

MAHARAJA SURAJMAL INSTITUTE

Affiliated to GGSIP University & NAAC 'A' grade accredited



DEPARTMENT OF COMPUTER APPLICATIONS

WEB TECHNOLOGIES

Practical File

Subject Code – BCA 175

SUBMITTED BY

Aman Tripathi

111146215262

1st Sem, 2nd Shift

SUBMITTED TO

Mrs Nikita Malik

Assistant Professor. MSI

S.N O.	Date	Content
1.	16/12/2021	Create your resume using various basic HTML tags.
2.	17/12/2021	Create the timetable of your class using HTML tags.
3.	23/12/2021	Create the following unordered/ordered nested list as shown in the figure.
4.	24/12/2021	<p>Create a web page with the following specifications:</p> <ul style="list-style-type: none"> a) an ordered list containing the names of your friends. b) an unordered list specifying hobbies. c) some links to various search engines. d) links to five different web pages, created by you, opening in a new window. e) a link at the top of the page so that when clicked jump all way to the bottom of the page. f) a link at the bottom of the page so that when clicked jump all way to the top of the page.
5.	30/12/2021	Create the following table as shown using HTML.
6.	31/12/2021	Create the following form in HTML as shown in the figure.
7.	03/01/2022	<p>Create an online application form having the following specifications:</p> <ul style="list-style-type: none"> a) position applied for(autofocus), name, nationality, gender, date of birth (Selected from auto picked of a text area), address, telephone number and email(required), password(required). b) educational history, qualifications and skills(checkbox). c) work experience/employment/training in terms of employer history and number of years of experience selected from a slider. Set max. years of experience to 10 years. d) personal statement. e) two referees including names, occupation, relationship, address, telephone. a submit and clear button.
8.	04/01/2022	Create a web page showing India's map and create hotspots on five different states and link them to the e-government sites of the respective states.
9.	05/01/2022	Create a web page using three frames and link them to an image, audio and video as shown in the figure.
10.	06/01/2022	Create a web page having six frames and link each frame with five different web pages.
11.	07/01/2022	Create the following frameset as shown in the figure.
12	07/01/2022	Create an Iframe and write some lines before and after it.
13.	12/01/2022	Create the following webpage using CSS.
14.	13/01/2022	Create a Zebra Table using CSS.
15.	14/01/2022	Create a CSS based button and create a hoverable dropdown.
16.	14/01/2022	Use two images and use CSS transition properties on hover change one to another.
17.	18/01/2022	2D & 3D Transform
18.	19/01/2022	Write about Incredible India using an external stylesheet.
19.	21/01/2022	Create a webpage with 3 equal columns. (Bootstrap 5)
20.	25/01/2022	Create a webpage with different tables. (Bootstrap 5)
21.	27/01/2022	Create a webpage with different images & borders. (Bootstrap 5)

Practical 1

Theory:-

What is HTML?

- HTML stands for HyperText Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.
- HTML language is not case sensitive.

HTML Elements

The HTML element is everything from the start tag to the end tag:

<tagname>Content goes here...</tagname>

Some HTML elements have no content (like the
 element). These elements are called empty elements. Empty elements do not have an ending tag.

HTML elements can be nested (this means that elements can contain other elements).

HTML Attributes

- All HTML elements can 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"
1. The href attribute:- The <a> tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to.
 2. The src attribute:- The tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed.
 3. The width and height attribute:- The tags should also contain the width and height attributes, which specifies the width and height.
 4. The alt attribute:- The required alt attribute for the tag specifies an alternate text for an image if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the src attribute, or if the user uses a screen reader.

5. The style attribute:- The style attribute is used to add styles to an element, such as color, font, size, and more.
6. The lang attribute:- You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers.
7. The title attribute:- The title attribute defines some extra information about an element. The value of the title attribute will be displayed as a tooltip when you mouse over the element.

HTML Documents

- i. All HTML documents must start with a document type declaration: <!DOCTYPE html>. The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly. It must only appear once, at the top of the page (before any HTML tags).
- ii. The HTML document itself begins with <html> and ends with </html>.
- iii. The visible part of the HTML document is between <body> and </body>.

HTML Headings

HTML headings are defined with the <h1> to <h6> tags. <h1> defines the most important heading. <h6> defines the least important heading.

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

HTML Paragraphs

HTML paragraphs are defined with the <p> tag. These tags are used to define a block of text as a paragraph. HTML paragraphs can be any structural grouping of related content, such as images or form fields.

```
<p>This is a paragraph.</p>
```

```
<p>This is another paragraph.</p>
```

HTML Horizontal Rule

The <hr> tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule. This element is used to separate content (or define a change) in an HTML page. It is an empty tag.

HTML Line Break

The HTML
 element defines a line break. Use
 if you want a line break (a new line) without starting a new paragraph. It is an empty tag.

HTML Tags Formatting

HTML contains several elements for defining text with a special meaning. Formatting elements were designed to display special types of text:

- - Bold text
- - Important text
- <i> - Italic text
- - Emphasized text
- <mark> - Marked text
- <small> - Smaller text

- - Deleted text
- <ins> - Inserted text
- <sub> - Subscript text
- <sup> - Superscript text

HTML Lists

HTML lists allow web developers to group a set of related items in lists.

An unordered list starts with the tag. Each list item starts with the tag. The list items will be marked with bullets (small black circles) by default.

An ordered list starts with the tag. Each list item starts with the tag. The list items will be marked with numbers by default.

HTML also supports description lists. A description list is a list of terms, with a description of each term. The <dl> tag defines the description list, the <dt> tag defines the term (name), and the <dd> tag describes each term

An unordered HTML list:

- Item
 - Item
 - Item
 - Item
- | |
|--------------------|
| Coffee |
| - black hot drink |
| Milk |
| - white cold drink |

A description list:-

An ordered HTML list:

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

HTML Links

HTML links are defined with the <a> tag. The link tag is used to define a link between a document and an external resource. The link tag is mainly used to link to external style sheets. This element can appear multiple times but it goes only in the head section.

HTML Images

HTML images are defined with the tag. The HTML tag is used to embed an image in a web page. Images are not technically inserted into a web page; images are linked to web pages. The tag creates a holding space for the referenced image. The tag is empty, it contains attributes only, and does not have a closing tag.

The tag has two required attributes:

- src - Specifies the path to the image
- alt - Specifies an alternate text for the image

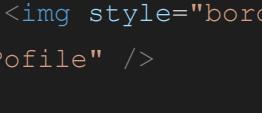
Code:-

```
<!DOCTYPE html>

<html lang="en">

    <head>
        <meta charset="UTF-8" />
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Resume</title>
</head>

<body>
<div>
<center>

</center>
<h2 style="text-align: center">
Aman Tripathi <br />Email:- imamantripathi@gmail.com <br />Contact No.:-  

8126406617
</h2>
</div>
<h2 style="padding-left: 100px"><u>Objective</u></h2>
<p style="padding-left: 100px; padding-right: 200px; font-size: medium">
<b>Looking for opportunities to incorporate my skills and training to help  

the company grow. I am looking forward to roles that will help me  

realise my potential by exploring the various aspects of this field.</b>
</p>
<div style="padding-left: 55px">
<ul>
<h2><u>Education Qualification</u></h2>
<li style="font-size: medium">
<b>10th passed from ICSE Board with 81% (2019) </b>
</li>
<li style="font-size: medium">
<b>I got 100/100 Marks in Computer Applications </b>
</li>
<li style="font-size: medium">
<b>12th passed from ISC Board with 80.8% (2021) </b>
</li>

```

```
</li>

<li style="font-size: medium">
    <b>I received a certificate in code jam 2021 </b>
</li>

</ul>

</div>

<div style="padding-left: 55px">
    <ul>
        <h2><u>Professional Qualification</u></h2>
        <li style="font-size: medium">
            <b>Basic Knowledge of Computer </b>
        </li>
        <li style="font-size: medium">
            <b>Complete Knowledge of JAVA </b>
        </li>
        <li style="font-size: medium">
            <b>Complete Knowledge of HTML </b>
        </li>
        <li style="font-size: medium">
            <b>Intermediate Knowledge of CSS </b>
        </li>
        <li style="font-size: medium">
            <b>Basic knowledge of JAVASCRIPT </b>
        </li>
    </ul>
</div>

<div style="padding-left: 55px">
    <ul>
        <h2><u>Hobbies</u></h2>
        <li style="font-size: medium">
            <b>Reading books </b>
        </li>
```

```
<li style="font-size: medium">
    <b>Playing Chess</b>
</li>

<li style="font-size: medium">
    <b>Listening Music </b>
</li>

<li style="font-size: medium">
    <b>Playing an instrument </b>
</li>

<li style="font-size: medium">
    <b>Writing & Art </b>
</li>

</ul>

</div>

<div style="padding-left: 55px">
    <ul>
        <h2><u>Interests</u></h2>
        <li style="font-size: medium">
            <b>History (Indian Modern History) </b>
        </li>

        <li style="font-size: medium">
            <b>Website Development</b>
        </li>

        <li style="font-size: medium">
            <b>Travelling </b>
        </li>

        <li style="font-size: medium">
            <b>Research in IT Sector </b>
        </li>

        <li style="font-size: medium">
            <b>Android Development</b>
        </li>
```

```
<li style="font-size: medium">  
    <b>Producing or listening music </b>  
</li>  
</ul>  
</div>  
  
<br /><br />  
  
<address style="  
    font-size: x-large;  
    font-weight: bold;  
    text-align: right;  
    padding-right: 200px;  
>  
    Aman Tripathi  
</address>  
  
<br /><br /><br />  
</body>  
  
</html>
```

Output:-



Aman Tripathi
Email:- imamantripathi@gmail.com
Contact No.: - 8126406617

Objective

Looking for opportunities to incorporate my skills and training to help the company grow. I am looking forward to roles that will help me realise my potential by exploring the various aspects of this field.

