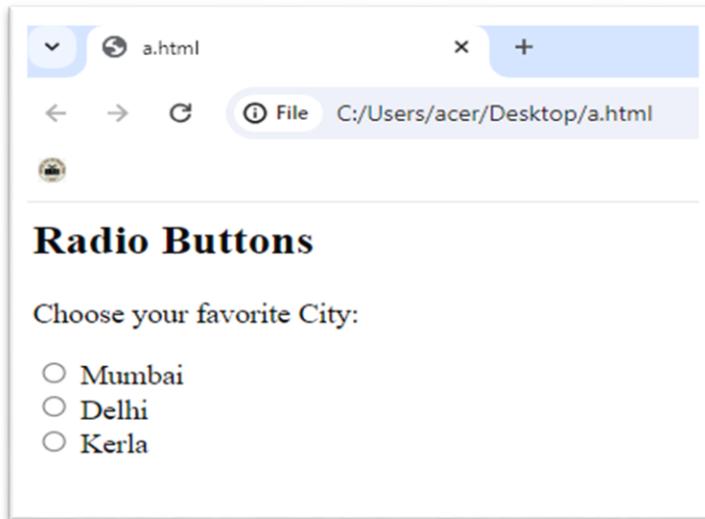
Checkboxes:

The <input type="checkbox"> defines a checkbox.

Checkboxes let a user select ZERO or MORE options of a limited number of choices.

Example:

```
<html>
<body>

<h2>Checkboxes</h2>
<p>The <strong>input type="checkbox"</strong> defines a checkbox:</p>

<form>
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label><br><br>
  </form>
</body>
</html>
```

Output:
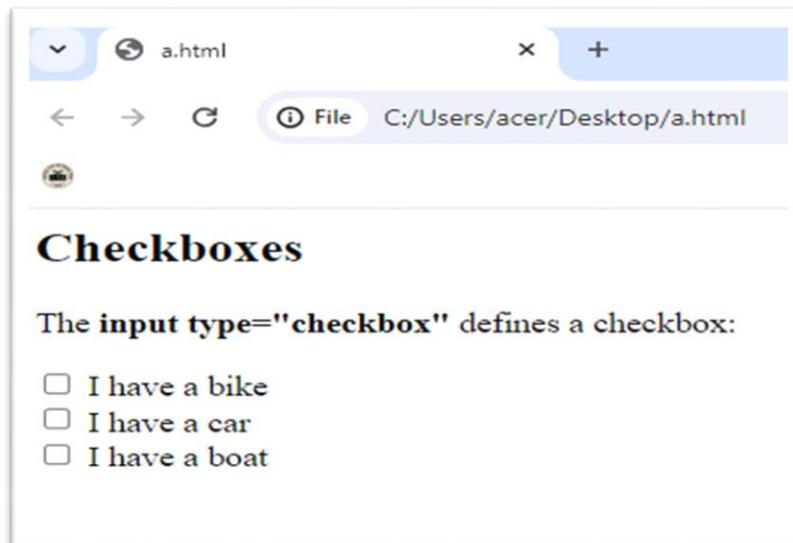
The Submit Button:

The <input type="submit"> defines a button for submitting the form data to a form-handler. The form-handler is typically a file on the server with a script for processing input data.

The form-handler is specified in the form's action attribute.

Example:

```
<html>
<body>
<h2>HTML Forms</h2>

<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="abc"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="xyz"><br><br>
  <input type="submit" value="Submit">
</form>

<p>If you click the "Submit" button, the form-data will be sent to a page called "/action_page.php".</p>

</body>
</html>
```

Output:

VII Exercise

Develop a web page following web site page.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed
1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

……………………………………………………………………………………

……………………………………………………………………………………

XII Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.
1) Develop a web page for student registration form.
2) Develop a web page for login page.

[Space for Answer]

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

XIII References / Suggestions for further Reading Software/Learning Websites

1) https://www.w3schools.com/html/html_forms.asp
2) https://www.javatpoint.com/how-to-create-a-form-in-html

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		40%
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.22: Create CSS by applying style sheets

I Practical Significance

Cascading Style Sheet (CSS) is a simple mechanism of describing how documents are presented on screens. Cascading Style Sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML tags. This practical demonstrate the use of CSS and improves in content accessibility.

II Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified competency 'Develop static interactive web-sites'.
1. Describe the basic syntax and structure of CSS.
2. Use internal, external and inline CSS.
3. Apply styles to background, text, fonts and other HTML components.

III Course Level Learning Outcomes

Apply presentation schemes on content using CSS.

IV Laboratory Learning Outcome

Create a web page for demonstration of CSS by applying internal style, external and inline style.

V Relevant Affective domain related Outcome(s)

1) Follow safety practices.
2) Maintain tools and equipment.
3) Follow ethical practices.

VI Relevant Theoretical Background

CSS stands for Cascading Style Sheets and it is the language used to style the visual presentation of web pages. CSS is the language that tells web browsers how to render the different parts of a web page.

CSS Syntax- CSS syntax includes selectors, properties, values, declarations, declaration blocks, rulesets, at-rules, and statements.

- A selector is a code snippet used to identify the web page element or elements that are to be affected by the styles.
- A property is the aspect of the element that is to be affected. For example, color, padding, margin, and background are some of the most commonly used CSS properties.
- A value is used to define a property. For example, the property color might be given the value of red for example: color: red;.The combination of a property and a value is called a declaration.

106

- In many cases, multiple declarations are applied to a single selector. A declaration block is the term used to refer to all of the declarations applied to a single selector.
- A single selector and the declaration block that follows it in combination are referred to as a ruleset.
- At-rules are similar to rulesets but begin with the @ sign rather than with a selector. The most common at-rule is the @media rule which is often used to create a block of CSS rules that are applied based on the size of the device viewing the web page.

An Example of CSS Syntax- Let's use a block of CSS to clarify what each of these items is.

```
h1 {
color: red;
font-size: 3em;
text-decoration: underline;
}
```

In this example, h1 is the selector. The selector is followed by a declaration block that includes three declarations. Each declaration is separated from the next by a semicolon. The tabs and line breaks are optional but used by most developers to make the CSS code more human-readable.By using h1 as the selector, we are saying that every level 1 heading on the web page should follow the declarations contained in this ruleset.