Education Qualification

- 10th passed from ICSE Board with 81% (2019)
- I got 100/100 Marks in Computer Applications
- 12th passed from ISC Board with 80.8% (2021)
- I received a certificate in code jam 2021

Professional Qualification

- Basic Knowledge of Computer
- Complete Knowledge of JAVA
- Complete Knowledge of HTML
- Intermediate Knowledge of CSS
- Basic knowledge of JAVASCRIPT

Hobbies

- Reading books
- Playing Chess
- Listening Music
- Playing an instrument
- Writing & Art

Interests

- History(Indian Modern History)
- Website Development
- Travelling
- Research in IT Sector
- Android Development
- Producing or listening music

Aman Tripathi

Practical 2

Theory:-

HTML Tables

HTML tables allow web developers to arrange data into rows and columns. It consists of table cells inside rows and columns.

Tag Description

<table> Defines a table

<th> Defines a header cell in a table

<tr> Define a row in a table

<td> Define a cell in a table

<colspan> Merges columns

<rowspan> Merges rows

<caption> Defines a table caption

Code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Collage TimeTable</title>

    <style>

      * {

        padding-top: 25px;
        padding-left: 10px;
        padding-right: 10px;
        margin: 0;
      }

      table,
      th,
      td {
```

```
border: 2px solid black;
}

table {
    border-collapse: collapse;
}

th,
td {
    text-align: center;
    padding: 5px 20px 5px 20px;
}

div {
    padding: 10px 300px 50px 250px;
    border: 1px solid black;
    border-radius: 10px;
}

caption {
    text-decoration: none;
    font-weight: bolder;
    font-family: "Lucida Sans", "Lucida Sans Regular", "Lucida Grande",
    "Lucida Sans Unicode", Geneva, Verdana, sans-serif;
}

</style>

</head>

<body>

<div style="table-layout: fixed">

<table>

<thead>

<caption>

    Maharaja Surajmal Institute

    <br /><b>Department Of Computer Application</b>

    <br />Online Timetable Second Shift (Session:- DEC-MAY 2021)

</caption>


```

```

<caption style="padding: 0%; padding-bottom: 20px;">

<u>BCA-FIRST SEM-Secton:A(Second Shift)</u>

<br />Class Coordinator: Ms. Nikita Malik

</caption>

<tr>

<th>DAY/TIME</th>

<th>8:50-9:50</th>

<th>9:55-10:55</th>

<th>11:00-12:00</th>

<th>12:05-01:05</th>

<th>01:05-01:20</th>

<th>01:20-02:20</th>

<th>02:25-03:25</th>

</tr>

</thead>

<tbody>

<tr>

<th>MON</th>

<td>WT</td>

<td>MATHS</td>

<td>TC</td>

<td>C</td>

<td rowspan="6">LUNCH</td>

<td colspan="2">WT/C LAB</td>

</tr>

<tr>

<th>TUE</th>

<td>MATHS</td>

<td>WT</td>

<td colspan="2">WT/C LAB</td>

<td colspan="2">FIT LAB</td>

</tr>

```

```
<tr>

<th>WED</th>

<td>C</td>

<td>MATHS</td>

<td>WT</td>

<td>FIT</td>

<td>TC</td>

</tr>

<tr>

<th>THU</th>

<td>TC</td>

<td>C</td>

<td colspan="2">WT/C LAB</td>

<td>FIT</td>

<td>MATHS (A+B Bridge)</td>

</tr>

<tr>

<th>FRI</th>

<td colspan="2">WT/C LAB</td>

<td>C</td>

<td>FIT</td>

<td>TC</td>

<td>WT</td>

</tr>

<tr>

<th>SAT</th>

<td>MATHS</td>

<td>FIT</td>

<td colspan="2">FIT LAB</td>

<td>MATHS (A+B Bridge)</td>

</tr>

</tbody>
```

```

</table>

< p style="padding: 0%;">

    <b>Maths:-</b>Dr. Jyoti, <b>FIT:-</b>Mr. Suraj Pal Chauhan,
    <b>C:-</b>Ms. Minal Dhankar, <br><b>WT:-</b>Ms. Nikita Malik,
    <b>TC:-</b>Manju Dhillon, <b>C Lab:-</b> Ms. Minal Dhankar, <br>
    <b>FIT Lab:-</b>Mr. Suraj Pal Chauhan / Ms. Kanika Kundu, <b>WT Lab:-</b>
    >Ms. Nikita Malik

</p>

</div>

</body>

</html>

```

Output:-

Maharaja Surajmal Institute
Department Of Computer Application
Online Timetable Second Shift (Session:- DEC-MAY 2021)
BCA-FIRST SEM-Secton:A(Second Shift)
Class Coordinator: Ms. Nikita Malik

DAY/TIME	8:50-9:50	9:55-10:55	11:00-12:00	12:05-01:05	01:05-01:20	01:20-02:20	02:25-03:25	
MON	WT	MATHS	TC	C	LUNCH	WT/C LAB		
TUE	MATHS	WT	WT/C LAB			FIT LAB		
WED	C	MATHS	WT	FIT		TC		
THU	TC	C	WT/C LAB			FIT	MATHS(A+B Bridge)	
FRI	WT/C LAB		C	FIT		TC	WT	
SAT	MATHS	FIT	FIT LAB			MATHS(A+B Bridge)		

Maths:- Dr. Jyoti, FIT:- Mr. Suraj Pal Chauhan, C:- Ms. Minal Dhankar,
 WT:- Ms. Nikita Malik, TC:- Manju Dhillon, C Lab:- Ms. Minal Dhankar,
 FIT Lab:- Mr. Suraj Pal Chauhan / Ms. Kanika Kundu, WT Lab:- Ms. Nikita Malik

Practical 3

Code:-

```
<html lang="en">
```

```
<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>List</title>

<style>

body {
    align-content: center;
}

div {
    font-family: "Lucida Sans", "Lucida Sans Regular", "Lucida Grande",
    "Lucida Sans Unicode", Geneva, Verdana, sans-serif;
    font-size: medium;
}

</style>

</head>

<body>

<div style="background-color: white">

    <h1>Learning Web Development</h1>

    <ol type="I">

        <li>
            Background Skills
            <ol type="A">
                <li>Unix Commands</li>
                <li>Vim Text Editor</li>
            </ol>
        </li>
        <li>
            HTML
        </li>
    </ol>
</div>

```

```
<ol type="A">

<li>Minimal page</li>

<li>Headings</li>

<li>Tags</li>

<li>

    Lists

    <ol type="i">

        <li>Unordered</li>

        <li>Ordered</li>

        <li>Definition</li>

        <li>Nested</li>

    </ol>

</li>

<li>

    Links

    <ol type="i">

        <li>Absolute</li>

        <li>Relative</li>

    </ol>

</li>

<li>Images</li>

</ol>

</li>

<li>

    CSS

    <ol type="A">

        <li>Anatomy</li>

        <li>

            Basic Selectors

            <ol type="i">

                <li>Elements</li>

                <li>Class</li>

            </ol>

        </li>

    </ol>

</li>
```

```
<li>ID</li>
<li>Group</li>
</ol>
</li>
<li>The DOM</li>
<li>Advanced Selectors</li>
<li>Box Model</li>
</ol>
</li>
<li>
    Programming
    <ol type="A">
        <li>Python</li>
        <li>Javascript</li>
    </ol>
</li>
<li>
    Database
    <ol type="A">
        <li>Flat File</li>
        <li>Relational</li>
    </ol>
</li>
</ol>
</div>
</body>
</html>
```

Output:-

Learning Web Development

I. Background Skills

- A. Unix Commands
- B. Vim Text Editor

II. HTML

- A. Minimal page
- B. Headings
- C. Tags
- D. Lists
 - i. Unordered
 - ii. Ordered
 - iii. Definition
 - iv. Nested
- E. Links
 - i. Absolute
 - ii. Relative
- F. Images

III. CSS

- A. Anatomy
- B. Basic Selectors
 - i. Elements
 - ii. Class
 - iii. ID
 - iv. Group
- C. The DOM
- D. Advanced Selectors
- E. Box Model

IV. Programming

- A. Python
- B. Javascript

V. Database

- A. Flat File
- B. Relational

Practical 4

Theory:-

HTML id attribute

The id attribute specifies a unique id for an HTML element. The value of the id attribute must be unique within the HTML document. The syntax for id is: write a hash character (#), followed by an id name.

Anchor Tag

The <a> tag defines a hyperlink, which is used to link from one page to another.

The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

By default, 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

Code:-

```
<html lang="en">

<head>

    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 4 (Web Page)</title>
    <style>
        a {
            text-decoration: none;
            color: black;
        }
    </style>
</head>

<body>
    <div id="top"></div>
    <center>
```

```
<a href="#bottom" style="color: red; font-weight: bold; font-size: x-large">Go to  
Bottom Section</a>  
</center>  
  
<h3>Name of my friends:</h3>  
  
<ol>  
  
    <li>Vipin Buddha</li>  
  
    <li>Raj Kumar</li>  
  
    <li>Tushar Sharma</li>  
  
    <li>Yashu Varshney</li>  
  
    <li>Gagan Tripathi</li>  
  
</ol>  
  
<h3>List of my hobbies:</h3>  
  
<ul>  
  
    <li>Reading Books</li>  
  
    <li>Playing Chess</li>  
  
    <li>Traveling</li>  
  
    <li>Designing</li>  
  
</ul>  
  
<h3>Links for Various Search Engines:</h3>  
  
<ul>  
  
    <li><a target="_blank" href="https://www.google.com/">Google</a></li>  
  
    <li><a target="_blank" href="https://www.bing.com/">Bing</a></li>  
  
    <li><a target="_blank" href="https://www.baidu.com/">Baidu</a></li>  
  
    <li><a target="_blank" href="https://www.yahoo.com/">Yahoo!</a></li>  
  
    <li><a target="_blank" href="https://yandex.com/">Yandex</a></li>  
  
    <li><a target="_blank" href="https://www.ask.com/">Ask</a></li>  
  
</ul>  
  
<h3>List of Diffrent Webpages:</h3>  
  
<ul>  
  
    <li>  
        <a target="_blank" href="Resume_Practical_1.html">Practical 1 (Resume)</a>  
    </li>  
  