The ruleset contains three declarations:
- color:red;
- font-size: 3em;
- text-decoration: underline;

color, font-size, and text-decoration are all properties. There are literally hundreds of CSS properties that can use, but only a few dozen are commonly used. The color property can use a color keyword or a color formula in Hex, RGB, or HSL format. In this case, the color keyword red. There are a few dozen color keywords available in CSS3, but millions of colors can be accessed with the other color models. The value of 3em to the property font-size. There are a wide range of size units we could have used including pixels, percentages, and more. Finally, the value underline to the property text-decoration. The overline or line-through can be used as values for text-decoration. In addition, CSS3 allows for the use of the line- styles solid, double, dotted, dashed, and wavy was well the specification of text-decoration colors.

Ways of Linking CSS Rules to an HTML Document

There are three ways of adding CSS rules to a web page:

1) Inline styles
2) Internal stylesheets
3) External stylesheets

In the vast majority of cases, external stylesheets should be used. However, there are instances where inline styles or internal stylesheets may be used.

- **Inline Styles**

  Inline styles are applied to specific HTML elements. The HTML attribute style is used to define rules that only apply to that specific element. Here's a look at the syntax for writing inline styles.

```
<h1 style="color:red; padding:10px; text-decoration:underline;">Example Heading</h1>
```

That code would cause just that heading to render with red underlined text and 10 pixels of padding on all sides. There are very few instances where inline styles should be used. In nearly all cases they should be avoided and the styles added to a stylesheet.

- **Internal Stylesheets**

  The earlier examples in this tutorial make use of internal stylesheets. An internal stylesheet is a block of CSS added to an HTML document head element.
  The style element is used between the opening and closing head tags, and all CSS declarations are added between the style tags.

```
<head>
<style>
h1 {
color: red;
padding: 10px;
text-decoration: underline; }
</style>
</head>
<body>
<h1>Example Heading</h1>
</body>
```

That code would produce the same results as the inline styles. However, the benefit to using internal stylesheets rather than inline styles is that all h1 elements on the page will be affected by the styles.

- External Stylesheets

  External stylesheets are documents containing nothing other than CSS statements. The rules defined in the document are linked to one or more HTML documents by using the link tag within the head element of the HTML document.

To use an external stylesheet, first create the CSS document.
Save with a name ending in .css such as styles.css

```
h1 {
color: red;
padding: 10px;
text-decoration: underline;
}
```

Now that we have an external stylesheet with some styles, we can link it to an HTML document using the link element.

```
<head>
<link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
<h1>Example Heading</h1>
</body>
```

When this HTML document is loaded the link tag will cause the styles in the file styles.css to be loaded into the web page. As a result, all level 1 heading elements will appear with red text, underlined, and with 10 pixels of padding applied to every side.

VII Exercise

1) Create a web page for demonstration of CSS by applying internal style, external and inline style

VIII 'HTML' Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be followed

1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

....

....

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1) Develop a web page using CSS for following web site page.
2) Develop a web page using CSS for following web site page.
3) Explain the font property with syntax.

[Space for Answer]

....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....
....

....
....
....

XIII References / Suggestions for further Reading Software/Learning Websites

1)https://www.tutorialspoint.com/css/what_is_css.htm

2)https://www.w3schools.com/html/html_css.asp

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		40%
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.23: Work on RWD (Responsive Web Design) Templates in HTML.

I Practical Significance

RWD templates ensure that websites are accessible and functional on a wide range of devices, including desktops, laptops, tablets, and smartphones. Instead of developing separate versions for various devices, RWD allows for a single development effort that caters to diverse screen sizes. This practical helps student for creating websites that are versatile, user-friendly, cost-effective, and adaptable to the ever-changing landscape of web technologies and devices.

II Industry/ Employer Expected outcome

This practical is expected to develop the following skills for the industry identified competency 'Develop static interactive web-sites'.

III Course Level Learning Outcomes

.Apply presentation schemes on content using CSS.

IV Laboratory Learning Outcome

Create a web page for demonstration of CSS responsive web design.

V Relevant Affective domain related Outcome(s)

- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI Relevant Theoretical Background

Responsive web design makes your web page look good on all devices.
Responsive web design uses only HTML and CSS.
Web pages can be viewed using many different devices: desktops, tablets, and phones. Your web page should look good, and be easy to use, regardless of the device.
Web pages should not leave out information to fit smaller devices, but rather adapt its content to fit any device:
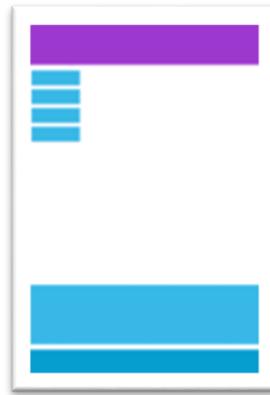
Desktop   Tablet   Phone

It is called responsive web design when you use CSS and HTML to resize, hide, shrink, enlarge, or move the content to make it look good on any screen.

Example of Responsive Website:

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<style>
* {
  box-sizing: border-box;
}

.row::after {
  content: "";
  clear: both;
  display: table;
}

[class*="col-"] {
  float: left;
  padding: 15px;
}

html {
  font-family: "Lucida Sans", sans-serif;
}

.header {
  background-color: #9933cc;
```

```
  color: #ffffff;
  padding: 15px;
}

.menu ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
}

.menu li {
  padding: 8px;
  margin-bottom: 7px;
  background-color: #33b5e5;
  color: #ffffff;
  box-shadow: 0 1px 3px rgba(0,0,0,0.12), 0 1px 2px rgba(0,0,0,0.24);
}

.menu li:hover {
  background-color: #0099cc;
}

.aside {
  background-color: #33b5e5;
  padding: 15px;
  color: #ffffff;
  text-align: center;
  font-size: 14px;
  box-shadow: 0 1px 3px rgba(0,0,0,0.12), 0 1px 2px rgba(0,0,0,0.24);
}

.footer {
  background-color: #0099cc;
  color: #ffffff;
  text-align: center;
  font-size: 12px;
  padding: 15px;
}

/* For mobile phones: */
[class*="col-"] {
  width: 100%;
}
```

```
@media only screen and (min-width: 600px) {
 /* For tablets: */
 .col-s-1 {width: 8.33%;}
 .col-s-2 {width: 16.66%;}
 .col-s-3 {width: 25%;}
 .col-s-4 {width: 33.33%;}
 .col-s-5 {width: 41.66%;}
 .col-s-6 {width: 50%;}
 .col-s-7 {width: 58.33%;}
 .col-s-8 {width: 66.66%;}
 .col-s-9 {width: 75%;}
 .col-s-10 {width: 83.33%;}
 .col-s-11 {width: 91.66%;}
 .col-s-12 {width: 100%;}
}
@media only screen and (min-width: 768px) {
 /* For desktop: */
 .col-1 {width: 8.33%;}
 .col-2 {width: 16.66%;}
 .col-3 {width: 25%;}
 .col-4 {width: 33.33%;}
 .col-5 {width: 41.66%;}
 .col-6 {width: 50%;}
 .col-7 {width: 58.33%;}
 .col-8 {width: 66.66%;}
 .col-9 {width: 75%;}
 .col-10 {width: 83.33%;}
 .col-11 {width: 91.66%;}
 .col-12 {width: 100%;}
}
</style>
</head>
<body>

<div class="header">
 <h1>Chania</h1>
</div>

<div class="row">
  <div class="col-3 col-s-3 menu">
    <ul>
      <li>The Flight</li>
```

```
        <li>The City</li>
        <li>The Island</li>
        <li>The Food</li>
      </ul>
    </div>
    <div class="col-6 col-s-9">
      <h1>The City</h1>
      <p>Chania is the capital of the Chania region on the island of Crete. The city can be divided in two parts, the old town and the modern city.</p>
    </div>
    <div class="col-3 col-s-12">
      <div class="aside">
        <h2>What?</h2>
        <p>Chania is a city on the island of Crete.</p>
        <h2>Where?</h2>
        <p>Crete is a Greek island in the Mediterranean Sea.</p>
        <h2>How?</h2>
        <p>You can reach Chania airport from all over Europe.</p>
      </div>
    </div>
  </div>
  <div class="footer">
    <p>Resize the browser window to see how the content respond to the resizing.</p>
  </div>
</body>
</html>
```

Output:
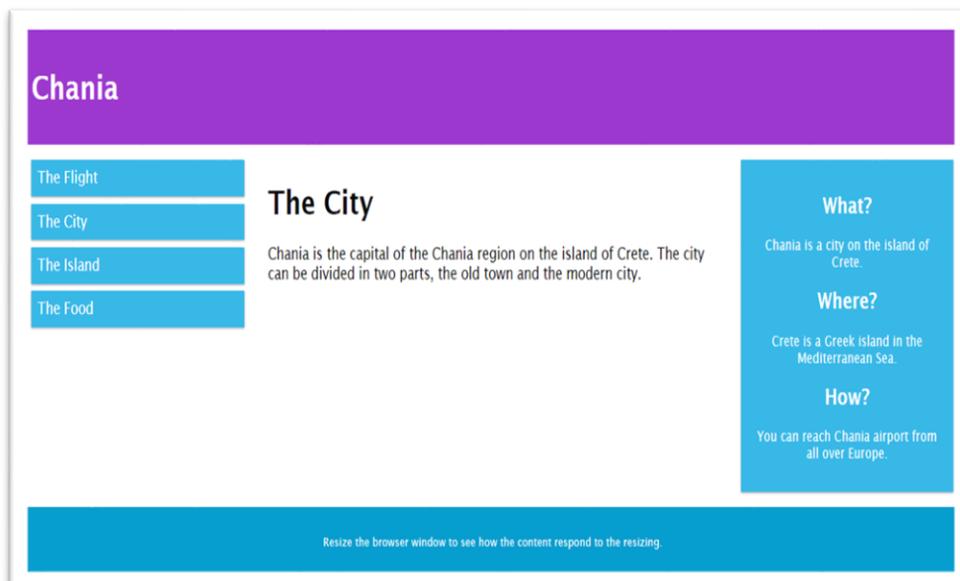
VII Exercise

Create on responsive web page for your college.

VIII HTML Code

Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed
1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

……

……

X Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.

1) Explain what you understand for responsive web design
2) Which tag we have to set to make page responsive in website.

[Space for Answer]

……
……
……
……
……
……
……

…………………………………………………………………………………………………..
…………………………………………………………………………………………………….
…………………………………………………………………………………………………..
…………………………………………………………………………………………………….
………………………………………………………………………………………………….
……………………………………………………………………………………………………..

…………………………………………………………………………………….…………………
……………………………………………………………………………………………………

XI References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/css/css_rwd_intro.asp

XII Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		40%
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.24: Hosting of website on open-source platform.

I Practical Significance

Web hosting services are offered free of cost to all, for publishing website on internet. Advantage of such hosting service is their cost effectiveness. Policy may vary from one hosting service provider to another. The website owner gets the free space on the server, free sub-domain name for accessing website and global reach over the World Wide Web. This practical helps student to host website on internet.

II Industry/ Employer Expected Outcome

This practical is expected to develop the following skills for the industry identified competency 'Develop static interactive web-sites'. Publish a Website on Internet.

III Course Level Learning Outcomes

.

Publish websites on internet or intranet.

IV Practical Outcome

Create a website and host on open source.

V Relevant Affective domain related Outcome(s)
- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI Relevant Theoretical Background

Website: - website is actually just a bunch of files, images, html files, and more, present on a computer accessible over network.
Domain: - Domain is the text-based address that user like to point to their website. For example,"www.userdomain.com". User can "register" domain from a selection of many domain registrars.

Here's a step-by-step guide to hosting a website on an open-source platform:

- Choose a Hosting Provider: Sign up for a hosting provider that supports open-source platforms. For this example, let's use DigitalOcean.

- Register a Domain Name: If you don't have a domain name,

register one through a domain registrar like Namecheap.

- Set up DNS: In your domain registrar's dashboard, configure the DNS settings to point to your DigitalOcean server's IP address.

- Provision a Server: Log in to your DigitalOcean account and create a new Droplet (virtual server). Choose an appropriate plan and select a Linux distribution like Ubuntu.