    <li>  
        <a target="_blank" href="index.html">Index</a>  
    </li>
```

```
<a target="_blank" href="TimeTable_Practical_2.html">Practical 2  
(Timetable)</a>  
</li>  
<li>  
    <a target="_blank" href="List_Practical_3.html">Practical 3 (List)</a>  
</li>  
<li>  
    <a target="_blank" href="Webpage_Practical_4.html">Practical 4 (Webpage)</a>  
</li>  
<li>  
    <a target="_blank" href="Table_Practical_5.html">Practical 5  
(Image_Table)</a>  
</li>  
<li>  
    <a target="_blank" href="Form_Practical_6.html"> Practical 6 (Form)</a>  
</li>  
</ul>  
<center>  
    <a href="#top" style="color: red; font-weight: bold; font-size: x-large">Go to  
Top Section</a>  
</center>  
<div id="bottom"></div>  
</body>  
  
</html>
```

Output:-

[Go to Bottom Section](#)

Name of my friends:

- 1. Vipin Buddha
- 2. Raj Kumar
- 3. Tushar Sharma
- 4. Yashu Varshney
- 5. Gagan Tripathi

List of my hobbies:

- Reading Books
- Playing Chess
- Traveling
- Designing

Links for Various Search Engines:

- Google
- Bing
- Baidu
- Yahoo!
- Yandex
- Ask

List of Diffrent Webpages:

- Practical 1 (Resume)
- Practical 2 (Timetable)
- Practical 3 (List)
- Practical 4 (Webpage)
- Practical 5 (Image_Table)
- Practical 6 (Form)

[Go to Top Section](#)

Practical 5

Code:-

```
<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta http-equiv="X-UA-Compatible" content="IE=edge" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Document</title>

        <style>

            td {

                border: 1px solid black;

            }

            table {

                border: 5px solid black;

            }

        </style>

    </head>

    <body>

        <table border="1">

            <tr>

                <td>1</td>
                <td>2</td>
            </tr>

            <tr>

                <td>3</td>
                <td>4</td>
            </tr>

            <tr>

                <td>5</td>
                <td>6</td>
            </tr>

        </table>

    </body>

</html>
```

```
        }


```

```
>
</td>
<td>

</td>
</tr>
<tr>
<td>

</td>
<td
  colspan="2"
  style="
    text-align: center;
    font-size: larger;
    font-family: cursive;
    background: goldenrod;
  "
>
  Table with Images
</td>
<td>

</td>
</tr>
<tr>
<td>

    width="150px"
    alt="Image"
/>
</td>
<td>

    width="150px"
    alt="Image"
/>
</td>
<td>

    width="150px"
    alt="Image"
/>
</td>
<td>

    width="150px"
    alt="Image"
/>

```

```

    />
  </td>
</tr>
</tbody>
</table>
</div>
</body>
</html>

```

Output:-



Practical 6

Theory:-

HTML <form> tag

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. .

The <form> tag is used to create an HTML form for user input. The <form> element can contain one or more of the following form elements:

- <input> :- It defines an input control.
- <textarea> :- It defines a multi-line input control.
- <button> :- It defines a clickable button
- <select> :- It defines a drop-down list.
- <option> :- It defines an option in a drop-down list.
- <optgroup> :- It defines a group of related options in a drop down list.
- <fieldset> :- It groups the related element in a form.
- <label> :- It defines a label in an input element.
- <output> :- It defines the result of a calculation.

<label> tag

It is considered better to have label in form. As it makes the code parser/browser/user friendly. If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.

Input type

- Password :- The password is not visible to the user in password field control.
- Email :- The email field is new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.
- Radio :- The radio button is used to select one option from multiple options. It is used for selection of gender, quiz questions etc.
- Checkbox :- The checkbox control is used to check multiple options from given checkboxes.
- Submit :- HTML <input type="submit"> are used to add a submit button on web page. When user clicks on submit button, then form get submitted to the server.

Code:-

```
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Form</title>

<style>

form{

    font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;

    font-size: larger;

    font-weight: bold;

    text-align: left;

    padding: auto;

}

</style>

</head>

<body>

<hr />

<h2

    style="

        font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;

        text-align: center;

    "

>

    COMPUTER SOCIETY OF INDIA ANNUAL CONVENTION 2022 PARTICIPANTS RECORD

</h2>

<hr />

<div>

<form action="form.php">

    <label for="name"> 1. Name of Participant: </label>

    <input type="text" id="name" placeholder="Enter Your Name" />

    <br />

    <br />

    <label for="address"> 2. Address: Street </label>

    <input type="text" id="address" placeholder="Street Name" />

</form>

</div>

</body>
```

```
<label for="town"> Town </label>

<input type="text" id="town" placeholder="Town Name" />

<br /><br />

<label for="state">State</label>

<input type="text" id="state" placeholder="State Name" />

<label for="pincode">Pincode</label>

<input type="number" id="pincode" placeholder="Enter Pincode " />

<br /><br />

<label for="work">3. Select the work you are involved:</label>

<select name="work" id="work">

<option value="no-work">Select your choice</option>

<option value="Computer Education">Computer Education</option>

<option value="Website Development">Website Development</option>

<option value="Application Development">

    Application Development

</option>

</select>

<br /><br />

<label for="tutorial">4. Select any tutorial you wish to Attend:</label>

<br />

<label for="Tutorial"> 16th April 2022</label>

<select name="tutorial" id="tutorial">

<option value="no-option">Select your choice</option>

<option value="E-commerce">E-commerce</option>

<option value="web Tech">Website Technology</option>

<option value="Android Development">Android Development</option>

<option value="Digital Marketing">Digital Marketing</option>

</select>

<label for="Tutorial"> 17th April 2022</label>

<select name="tutorial" id="tutorial">

<option value="no-option">Select your choice</option>

<option value="E-commerce">E-commerce</option>
```

```

<option value="web Tech">Website Technology</option>
<option value="Android Development">Android Development</option>
<option value="Digital Marketing">Digital Marketing</option>
</select>
<br /><br />

<label for="requirements">5. Type any of your requirements in the Box:</label>
<br />

<textarea rows="10" cols="30" id="requirements"></textarea>
<br /><br />

<input type="reset" value="Start over" />
<input type="submit" value="Send over" />
</form>
</div>
</body>
</html>

```

Output:-

COMPUTER SOCIETY OF INDIA ANNUAL CONVENTION 2022 PARTICIPANTS RECORD

1. Name of Participant:

2. Address:

State **Pincode**

3. Select the work you are involved:

4. Select any tutorial you with to Attend:

16th April 2022 **17th April 2022**

5. Type any of your requirements in the Box:

Practical 7

Code:-

```
<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta http-equiv="X-UA-Compatible" content="IE=edge" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Online Application Form</title>

    </head>

    <body>

        <h2
            style="

                font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
                text-align: center;
            "

        >

            Online Application Form

        </h2>

        <div>

            <form action="/form.php">

                <label for="position">Position Applied For:</label>
                <input type="text" autofocus id="position" /> <br /><br />

                <label for="name">Enter Your Name:</label>
                <input type="text" id="name" placeholder="" />
                <br /><br />

                <label for="nationality">Enter Your Nationality:</label>
                <input type="text" name="nationality" id="nationality" /><br /><br />

                <label for="gender">Select Your Gender:</label><br />
                <input type="radio" name="gender" value="male" /> Male<br />

            </form>

        </div>

    </body>

</html>
```

```
<input type="radio" name="gender" value="female" /> Female<br />

<input type="radio" name="gender" value="other" /> Other

<br />

<br />

<label for="dob">Date Of Birth:</label>

<input type="date" id="dob" name="dateofbirth" value="" min="" max="" />

<br />

<br />

<label for="address">Enter Your Address:</label>

<textarea name="address" id="address" cols="20" rows="5"></textarea>

<br /><br />

<label for="telephone_number">Enter Your Number:</label>

<input type="number" name="number" id="telephone_number" /> <br /><br />

<label for="Email"> Enter Your Email: </label>

<input type="email" required name="email" id="Email" />

<br /><br />

<label for="password">Enter Your Password:</label>

<input type="password" name="password" required id="password" />

<br /><br />

<label for="education">Educational History:</label><br />

<input type="checkbox" name="12th" id="education" />12th Class Student

<br />

<input type="checkbox" name="BCA" id="education" />BCA Student

<br /><br />

<label for="qualification">Qualification:</label><br />

<input type="checkbox" name="12th pass" id="qualification" />12th Pass

<br />

<input type="checkbox" name="undergraduate" id="qualification" /> Under

Graduate <br />

<input type="checkbox" name="graduate" id="qualification" /> Graduate

<br />

<input type="checkbox" name="postgraduate" id="qualification" /> Post
```

```
Graduate <br />

<input type="checkbox" name="doctorate" id="qualification" /> Doctorate
<br /><br />

<label for="skills">Skills:</label><br />

<input type="checkbox" name="Web Development" id="skills" />Web
Development<br />

<input type="checkbox" name="App Development" id="skills" />App
Development <br />

<input
    type="checkbox"
    name="BlockChain Development"
    id="skills"
/>BlockChain Development<br />

<input
    type="checkbox"
    name="Software Development"
    id="skills"
/>Software Development<br />

<br /><br />

<label for="work experience">
    >Work Experience/Employment/Training:</label>
>

<input
    type="number"
    name="work-experience"
    min="0"
    max="10"
    id="work experience"
/>
<br /><br />

<label for="personal-statement">Personal Statement:</label>
<textarea
```

```
name="personal statement "
id="personal-statement"
cols="30"
rows="5"
></textarea>