- Install the Operating System: Access your Droplet via SSH and follow the instructions to install the chosen Linux distribution.

- Install Web Server Software: Install Apache or Nginx using your Linux distribution's package manager.

- Configure the Web Server: Create a virtual host configuration file for your website, specifying the domain name and document root.

- Upload Website Files: Use SCP or FTP to transfer your website files to the document root directory on the server.

- Set Permissions: Ensure that the permissions on the website files and directories are set correctly so that the web server can access them.

- Test Your Website: Open a web browser and navigate to your domain name. You should see your website's content displayed.

- Secure Your Website: Obtain an SSL certificate and configure HTTPS for your domain to encrypt data transmission.

- Set Up Monitoring and Backups: Configure monitoring tools to track server performance and uptime. Implement regular backups to protect against data loss.

We will take one example for hosting website on github:

II Exercise
1) Write steps to publish website
2) Explain the procedure to configure a webserver and hosting the given website.

VIII 'HTML' Code
Write HTML code for above exercise on the blank pages attached at the end of

practical**.**

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed

1) Handle computer system with care.
2) Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion

……
……

XII Practical Related Questions

Note: Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO.

1) Create your own website and publish on GitHub.
2) Create a blog and publish it

[Space for Answer]

……
……
……
……
……
……
……
……
……
……
……
……
……
……
……
……

………..
……
……
……
……
……
……
……
……
……
………………………………………………………………………….…………

XIII References / Suggestions for further Reading Software/Learning Websites

1. https://www.geeksforgeeks.org/how-to-host-a-website-on-github-for-free/
2. https://careerfoundry.com/en/blog/web-development/how-to-host-a-website-for-free/

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		**40%**
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	

Practical No.25: Create a web site to represent portfolio

I Practical Significance

A portfolio website provides a centralized and easily accessible platform to showcase your projects, work samples, and achievements. It allows potential employers, clients, or collaborators to see the range and quality of your work. This practical is useful for creating a portfolio website is a practical and powerful way to present your skills, experiences, and achievements, fostering professional growth and opening doors to new opportunities.

II Competency and Practical skills

This practical is expected to develop the following skills for the industry-identified competency 'Develop and host the static website as per industry requirement.

.

Understanding the fundamentals of HTML and CSS is essential for structuring and styling your website. Ensure your website is responsive, meaning it adapts to different screen sizes and devices, providing a consistent user experience. Plan your portfolio's structure, emphasizing key projects and achievements. Consider the flow and user experience.

III Course Level Learning Outcomes

Publish websites on internet or intranet.

IV Laboratory Learning Outcome

Create a web page to represent personal portfolio.

V Relevant Affective domain related Outcome(s)

- Follow safety practices.
- Maintain tools and equipment.
- Follow ethical practices.

VI Relevant Theoretical Background

The portfolio can have the same purpose as a CV. Most CVs are written with text, while the portfolio is for showcasing, so it is visual with images and often more detailed than the CV.
Typical roles that use portfolios are professionals such as, but no limited to:

- Software developers
- UX designers
- Graphic designers
- Photographers
- Marketing professionals

- Architects
- Writers

HTML, CSS and JavaScript are the foundational languages to create a website. You can come a long way just using these three!

Create the structure with HTML. The first thing you have to learn, is HTML, which is the standard markup language for creating web pages.

Style with CSS. The next step is to learn CSS, to set the layout of your web page with beautiful colors, fonts, and much more.

Make it interactive with JavaScript. After studying HTML and CSS, you should learn JavaScript to create dynamic and interactive web pages for your users.

How to create a portfolio step-by-step

Step One: Add HTML Skeleton

Type an HTML skeleton code, which is the starting point for your website. It is the structure which holds the code and ensures that it is properly displayed on the internet.

Example:

```
<!DOCTYPE html>
<html lang="en">
<meta charset="UTF-8">
<title>Page Title</title>
<meta name="viewport" content="width=device-width,initial-scale=1">
<link rel="stylesheet" href="">
<style>
html,body {font-family:"Verdana",sans-serif}
h1,h2,h3,h4,h5,h6 {font-family:"Segoe UI",sans-serif}
</style>
<script src=""></script>
<body>

<img src="flower.jpg" alt="LA" style="width:50%">

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>
<p>This is a another paragraph.</p>

</body>
</html>
```
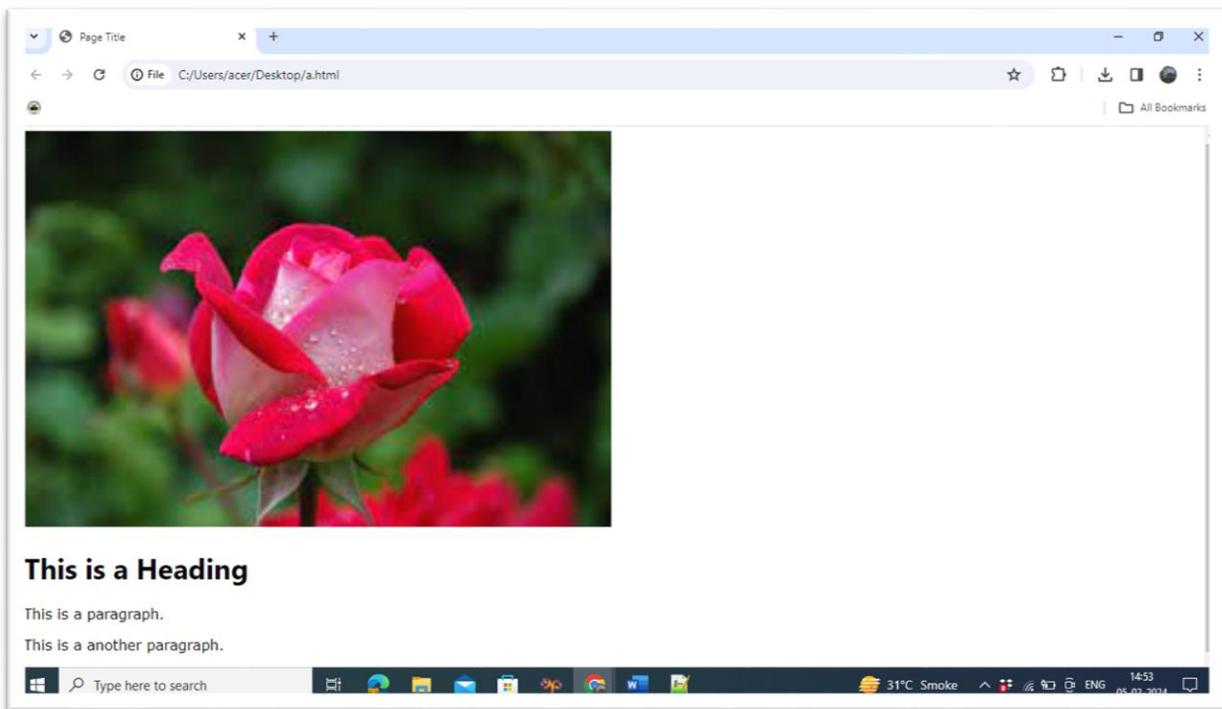
Step Two: Add Navigation Bar

The navigation bar is a short representation of the content on the website.

It is one of the first things that a visitor will see.

It helps the visitors to find and **navigate** through the content on website. It is important to create well-structured navigation. So that your visitors can find what they are looking for.

Here is an example of how to create a top navigation bar:

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body {
  margin: 0;
  font-family: Arial, Helvetica, sans-serif;
}

.topnav {
  overflow: hidden;
  background-color: #333;
}

.topnav a {
  float: left;
  color: #f2f2f2;
  text-align: center;
```

```
 padding: 14px 16px;
 text-decoration: none;
 font-size: 17px;
}

.topnav a:hover {
 background-color: #ddd;
 color: black;
}

.topnav a.active {
 background-color: #04AA6D;
 color: white;
}
</style>
</head>
<body>
<div class="topnav">
  <a class="active" href="#home">Home</a>
  <a href="#news">News</a>
  <a href="#contact">Contact</a>
  <a href="#about">About</a>
</div>
<div style="padding-left:16px">
  <h2> Navigation Example</h2>
  <p> content..</p>
</div>
</body>
</html>
```
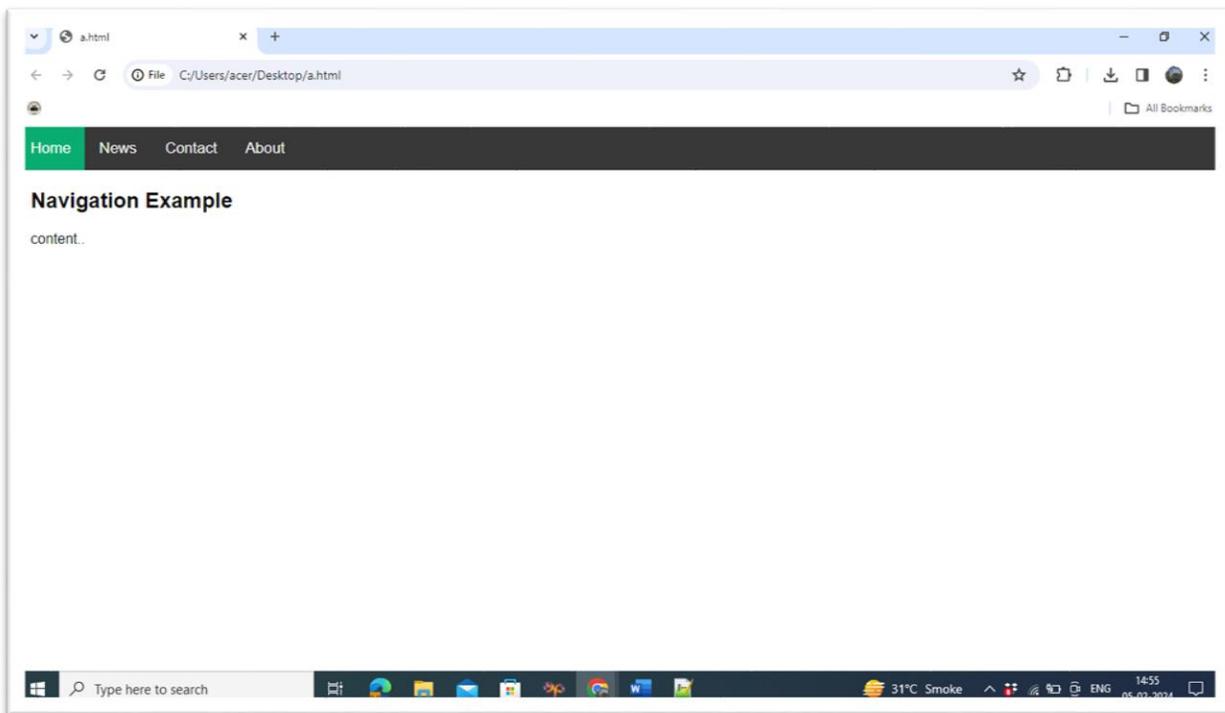
Step Three: Add Hero section

The Hero section, together with the navigation bar, is the first section of your portfolio that people will see.
It should contain short information about several things such as:

Who are you?

What do you offer?

What is your profession?

Why should people work with you?

Which actions should you take?

Write in first-person and keep it **short** and **simple**.

Additional things preferred in the hero section are:

Eye-catching graphics, either as a background or side-by-side with the text.

An action button that leads to content on your portfolio or to the content of another website.