<div>
<h3>Referee 1</h3>
<label for="name">Name:</label>
<input type="text" id="name" placeholder="" /><br /><br />
<label for="occupation">Occupation:</label>
<input type="text" id="occupation" placeholder="" /><br /><br />
<label for="relation">Relationship:</label>
<input type="text" id="relation" placeholder="" /><br /><br />
<label for="address">Address:</label>
<textarea name="address" id="address" cols="20" rows="5"></textarea>
><br /><br />
<label for="name">Telephone:</label>
<input type="text" id="name" placeholder="" />
<br /><br />
<br /><br />
</div>
<div>
<h3>Referee 2</h3>
<label for="name">Name:</label>
<input type="text" id="name" placeholder="" /><br /><br />
<label for="occupation">Occupation:</label>
<input type="text" id="occupation" placeholder="" /><br /><br />
<label for="relation">Relationship:</label>
<input type="text" id="relation" placeholder="" /><br /><br />
<label for="address">Address:</label>
<textarea name="address" id="address" cols="20" rows="5"></textarea>
><br /><br />
```

```

<label for="name">Telephone:</label>
<input type="text" id="name" placeholder="" />
<br /><br />
<br /><br />
</div>

<div class="controls">
<input type="reset" value="Reset" />
<input type="submit" value="Submit" />
</div>
</form>
</div>
</body>
</html>

```

Output:-

Online Application Form

Position Applied For:

Enter Your Name:

Enter Your Nationality:

Select Your Gender:

- Male
- Female
- Other

Date Of Birth:



Enter Your Address:

Enter Your Number:

Enter Your Email:

Enter Your Password:

Educational History:

- 12th Class Student
- BCA Student

Qualification:

- 12th Pass
- Under Graduate
- Graduate
- Post Graduate
- Doctorate

Skills:

- Web Development
- App Development
- BlockChain Development
- Software Development

Work Experience/Employment/Training:

Personal Statement:

Referee 1

Name:

Occupation:

Relationship:

Address:

Telephone:

Referee 2

Name:

Occupation:

Relationship:

Address:

Telephone:

Practical 8

Theory:-

Image map

The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.

Usemap attribute

The usemap value starts with a hash tag # followed by the name of the image map, and is used to create a relationship between the image and the image map.

- Use the HTML <map> element to define an image map
- Use the HTML <area> element to define the clickable areas in the image map
- Use the HTML usemap attribute of the element to point to an image map

Code:-

```
<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta http-equiv="X-UA-Compatible" content="IE=edge" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Image Map</title>

    </head>

    <body>

        <map name="indiamap">

            <area

                target="_blank"

                alt="Uttar Pradesh"

                title="Uttar Pradesh"

                href="https://edistrict.up.gov.in/edistrictup/"

                coords="1319,867,897,689,1013,922,1116,1017,1281,1091,1328,933,1321,902,1321,885,897,728,1022,973,1109,992,916,832"

                shape="poly"

            />

            <area

                target="_blank"

                alt="Rajasthan"

                title="Rajasthan"

            />

        </map>

    </body>

</html>
```

```
    href="https://rajasthan.gov.in/"  
    coords="703,1169,938,900,709,675,450,827,443,955,612,1062,650,1104"  
    shape="poly"  
  />  
  
<area  
    target="_blank"  
    alt="Uttarakhand"  
    title="Uttarakhand"  
    href="https://edistrict.uk.gov.in/"  
    coords="936,647,1072,748,1122,664,1059,596,991,590,975,627"  
    shape="poly"  
  />  
  
<area  
    target="_blank"  
    alt="Jammu & Kashmir"  
    title="Jammu & Kashmir"  
    href="https://www.jk.gov.in/jkeservices/"  
  
coords="652,176,788,132,865,205,911,246,973,249,955,260,1019,233,1072,246,1070,326,1048,3  
56,1028,363,1010,381,1008,400,1037,427,1039,447,1039,471,1026,480,1013,480,991,471,964,46  
9,933,444,909,447,881,433,856,433,834,436,823,447,806,473,786,484,746,471,716,449,698,433  
,678,420,709,301,709,275,685,249,656,218,623,209"  
    shape="poly"  
  />  
  
<area  
    target="_blank"  
    alt="Panjab"  
    title="Panjab"  
    href="http://edistrict.punjabgovt.gov.in/eda/landing.aspx"  
  
coords="755,517,795,510,812,524,819,543,830,563,852,581,861,596,872,623,867,636,856,647,8  
41,651,828,664,821,680,799,675,784,677,757,669,716,660,694,655,689,629"  
    shape="poly"  
  />
```

```
</map>
```

```
</body>
```

```
</html>
```

Output:-



Practical 9

Theory:-

HTML Frames

HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset.

To use frames on a page we use <frameset> tag instead of <body> tag. The <frameset> tag defines, how to divide the window into frames. The rows attribute of <frameset> tag defines horizontal frames and cols attribute defines vertical frames. Each frame is indicated by <frame> tag and it defines which HTML document shall open into the frame.

Attributes

- Src:- This attribute is used to give the file name that should be loaded in the frame.
- Name:- This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into.
- Frameborder:- This attribute specifies whether or not the borders of that frame.
- Marginwidth:- This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content.
- Marginheight:- This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents.
- Scrolling:- This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either "yes", "no" or "auto".

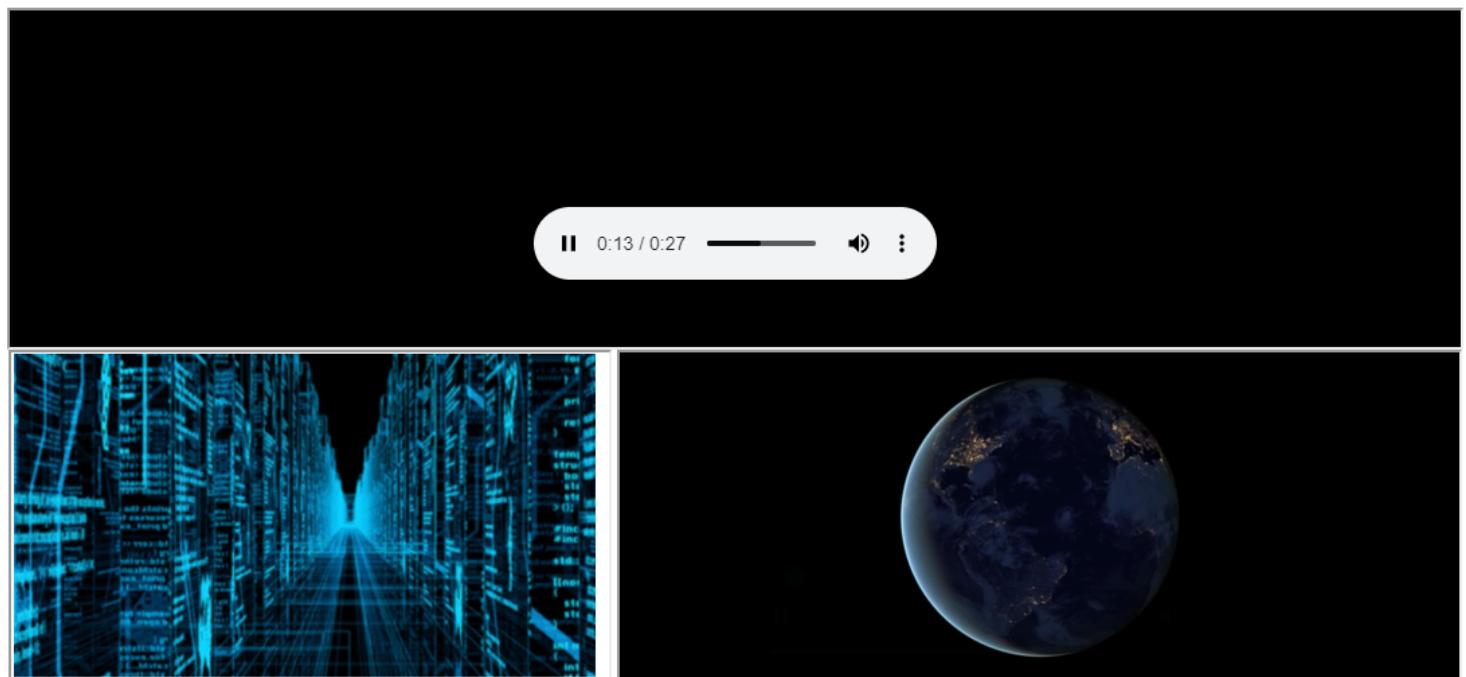
Code:-

```
<html lang="en">

    <head>
        <meta charset="UTF-8" />
        <meta http-equiv="X-UA-Compatible" content="IE=edge" />
        <meta name="viewport" content="width=device-width, initial-scale=1.0" />
        <title>Frames</title>
        <style>
            iframe{
                padding: 0;
                margin: 0;
            }
        div
```

```
{  
    text-align: center;  
}  
  
</style>  
</head>  
  
<body>  
    <div>  
        <iframe  
            src="Media/audio.mp3"  
            width="80%"  
            height="250"  
            frameborder="1"  
            style="background: brown;"  
            allowfullscreen=""  
            allow="fullscreen; picture-in-picture"  
></iframe>  
        <iframe src="Media/4.png" style="display: inline-block;" width="33%" height="40%"  
frameborder="1"></iframe>  
        <iframe src="Media/video.mp4" width="46.3%" height="40%" frameborder="1"></iframe>  
    </div>  
    </body>  
</html>
```

Output:-



Practical 10

Theory:-

HTML Iframe tag

The iframe HTML element represents a nested browsing context, embedding another HTML page into the current one. The iframe tag defines a rectangular region within the document in which the browser can display a separate document, including scrollbars and borders. An inline frame is used to embed another document within the current HTML document.

Attributes

- Src :- This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL.
- Name :- This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into another frame, in which case the second frame needs a name to identify itself as the target of the link.
- Frameborder:- This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the frameborder attribute on the frameset tag.
- Marginwidth:- This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content.
- Scrolling:- This attribute controls the appearance of the scrollbars that appear on the frame.

Code:-

```
<html lang="en">
```

```
<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title> 6 Frames</title>

<style>

    iframe

    {

        margin: 5%;

        height: 500;

        margin-left: 0;

        margin-right: 0;

    }

</style>

</head>

<body>

    <iframe

        src="https://www.nerdsflow.com/"

        width="100%"

        height="300"

        style="border: 2px solid black;"

    >

    </iframe><iframe

        src="https://www.tusharojha.com/"

        width="100%"

        height="300"

        style="border: 2px solid black"

    >

    </iframe><iframe

        src="https://www.ranveer.com/"

        width="100%"

        height="300"

    >

</body>
```

```
style="border: 2px solid black"
>

</iframe><iframe

src="https://www.bps.in/"

width="100%"

height="300"

style="border: 2px solid black"

>

</iframe><iframe

src="https://www.expert.ai/"

width="100%"

height="300"

style="border: 2px solid black"

>

</iframe><iframe

src="https://www.britannica.com/topic/history"

width="100%"

height="300"

style="border: 2px solid black"

>

</iframe>

</body>

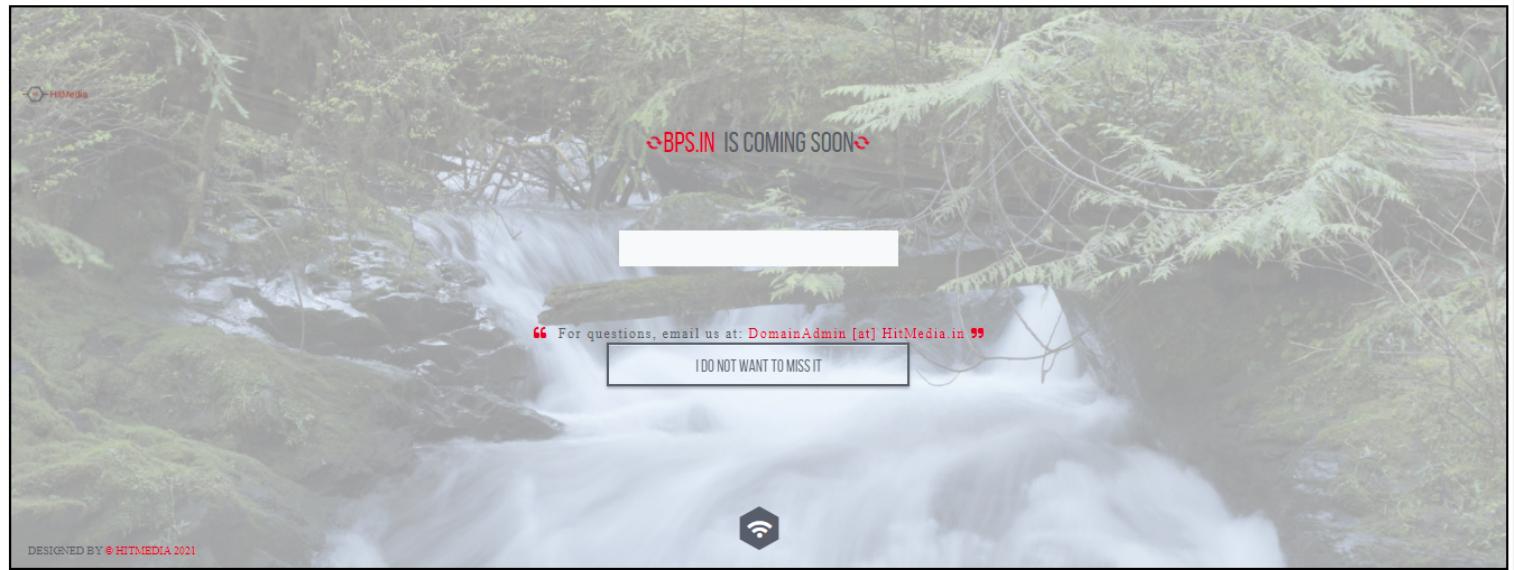
</html>
```

Output:-

The screenshot shows the homepage of the nerdsflow website. At the top, there is a navigation bar with links for Home, Blog, Quizzes, Fact capsules, About, Contact, and Login. To the right of the navigation is a search icon. The main content area features a large, stylized illustration of a person wearing glasses and a dark shirt, sitting at a desk and looking at a computer monitor. To the left of the illustration, the text "Learn tech, coding, facts & more" is displayed in a large, serif font. In the top-left corner, there is a logo consisting of three stylized human figures above the text "nerdsflow".

The screenshot shows the profile page of Tushar Ojha on his website, tusharojha.com. The page has a black header with a navigation menu containing Home, Skills, Education, Experience, Projects, Blogs, and Contact. The URL "tusharojha.com" is visible in the top right. The main content area features a large circular profile picture of Tushar Ojha, a young man with short dark hair, wearing a white striped long-sleeve shirt, standing outdoors in front of some buildings and greenery. Below the profile picture, the name "Tushar Ojha" is displayed in a large, bold, sans-serif font. A subtitle below it reads "A Full Stack Engineer, & open source contributor. Learning Quantum Computing and Blockchain." To the right of the profile picture, there are several social media icons: GitHub, Twitter, LinkedIn, YouTube, and others. Below the social media icons are three smaller icons related to technology or development. At the bottom of the page, there is a "Scroll for more" button.

The screenshot shows a section of the website featuring two quizzes. On the left, there is a large orange number "25" followed by the text "MARCH" in smaller orange letters. Next to it is the title "Ranveer Singh New Look Quiz". Below the title are author details: "Tina K", "quiz", and "0 Comments". A text snippet says "How much you about Ranveer Singh's New Look? Take this quiz to check and learn more" and a "Take Quiz" button. On the right, there is a search bar with a magnifying glass icon. Below the search bar is a "RECENT POSTS" section with a list of five items. Further down is a "RECENT COMMENTS" section with one item. On the left, there is another large orange number "24" followed by the text "MARCH" in smaller orange letters. Next to it is the title "Ranveer Singh Hairstyle Quiz". Below the title are author details: "Deepit", "quiz", and "0 Comments". A text snippet says "How much you know about Ranveer Singh's Hairstyle? Take this quiz to check and learn more" and a "Take Quiz" button.



DESIGNED BY © HITMEDIA 2021

The homepage of expert.ai. On the left, there is a logo consisting of a blue hexagon with green and blue dots forming a stylized brain or network pattern next to the text "expert.ai". On the right, there is a navigation bar with links for Products, Solutions, Resources, Community, Blog, Demo, and About, along with a UK flag icon. The main content area features a large blue graphic divided into several sections: "ACCURACY" (top), "SCALABILITY", "DEPLOYABILITY", "LATENCY/PERFORMANCE", "EXPLAINABILITY" (middle), "COMPUTATIONAL COST/ CARBON FOOTPRINT" (bottom left), and "DATA SCARCITY" (bottom right). To the left of this graphic, a white rounded rectangle contains the text "ACCURACY ON THE TASK" and a subtext: "This is often the main KPI considered by data-scientists."

A screenshot of the Britannica website. The top navigation bar includes links for Britannica, Browse, Search, Quizzes, and On This Day, along with options to Subscribe and Login. The main search bar shows the query "history". The left sidebar has a tree icon and lists "ARTICLE" (selected), "Introduction", "FAST FACTS", "MEDIA", and "ADDITIONAL INFO". The main content area shows the title "history" and its subtitle "discipline". It includes buttons for Print, Cite, Share, and More. Below the title, it says "BY The Editors of Encyclopaedia Britannica | View Edit History". The main text describes history as "the discipline that studies the chronological record of events (as affecting a nation or people), based on a critical examination of source materials and usually presenting an explanation of their causes." To the right, there is a box listing "Key People" like Karl Marx, David Hume, Niccolo Machiavelli, Thucydides, and Xenophon. Another box lists "Related Topics" such as history of Europe, ancient Rome, ancient Greek civilization, and pre-Colum... (with a "Show more" link). A "See all related content" button is also present. A blue circular icon with a question mark is in the bottom right corner.

Practical 11

Code:-

```
<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta http-equiv="X-UA-Compatible" content="IE=edge" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Frameset</title>

        <style>

            a {

                text-decoration: none;

                color: black;

                text-align: left;

                font-weight: bolder;

                font-family: Cambria, Cochin, Georgia, Times, "Times New Roman", serif;

            }

        </style>

    </head>

    <body>

        <header style="border: 1px solid black">

            <h3 style="display: inline">

            </h3>

            <h1>
```

```
style="

display: inline;

margin-left: 20%;

position: absolute;

line-height: 40px;

top: 20px;

"

>

National Institute of Open Schooling (NIOS)

<br />

<span style="font-size: x-large; margin-left: 20%">

B-31B, Kailash Colony, New Delhi-18</span

>

<br />

<span style="font-size: x-large; margin-left: 22%">

Website:

<a

style="text-decoration: none; color: black"

target="_blank"

href="https://www.nios.ac.in"

>https://www.nios.ac.in</a

>

</span>

</h1>

</header>

<table style="border: 1px solid black">

<tr>

<td style="border-right: 1px solid black; padding-right: 70px">

<ul>

<li>

<a

href="https://www.nios.ac.in/departmentsunits/academic.aspx"
```

```
    target="frame"
    >Academic Programmes</a
    >
</li>
<br /><br />
<li>
    <a
        href="https://www.nios.ac.in/departmentsunits/vocational-education.aspx"
        target="frame"
        >Vocational Education</a
    >
</li>
<br /><br />
<li>
    <a
        href="https://www.nios.ac.in/notice-boardoffice-order.aspx"
        target="frame"
        >Examination</a
    >
</li>
<br /><br />
<li>
    <a
        href="https://www.nios.ac.in/departmentsunits/administration.aspx"
        target="frame"
        >Administration</a
    >
</li>
<br /><br />
<li>
    <a
        href="https://sdmisi.nios.ac.in/registration/locate-study-center"
```