Here is an example on how to create a Hero section:

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body, html {
  height: 100%;
  margin: 0;
  font-family: Arial, Helvetica, sans-serif;
}
```

```
.hero-image {
 background-image: linear-gradient(rgba(0, 0, 0, 0.5), rgba(0, 0, 0, 0.5)), url("cartoon.avif");
 height: 90%;
 background-position: center;
 background-repeat: no-repeat;
 background-size: cover;
 position: relative;
}

.hero-text {
 text-align: center;
 position: absolute;
 top: 50%;
 left: 50%;
 transform: translate(-50%, -50%);
 color: white;
}

.hero-text button {
 border: none;
 outline: 0;
 display: inline-block;
 padding: 10px 25px;
 color: black;
 background-color: #ddd;
 text-align: center;
 cursor: pointer;
}

.hero-text button:hover {
 background-color: #555;
 color: white;
}
</style>
</head>
<body>

<div class="hero-image">
 <div class="hero-text">
  <h1 style="font-size:50px">I am Cartoon</h1>
  <p>And I'm a Photographer</p>
  <button>Hire me</button>
 </div>
```

\</div\>

\<p\>Page Content..\</p\>

\</body\>
\</html\>
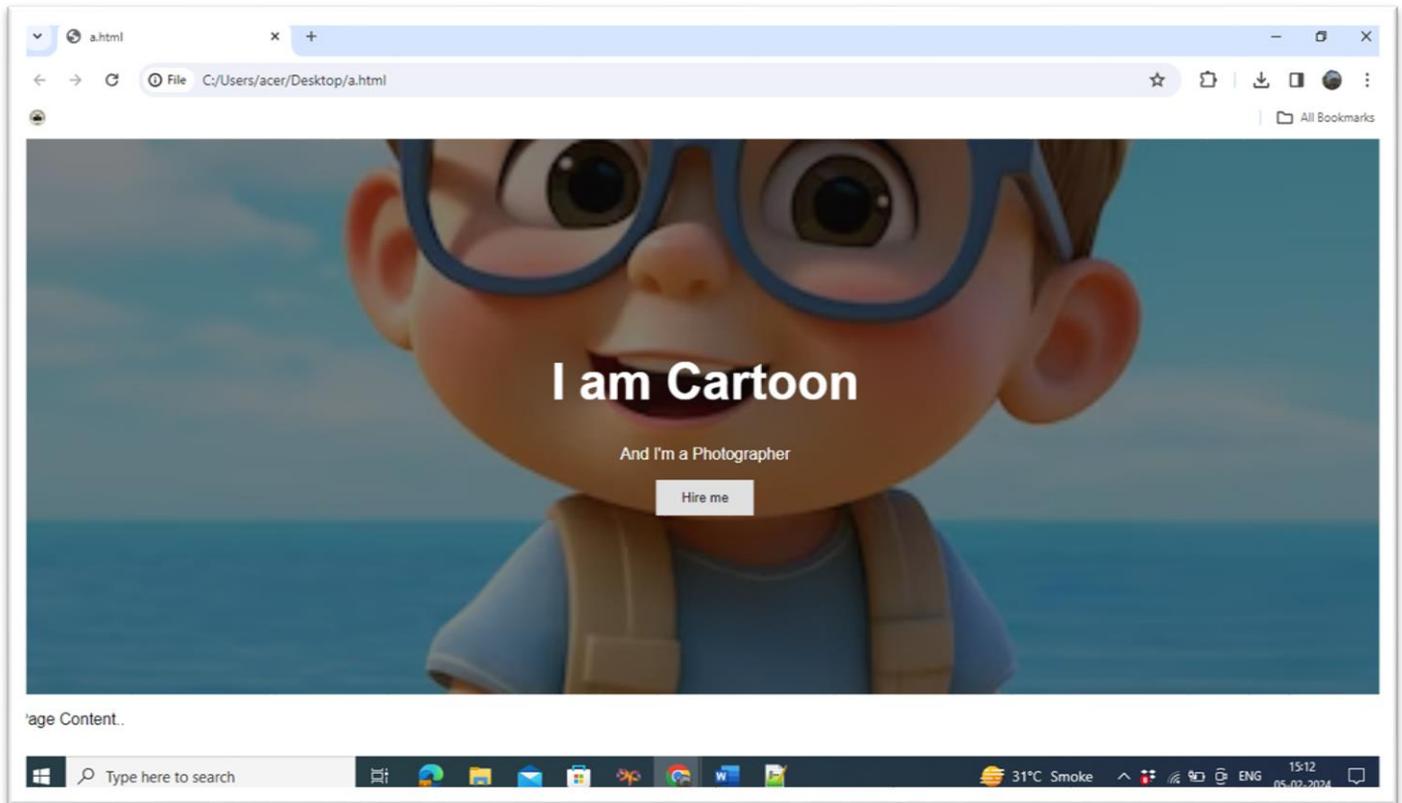
Step Four: Add About Me section
In this section, you can get creative. This can help you to to stand out.
Here you can **personalize** the content and write about yourself more in-depth.
The content you can include in this section is:
Your introduction
Who are you as a professional
Your education
Your skills
Your work experience (present and/or past)
Your hobbies
Your goals and ambitions
In a way, you can consider the "About me" section as a short summary of your CV.
Feel free to write about yourself in first person.
Personalization and making people understand you as a person might bring you more attention.
Here is an example on how to create an about me section:
\<!DOCTYPE html\>

```
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body {
  font-family: Arial, Helvetica, sans-serif;
  margin: 0;
}

html {
  box-sizing: border-box;
}

*, *:before, *:after {
  box-sizing: inherit;
}

.column {
  float: left;
  width: 33.3%;
  margin-bottom: 16px;
  padding: 0 8px;
}

.card {
  box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
  margin: 8px;
}

.about-section {
  padding: 50px;
  text-align: center;
  background-color: #474e5d;
  color: white;
}

.container {
  padding: 0 16px;
}

.container::after, .row::after {
  content: "";
  clear: both;
  display: table;
```

```
}

.title {
  color: grey;
}

.button {
  border: none;
  outline: 0;
  display: inline-block;
  padding: 8px;
  color: white;
  background-color: #000;
  text-align: center;
  cursor: pointer;
  width: 100%;
}

.button:hover {
  background-color: #555;
}

@media screen and (max-width: 650px) {
  .column {
    width: 100%;
    display: block;
  }
}
</style>
</head>
<body>

<div class="about-section">
  <h1>About Us Page</h1>
  <p>Some text about who we are and what we do.</p>
  <p>Resize the browser window to see that this page is responsive by the way.</p>
</div>