```
        target="frame"
        >Study Center</a>
      >
    </li>
    <br /><br />
    <!-- <li><a href="" target="frame">FAQ</a></li><br><br> -->
    <li>
      <a href="https://www.nios.ac.in/contact-us.aspx" target="frame">
        Contact us</a>
      >
    </li>
  </ul>
</td>
<td>
<iframe
  src=""
  frameborder="0"
  title="Right frame"
  name="frame"
  width="1100px"
  height="585px"
>
</iframe>
</td>
</tr>
</table>
<footer>
  <h3 style="text-align: center; border: 1px solid black; margin: 0%">
    Website Designed & Developed By
    <a target="_blank" href="https://www.nios.ac.in">
      National Institute of Open Schooling (NIOS)</a>
  </h3>
</footer>
```

```

>
<br />

For any Query Contact

<a target="_blank" href="https://linktr.ee/imamantripathi"

>Aman Tripathi</a

>

</h3>

</footer>

</body>

</html>

```

Output:-



The screenshot shows the homepage of the National Institute of Open Schooling (NIOS). The header features the NIOS logo (a blue circle with a white stylized 'S' and a red flame), the text 'विद्यालयम् सर्वदर्शनं प्रधानम्', and the text 'National Institute of Open Schooling (NIOS) B-31B, Kailash Colony, New Delhi-18'. Below the header, the website address 'Website: https://www.nios.ac.in' is displayed. The main content area has a yellow background with the text 'राष्ट्रीय मुक्त विद्यालयी शिक्षा संस्थान National Institute of Open Schooling (An autonomous institution under Ministry of Education, Govt. of India) (The Largest Open Schooling System in the World) ISO 9001:2008 CERTIFIED'. It also features the 'Azadi Ka Amrit Mahotsav' logo and social media links for Facebook, Twitter, and YouTube. A search bar is located at the bottom right. The left sidebar contains links for Academic Programmes, Vocational Education, Examination, Administration, Study Center, and Contact us. The top navigation bar includes links for RTI Disclosure, Staff Corner, Screen Reader Access, Skip to main content, Text Size (A-, A, A+), Contrast Scheme, English, and हिन्दी. The footer contains a 'Notice Board' section with links for 'For all Notification Orders & Office Orders', 'Transfer Order', and 'Important Notice about Fake website', along with a note about the January 2022 examinations.

Practical 12

Code:-

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Iframe Example</title>

</head>

<body style="border: 1px solid black; padding: 10px">

<h3>

The Taj Mahal 'Crown of the Palace' is an ivory-white marble mausoleum on  
the right bank of the river Yamuna in the Indian city of Agra. It was  
commissioned in 1632 by the Mughal emperor Shah Jahan (r. 1628-1658) to  
house the tomb of his favourite wife, Mumtaz Mahal; it also houses the  
tomb of Shah Jahan himself. The tomb is the centrepiece of a 17-hectare  
(42-acre) complex, which includes a mosque and a guest house, and is set  
in formal gardens bounded on three sides by a crenellated wall.

</h3>

<iframe

src="https://upload.wikimedia.org/wikipedia/commons/thumb/d/da/Taj-Mahal.jpg/200px-Taj-Ma  
hal.jpg"

width="200px"

height="133px"

frameborder="4"

>

</iframe>

<h3>
```

The most spectacular feature is the marble dome that surmounts the tomb. The dome is nearly 35 metres (115 ft) high which is close in measurement to the length of the base, and accentuated by the cylindrical "drum" it sits on, which is approximately 7 metres (23 ft) high. Because of its shape, the dome is often called an onion dome or amrud (guava dome). [19]

The top is decorated with a lotus design which also serves to accentuate its height. The shape of the dome is emphasised by four smaller domed chattris (kiosks) placed at its corners, which replicate the onion shape of the main dome. The dome is slightly asymmetrical. [20] Their columned bases open through the roof of the tomb and provide light to the interior.

Tall decorative spires (guldastas) extend from edges of base walls, and provide visual emphasis to the height of the dome. The lotus motif is repeated on both the chattris and guldastas. The dome and chattris are topped by a gilded finial which mixes traditional Persian and Hindustani decorative elements. [21] The main finial was originally made of gold but was replaced by a copy made of gilded bronze in the early 19th century.

This feature provides a clear example of integration of traditional Persian and Hindu decorative elements. [22] The finial is topped by a moon, a typical Islamic motif whose horns point heavenward. [23] The minarets, which are each more than 40 metres (130 ft) tall, display the designer's penchant for symmetry. They were designed as working minarets— a traditional element of mosques, used by the muezzin to call the Islamic faithful to prayer. Each minaret is effectively divided into three equal parts by two working balconies that ring the tower. At the top of the tower is a final balcony surmounted by a chattri that mirrors the design of those on the tomb. The chattris all share the same decorative elements of a lotus design topped by a gilded finial. The minarets were constructed slightly outside of the plinth so that in the event of collapse, a typical occurrence with many tall constructions of the period, the material from the towers would tend to fall away from the tomb. [24]

</h3>

</body>

```
</html>
```

Output:-

The Taj Mahal 'Crown of the Palace' is an ivory-white marble mausoleum on the right bank of the river Yamuna in the Indian city of Agra. It was commissioned in 1632 by the Mughal emperor Shah Jahan (r. 1628–1658) to house the tomb of his favourite wife, Mumtaz Mahal; it also houses the tomb of Shah Jahan himself. The tomb is the centrepiece of a 17-hectare (42-acre) complex, which includes a mosque and a guest house, and is set in formal gardens bounded on three sides by a crenellated wall.



The most spectacular feature is the marble dome that surmounts the tomb. The dome is nearly 35 metres (115 ft) high which is close in measurement to the length of the base, and accentuated by the cylindrical "drum" it sits on, which is approximately 7 metres (23 ft) high. Because of its shape, the dome is often called an onion dome or amrud (guava dome). [19] The top is decorated with a lotus design which also serves to accentuate its height. The shape of the dome is emphasised by four smaller domed chattris (kiosks) placed at its corners, which replicate the onion shape of the main dome. The dome is slightly asymmetrical. [20] Their columned bases open through the roof of the tomb and provide light to the interior. Tall decorative spires (guldastas) extend from edges of base walls, and provide visual emphasis to the height of the dome. The lotus motif is repeated on both the chattris and guldastas. The dome and chattris are topped by a gilded finial which mixes traditional Persian and Hindustani decorative elements. [21] The main finial was originally made of gold but was replaced by a copy made of gilded bronze in the early 19th century. This feature provides a clear example of integration of traditional Persian and Hindu decorative elements. [22] The finial is topped by a moon, a typical Islamic motif whose horns point heavenward. [23] The minarets, which are each more than 40 metres (130 ft) tall, display the designer's penchant for symmetry. They were designed as working minarets—a traditional element of mosques, used by the muezzin to call the Islamic faithful to prayer. Each minaret is effectively divided into three equal parts by two working balconies that ring the tower. At the top of the tower is a final balcony surmounted by a chattri that mirrors the design of those on the tomb. The chattris all share the same decorative elements of a lotus design topped by a gilded finial.

Practical 13

Theory:-

CSS (Cascading Style Sheets) is a stylesheet language used to design the webpage to make it attractive. The reason for using this is to simplify the process of making web pages presentable. It allows you to apply styles to web pages. More importantly, it enables you to do this independent of the HTML that makes up each web page.

Code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Webpage Practical 13</title>

    <style>

      body {
        background: palegreen;
      }
    </style>
  </head>
  <body>
    <h1>Welcome to Practical 13</h1>
    <p>This is a simple webpage for Practical 13.</p>
  </body>
</html>
```

```
border-style: solid;  
border-color: beige;  
border-width: 5px;  
padding: 0px;  
width: 98%;  
}  
  
li {  
border-right: 20px solid red;  
width: 120px;  
height: 40px;  
background-color: #fff;  
color: black;  
text-align: center;  
margin-top: 80px;  
margin-left: 40px;  
margin-bottom: 20px;  
margin-right: 30px;  
}  
  
div {  
padding-top: 70px;  
padding-left: 20%;  
}  
  
a:hover {  
color: red;  
font-family: "Times New Roman", Times, serif;  
}  
  
a:visited {  
color: rebeccapurple;  
text-decoration: none;  
}  
  
</style>  
</head>
```

```
<body>

<ul type="none" style="float: left">

    <li>Home Page</li>

    <li>Musings</li>

    <li>My Town</li>

    <li>Links</li>

</ul>

<div>

    <a href="https://imamantripathi.github.io/HTML-Lab/Webpage_Using_CSS_Practical_13.html"
        target="_blank"
        rel="noopener noreferrer"><h1>My first webpage using css</h1>

    </a>

<h2>

    Lorem ipsum dolor sit amet consectetur adipisicing elit. Facilis nobis
    maiores totam tenetur rem iusto non? Voluptatibus voluptates labore
    veritatis cum quo!

</h2>

<p>

    Lorem ipsum dolor sit amet consectetur adipisicing elit. Accusamus est
    reiciendis eveniet amet accusantium exercitationem, deserunt vitae
    saepe, laudantium quisquam nulla quasi nihil eligendi dolorum error
    delectus perferendis soluta nesciunt debitis ipsum? Omnis commodi soluta
    culpa natus dolores, labore aliquid.