<h2 style="text-align:center">Our Team</h2>
<div class="row">
  <div class="column">
    <div class="card">
      <img src="cartoon.avif" alt="Jane" style="width:100%">
      <div class="container">
```

```
      <h2>ABC</h2>
      <p class="title">CEO & Founder</p>
      <p>Some text that describes me </p>
      <p>abc@example.com</p>
      <p><button class="button">Contact</button></p>
    </div>
  </div>
</div>

<div class="column">
  <div class="card">
    <img src="cartoon1.avif" alt="Mike" style="width:100%">
    <div class="container">
      <h2>XYZ</h2>
      <p class="title">Art Director</p>
      <p>Some text that describes me </p>
      <p>xyz@example.com</p>
      <p><button class="button">Contact</button></p>
    </div>
  </div>
</div>

<div class="column">
  <div class="card">
    <img src="cartoon2.avif" alt="John" style="width:100%">
    <div class="container">
      <h2>PQR</h2>
      <p class="title">Designer</p>
      <p>Some text that describes me </p>
      <p>pqr@example.com</p>
      <p><button class="button">Contact</button></p>
    </div>
  </div>
</div>
</div>

</body>
</html>
```
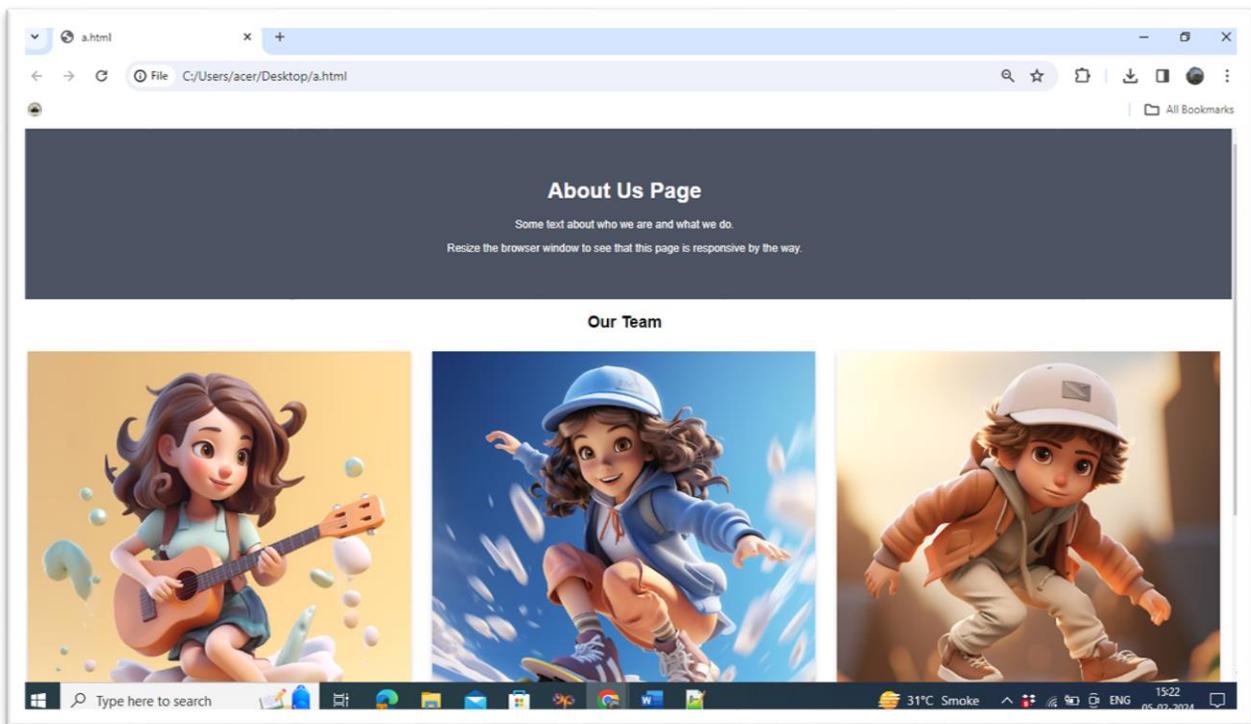
Step Five: Add Work Experience section

The work experience section highlights the experience, knowledge, and competence that you have made along your way.

Here you can add:

Links to your projects with the project name and/or short description of what the project is about.

Links to blog posts that you have written with title and/or short description about what it is about.

Your professional awards or achievements.

Highlighting your work and your accomplishments is a way to create opportunities for yourself.

Visual representations such as images or graphics.

Step Six: Add Contact section

The contact section is the section that **lets your visitor get in touch with you.**

You should always include a way for visitors to contact you, either through a contact form or by writing down your contact information such as:

Address

Email

Phone number

E.g. Github profile, LinkedIn profile, Youtube profile and so on.

Here is an example on how to create a basic contact section:

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<style>

body {

```css
  font-family: Arial, Helvetica, sans-serif;
}

* {
  box-sizing: border-box;
}

/* Style inputs */
input[type=text], select, textarea {
  width: 100%;
  padding: 12px;
  border: 1px solid #ccc;
  margin-top: 6px;
  margin-bottom: 16px;
  resize: vertical;
}

input[type=submit] {
  background-color: #04AA6D;
  color: white;
  padding: 12px 20px;
  border: none;
  cursor: pointer;
}

input[type=submit]:hover {
  background-color: #45a049;
}

/* Style the container/contact section */
.container {
  border-radius: 5px;
  background-color: #f2f2f2;
  padding: 10px;
}

/* Create two columns that float next to eachother */
.column {
  float: left;
  width: 50%;
  margin-top: 6px;
  padding: 20px;
}
```

```
/* Clear floats after the columns */
.row:after {
 content: "";
 display: table;
 clear: both;
}


/* Responsive layout - when the screen is less than 600px wide, make the two columns stack on top of each
other instead of next to each other */
@media screen and (max-width: 600px) {
 .column, input[type=submit] {
  width: 100%;
  margin-top: 0;
 }
}
</style>
</head>
<body>

<h2>Responsive Contact Section</h2>
<p>Resize the browser window to see the effect.</p>

<div class="container">
 <div style="text-align:center">
  <h2>Contact Us</h2>
  <p>leave us a message:</p>
 </div>
 <div class="row">
  <div class="column">
   <img src="map.avif" style="width:100%">
  </div>
  <div class="column">
   <form action="/action_page.php">
    <label for="fname">First Name</label>
    <input type="text" id="fname" name="firstname" placeholder="Your name..">
    <label for="lname">Last Name</label>
    <input type="text" id="lname" name="lastname" placeholder="Your last name..">
    <label for="country">Country</label>
    <select id="country" name="country">
     <option value="India">India</option>
     <option value="canada">Canada</option>
     <option value="usa">USA</option>
    </select>
    <label for="subject">Subject</label>
```

```
    <textarea          id="subject"          name="subject"          placeholder="Write          something.."
style="height:170px"></textarea>
    <input type="submit" value="Submit">
  </form>
  </div>
 </div>
</div>


</body>
</html>
```
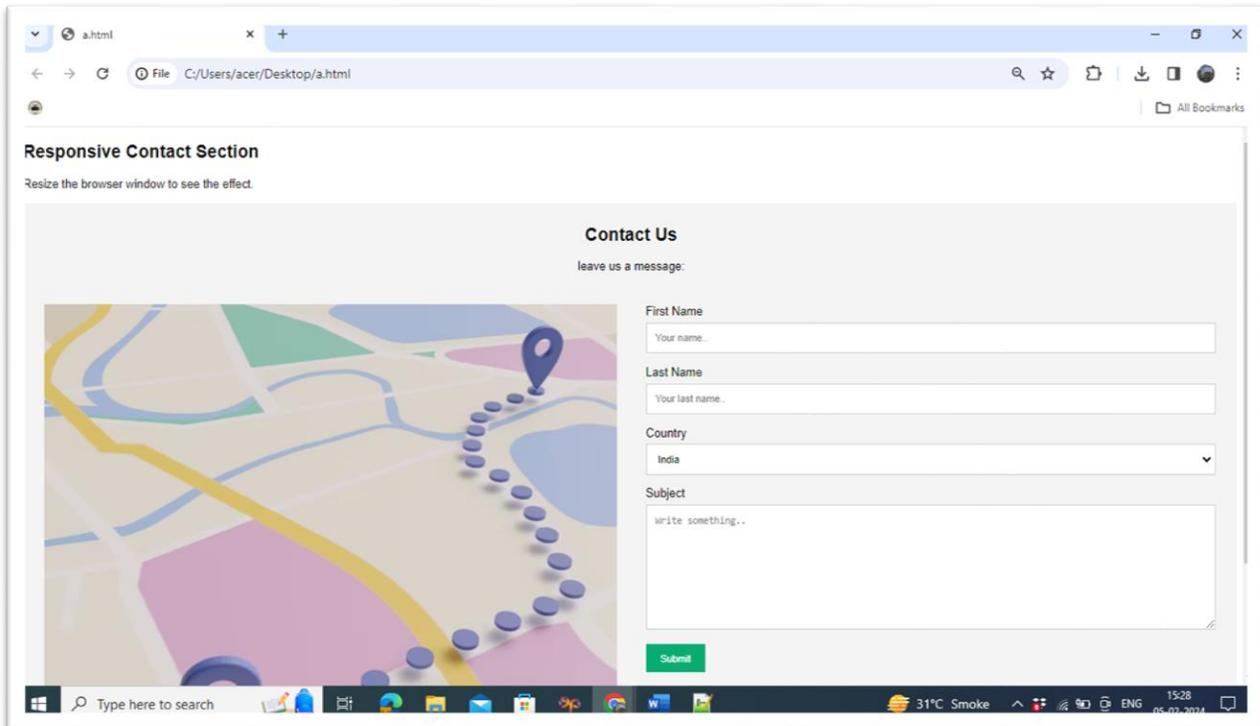

Step Seven: Add Footer section
The footer can be experienced as a minor section, but it is an important one of every website.
It is about showing critical information based on your website goals and the needs of your visitors.
Often it contains technical information about copyright, but it can hold other information, such as:
Link to "Privacy policy" page
Link to "Terms of use" page
Contact information
Website navigation links
Links to social networks
Link to your shop
Here is an example on how to build a footer section:

```
<!DOCTYPE html>
<html>
<head>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
.footer {
  position: fixed;
  left: 0;
  bottom: 0;
  width: 100%;
  background-color: Green;
  color: white;
  text-align: center;
}
</style>
</head>
<body>

<h2>Fixed/Sticky Footer Example</h2>
<p>The footer is placed at the bottom of the page.</p>

<div class="footer">
  <p>Footer</p>
</div>

</body>
</html>
```

VII Exercises
1. Create your own portfolio.
2. Create portfolio for any organization.

VIII 'HTML' Code
Write HTML code for above exercise on the blank pages attached at the end of practical.

IX Resources Required

Sr. No.	Name of Resource	Major Specification	Qty.	Remarks
1.	Computer System	Any desktop or laptop computer with basic configuration	One computer system for each student	
2.	Software Package	Text editor, Web browser		

X Precautions to be Followed
1. Handle computer system with care.
2. Be cautious while performing files related operations in computer system. Closely observe and remember the file name and its folder.

XI Conclusion
……
……

XII Practical Related Questions
Note: Below given are few sample questions for reference. Teachers must design more such questions to ensure the achievement of identified CO.
1. Define portfolio.
2. List different sessions available in portfolio.

[Space for Answer]
……
……
……
……
……
……
……
……
……
……
……
……

……
……
……
……
……
……
……

XIII References / Suggestions for further Reading Software/Learning Websites

1. https://www.w3schools.com/howto/howto_website_create_portfolio.asp

XIV Assessment Scheme

Performance indicators		Weightage
Process related: 30 Marks		**60%**
1.	Debugging ability	20%
2.	Correctness of Program codes	30%
3.	Quality of output achieved(LLO mapped)	10%
Product related: 20 Marks		40%
1.	Completion and submission of practical in time	20%
2	Answer to sample questions	20%
	Total 50 Marks	100%

Marks obtained			Dated Sign of Teacher
Process Related(30)	**Product Related(20)**	**Total(50)**	