</p>

</div>

</body>

</html>
```

Output:-



Practical 14

Theory:-

CSS Color property is used to set the color of HTML elements. This property is used to set font colour, background color etc.

Color of an element can be defined in the following ways:

- Built-In Color
- RGB Format
- RGBA Format
- Hexadecimal Notation
- HSL
- HSLA

Built-In Color: These are a set of predefined colors which are used by its name. For example: red, blue, green etc.

Syntax:

```
h1 {
```

```
    color: color-name;
```

}

Background color Property: This property specifies the background color of an element. A color name can also be given as : “green”, a HEX value as “#5570f0”, an RGB value as “rgb(25, 255, 2)”.

Syntax:

```
body {  
    background-color:color name  
}
```

CSS border properties allow us to set the style, color, and width of the border.

Note: Different properties can be set for all the different borders i.e. top border, right border, bottom border and left border.

Properties of CSS Borders :

1. Border Style: The border-style property specifies the type of border. None of the other border properties will work without setting the border style.

Following are the types of borders:

- *dotted – Defines a dotted border
- *dashed – Defines a dashed border
- *solid – Defines a solid border
- *double – Defines a double border
- *groove – Defines a 3D grooved border.
- *ridge – Defines a 3D ridged border.
- *inset – Defines a 3D inset border.
- *outset – Defines a 3D outset border.
- *none – Defines no border
- *hidden – Defines a hidden border

2. Border Width: Border width sets the width of the border. The width of the border can be in px, pt, cm or thin, medium and thick.

3. Border Color: This property is used to set the color of the border. Color can be set using the color name, hex value, or RGB value. If the color is not specified border inherits the color of the element itself.

4. Border individual sides: Individual sides can be set with different properties.

Syntax: If border properties have 4 values then.

border-style: solid dashed dotted double

Solid: top border

Dashed: right border

Dotted: bottom border

Double: left border

Syntax: If border properties have 3 values then:

border-style: solid dotted double

Solid: top border

Dotted: Left and right border

Double: bottom border

Syntax: If border properties have 2 values

border-style:solid dotted

Solid: top and bottom border

Dotted: right and left border

Syntax: If border properties have 1 value

border-style:dotted

Dotted: top, bottom, left and right border

CSS Margins: CSS margins are used to create space around the element. We can set the different sizes of margins for individual sides(top, right, bottom, left).

Margin properties can have the following values:

- Length in cm, px, pt, etc.
- Width % of the element.
- Margin calculated by the browser: auto.

Syntax:

body

{

margin: size;

}

Code:-

```
<html lang="en">

    <head>

        <meta charset="UTF-8" />

        <meta http-equiv="X-UA-Compatible" content="IE=edge" />

        <meta name="viewport" content="width=device-width, initial-scale=1.0" />

        <title>Zebra Table</title>

        <style>

            .center {
```

```
margin-left: auto;
margin-right: auto;
border: 2px solid black;
margin-top: 100px;
}

th,
tr,
td {
border: 2px solid black;
padding: 5px 70px 5px;
text-align: center;
}

.black {
background-color: black;
color: aliceblue;
}

</style>

</head>

<body>

<table class="center">

<thead>
<th>Roll No.</th>
<th>Name</th>
<th>Major</th>
</thead>

<tbody>
<tr class="black">
<td>1001</td>
<td>Aman</td>
<td>History</td>
</tr>
<tr>
```

```
<td>1002</td>
<td>Ramkumar</td>
<td>Biology</td>
</tr>
<tr class="black">
<td>1003</td>
<td>Warner</td>
<td>Chemistry</td>
</tr>
<tr>
<td>1004</td>
<td>Tarun</td>
<td>Maths</td>
</tr>
<tr class="black">
<td>1005</td>
<td>Ankit</td>
<td>Maths</td>
</tr>
<tr>
<td>1006</td>
<td>Neetesh</td>
<td>Maths</td>
</tr>
<tr class="black">
<td>1007</td>
<td>Vipin</td>
<td>Computer</td>
</tr>
</tbody>
</table>
</body>
```

```
</html>
```

Output:-

Roll No.	Name	Major
1001	Aman	History
1002	Ramkumar	Biology
1003	Warner	Chemistry
1004	Tarun	Maths
1005	Ankit	Maths
1006	Neetesh	Maths
1007	Vipin	Computer

Practical 15

Theory:-

The `:hover` selector is used to select elements when you mouse over them.

Tip: The `:hover` selector can be used on all elements, not only on links.

Tip: Use the `:link` selector to style links to unvisited pages, the `:visited` selector to style links to visited pages, and the `:active` selector to style the active link.

Note: `:hover` MUST come after `:link` and `:visited` (if they are present) in the CSS definition, in order to be effective!

Code:-

```
<html lang="en">

  <head>

    <title>Document</title>

    <style>

      body {

        font-family: "Poppins", sans-serif;

        background-color: #389612;
      }
    </style>
  </head>

  <body>

    <h1>Hello World!</h1>
  </body>
</html>
```

```
margin: 0;  
padding: 0;  
/* box-sizing: border-box;  
display: grid;  
place-items: center; */  
height: 100vh;  
}  
  
button {  
border: 7px solid white;  
background-color: black;  
color: white;  
height: 100px;  
width: 300px;  
text-align: center;  
font-size: 2rem;  
border-radius: 50px;  
/* margin-left: 38%;  
margin-right: 35%;  
margin-top: 20%; */  
position: relative;  
}  
  
button:hover {  
background-color: white;  
color: #151320;  
/* display: block; */  
cursor: pointer;  
  
/* transition: 0.5s ease-in; */  
}  
  
.onhover {  
display: none;  
position: absolute;
```

```
min-width: 200px;  
  
background: white;  
  
color: black;  
  
font-family: "Trebuchet MS", "Lucida Sans Unicode", "Lucida Grande",  
"Lucida Sans", Arial, sans-serif;  
  
/* z-index: 1; */  
  
/* width: 100px; */  
  
/* height:; */  
  
}  
  
.dropdown:hover .onhover {  
  
display: block;  
  
position: relative;  
  
background: palegreen;  
  
}  
  
.dropdown {  
  
position: relative;  
  
display: inline-block;  
  
}  
  
.a {  
  
text-decoration: none;  
  
color: black;  
  
}  
  
}  
  
</style>  
  
</head>  
  
<body>  
  
<div class="dropdown">  
  
<button>Google</button>  
  
<div class="onhover">  
  
<a href="http://www.google.com">Google </a><br />  
  
<a href="https://www.google.com/maps">Google map </a><br />  
  
<a href="https://docs.google.com/">Google Docs </a><br />
```

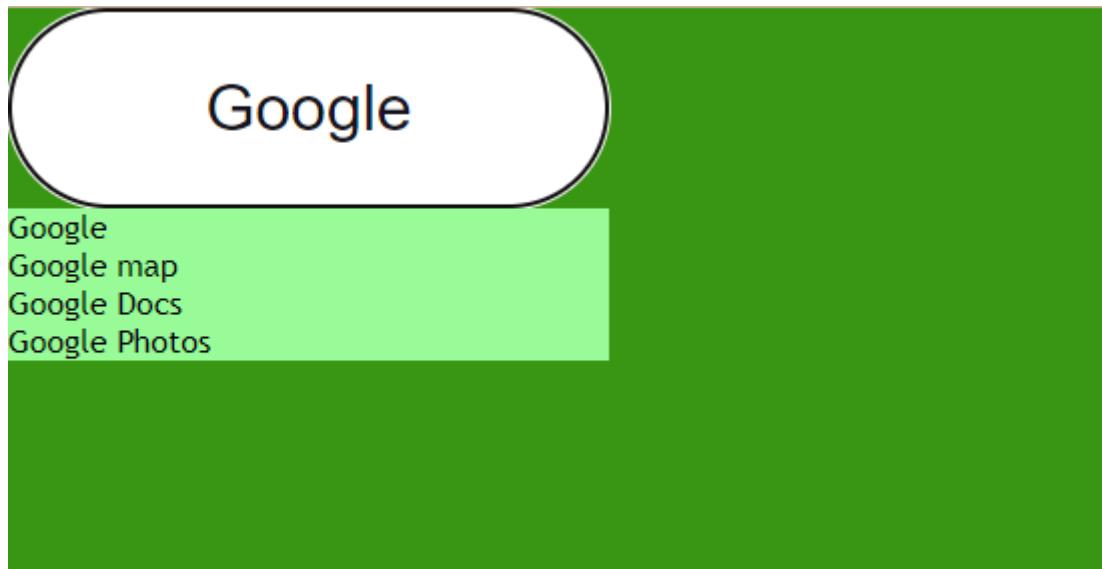
```
<a href="https://photos.google.com/?tab=rq&authuser=0&pageId=none">Google Photos</a><br />

</div>

</body>

</html>
```

Output:-



Practical 16

Theory:-

CSS transitions allow you to change property values smoothly, over a given duration.

- `transition`
- `transition-delay`
- `transition-duration`
- `transition-property`
- `transition-timing-function`

Code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Image Transition</title>

<style>

.image {
    display: inline-block;
}

.image:hover .pre-hover {
    opacity: 0;
    display: none;
    transition: opacity 0.2s;
}

.image:hover {
    opacity: 1;
    display: block;
    position: absolute;
    transition: opacity 0.6s;
}

</style>

</head>

<body>

<marquee behavior="scrolling" direction="right" style="font-size: xx-large">
    Hover on Image</marquee>
</div>

<div class="image">
    
    </div>
      
</div>  
  
</body>  
  
</html>
```

Output:-

age



Hover on Image



Practical 17

Theory:-

- **scale()**: Affects the size of the element. This also applies to the font-size, padding, height, and width of an element, too. It's also a shorthand function for the scaleX and scaleY functions.
- **skewX() and skewY()**: Tilts an element to the left or right, like turning a rectangle into a parallelogram. skew() is a shorthand that combines skewX() and skewY by accepting both values.
- **translate()**: Moves an element sideways or up and down.
- **rotate()**: Rotates the element clockwise from its current position.
- **matrix()**: A function that is probably not intended to be written by hand, but combines all transforms into one.
- **perspective()**: Doesn't affect the element itself, but affects the transforms of descendent elements' 3D transforms, allowing them all to have a consistent depth perspective.

Code:-

```
<!DOCTYPE html>

<html lang="en">

  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Transform</title>
    <style>
      img.a {
        display: inline;
        transform: rotate(180deg);
        padding: 100px;
      }
    </style>
  </head>
  <body>
    
  </body>
</html>
```

```
}

img.b {
    display: inline;
    transform: scale(2.5, 1.5);
    padding: 200px;
}

img.c {
    display: inline;
    transform: skew(20deg);
    padding: 100px;
}

img.e {
    display: inline;
    transform: translate(50px, 100px);
    padding: 100px;
}

img.d {
    display: inline;
    transform: skewY(20deg);
    padding: 100px;
}

img.f {
    padding-top: 100px;
    display: inline;
    transform: scaleX(4);
    padding: 100px;
}

img.g {
    padding: 100px;
    display: inline;
    transform-origin: scale(10);
    padding-bottom: 300px;
}
```

```
    }

    img {
    }

</style>

</head>

<body>

![Image](Media/12_practical_18.png)
```

Output:-





Practical 18

Theory:-

SS can be added to HTML documents in 3 ways:

- Inline - by using the `style` attribute inside HTML elements
- Internal - by using a `<style>` element in the `<head>` section
- External - by using a `<link>` element to link to an external CSS file

Code:-

HTML code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Incredible India</title>

    <link rel="stylesheet" href="Website_practical_18.css" />
```

```
</head>

<body>

<h1 class="heading">Incredible India</h1>

<p class="text">

    India is one of the oldest civilizations in the world with a kaleidoscopic variety and rich cultural heritage. It has achieved all-round socio-economic progress since its Independence. India has become self-sufficient in agricultural production and is now one of the top industrialised countries in the world and one of the few nations to have gone into outer space to conquer nature for the benefit of the people. Indian culture is the heritage of social norms, ethical values, traditional customs, belief systems, political systems, artifacts and technologies that originated in or are associated with the ethno-linguistically diverse Indian subcontinent.

</p>

<h2 class="sub-heading">Popular in India</h2>

<p class="text">

    India is the home to the finest Architectural heritage, serene ghats, spectacular landscapes and largest tiger reserve.

</p>

<div class="popular-in-india">

    <a href="Website_practical_18_tajmahal.html" target="_blank" rel="noopener noreferrer">Tajmahal</a>

    >

    <a href="http://" target="_blank" rel="noopener noreferrer">Agra Fort</a>

    <a href="http://" target="_blank" rel="noopener noreferrer">

        >Golden Temple</a>

    >

    <a href="http://" target="_blank" rel="noopener noreferrer">India Gate</a>


```

```
<a href="http://" target="_blank" rel="noopener noreferrer">Red Fort</a>
<a href="http://" target="_blank" rel="noopener noreferrer">Hawa Mahal</a>
<a href="http://" target="_blank" rel="noopener noreferrer">
    Ajanta & Ellora Caves</a>
>
<a href="http://" target="_blank" rel="noopener noreferrer">
    Akshardham Temple</a>
>
</div>

<h2 class="sub-heading">Must Visit Destinations</h2>
<p class="text">
    From Historical cities to natural splendours, come see the best of India.
</p>

<div class="main-must-visit">
    <div class="must-visit">
        
        <div class="text">Dalhausie</div>
    </div>
    <div class="must-visit">
        
        <div class="text">Goa</div>
    </div>
    <div class="must-visit">
        
        <div class="text">Assam</div>
    </div>
    <div class="must-visit">
        
        <div class="text">Tamilnadu</div>
    </div>
    <div class="must-visit">
        
    </div>

```

```
<div class="text">Punjab</div>

</div>

<div class="must-visit">

<div class="text">Rajasthan</div>
</div>

<div class="must-visit">

<div class="text">Mumbai</div>
</div>

<div class="must-visit">

<div class="text">Ayodhaya</div>
</div>

<div class="must-visit">

<div class="text">Sikkim</div>
</div>

<div class="must-visit">

<div class="text">Himachal Pradesh</div>
</div>

<div class="must-visit">

<div class="text">Mathura</div>
</div>

<div class="must-visit">

<div class="text">Delhi</div>
</div>
</div>
</body>
```

```
</html>
```

CSS Code:-

```
body {  
background-repeat: no-repeat;  
background-attachment: fixed;  
background-size: cover;  
background-image: url(Media/Practical_16_bg.png);  
border: 2px solid;  
}  
  
h1 {  
background: transparent;  
text-align: center;  
font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;  
font-weight: bolder;  
font-size: 50px;  
text-shadow: 2px 2px #ff0000;  
text-transform: uppercase;  
}  
  
.text {  
font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;  
text-align: center;  
font-size: larger;  
font-weight: 450px;  
text-shadow: 0.2px 0.2px blue;  
}  
  
h2 {  
text-align: center;  
font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;  
font-weight: bolder;  
font-size: 30px;
```

```
text-shadow: 2px 2px gold;
}

.popular-in-india {
    display: flex;
    flex-direction: row;
    row-gap: 10px;
    column-gap: 10px;
    padding-top: 10px;
    padding-bottom: 10px;
    padding-left: 50px;
    padding-right: 50px;
}

@media (max-width: 800px) {
    .popular-in-india {
        flex-direction: column;
        column-gap: normal;
        padding-left: 10px;
        padding-right: 10px;
    }
}

.popular-in-india a {
    flex: 1;
    background-color: #f06543;
    background-image: linear-gradient(315deg, #f06543 0%, #ffbe3d 74%);
    color: #fff;
    padding-top: 13px;
    border: 1px solid;
    border-radius: 20px;
    vertical-align: middle;
}
```

```
text-align: center;
color: black;
font-size: larger;
text-decoration: none;
transition: all 0.5s ease-out;
}

.popular-in-india a:hover,
a:focus {
    transform: scale(1.2);
background-color: #ee9617;
background-image: linear-gradient(315deg, #ee9617 0%, #fe5858 74%);
color: black;
font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
}

.main-must-visit {
    padding-left: 50px;
    padding-right: 50px;
background: transparent;
display: flex;
flex-wrap: wrap;
flex-direction: row;
}

.must-visit img {
    display: block;
margin-left: auto;
margin-right: auto;
width: 100%;
}

.must-visit {
    flex: 1 0 19%;
margin: 20px;
```

```
justify-content: center;
text-align: center;
background: white;
display: inline-block;
box-shadow: rgba(0, 0, 0, 0.25) 0px 54px 55px,
rgba(235, 212, 10, 0.12) 0px -12px 30px, rgba(238, 204, 13, 0.12) 0px 4px 6px,
rgba(253, 216, 2, 0.17) 0px 12px 13px, rgba(245, 209, 8, 0.65) 0px -3px 5px;
}

.must-visit:hover{
    transform: scale(1.2);
    transition: all 0.5s ease-in-out;
}

@media (max-width: 800px) {
    .main-must-visit {
        flex-direction: column;
        background: white;
    }
}

.must-visit .text {
    font-family: Verdana, Geneva, Tahoma, sans-serif;
    padding-top: 10px;
    padding-bottom: 10px;
    border: 0px solid;
}
```

Output:-

INCREDIBLE INDIA

India is one of the oldest civilizations in the world with a kaleidoscopic variety and rich cultural heritage. It has achieved all-round socio-economic progress since its Independence. India has become self-sufficient in agricultural production and is now one of the top industrialised countries in the world and one of the few nations to have gone into outer space to conquer nature for the benefit of the people. Indian culture is the heritage of social norms, ethical values, traditional customs, belief systems, political systems, artifacts and technologies that originated in or are associated with the ethno-linguistically diverse Indian subcontinent.

Popular in India

India is the home to the finest Architectural heritage, serene ghats, spectacular landscapes and largest tiger reserve.

Tajmahal

Agra Fort

Golden Temple

India Gate

Red Fort

Hawa Mahal

Ajanta & Ellora Caves

Akshardham Temple

Must Visit Destinations

From Historical cities to natural splendours, come see the best of India.



Dalhousie



Goa



Assam



Tamilnadu



Punjab



Rajasthan



Mumbai



Ayodhya

TAJMAHAL



History of Taj Mahal

The Taj Mahal of Agra is one of the Seven Wonders of the World, for reasons more than just looking magnificent. It's the history of Taj Mahal that adds a soul to its magnificence: a soul that is filled with love, loss, remorse, and love again. Because if it was not for love, the world would have been robbed of a fine example upon which people base their relationships. An example of how deeply a man loved his wife, that even after she remained but a memory, he made sure that this memory would never fade away. This man was the Mughal Emperor Shah Jahan, who was head-over-heels in love with Mumtaz Mahal, his dear wife. She was a Muslim-Persian princess (her name Arjumand Banu Begum before marriage) and he was the son of the Mughal Emperor Jehangir and grandson of Akbar the Great. It was at the age of 14 that he met Mumtaz and fell in love with her. Five years later in the year 1612, they got married. Mumtaz Mahal, an inseparable companion of Shah Jahan, died in 1631, while giving birth to their 14th child. It was in the memory of his beloved wife that Shah Jahan built a magnificent monument as a tribute to her, which we today know as the "Taj Mahal". The construction of Taj Mahal started in the year 1631. Masons, stonemasons, inlayers, carvers, painters, calligraphers, dome-builders and other artisans were requisitioned from the whole of the empire and also from Central Asia and Iran, and it took approximately 22 years to build what we see today. An epitome of love, it made use of the services of 22,000 laborers and 1,000 elephants. The monument was built entirely out of white marble, which was brought in from all over India and central Asia. After an expenditure of approximately 32 million rupees, Taj Mahal was finally completed in the year 1653.

Practical 19

Theory:-

- Containers provide a means to center and horizontally pad your site's contents. Use `.container` for a responsive pixel width or `.container-fluid` for `width: 100%` across all viewport and device sizes.
- Rows are wrappers for columns. Each column has horizontal `padding` (called a gutter) for controlling the space between them. This `padding` is then counteracted on the rows with negative margins. This way, all the content in your columns is visually aligned down the left side.
- In a grid layout, content must be placed within columns and only columns may be immediate children of rows.
- Thanks to flexbox, grid columns without a specified `width` will automatically layout as equal width columns. For example, four instances of `.col-sm` will each automatically be 25% wide from the small breakpoint and up. See the `auto-layout columns` section for more examples.
- Column classes indicate the number of columns you'd like to use out of the possible 12 per row. So, if you want three equal-width columns across, you can use `.col-4`.
- Column `widths` are set in percentages, so they're always fluid and sized relative to their parent element.
- Columns have horizontal `padding` to create the gutters between individual columns, however, you can remove the `margin` from rows and `padding` from columns with `.no-gutters` on the `.row`.
- To make the grid responsive, there are five grid breakpoints, one for each `responsive breakpoint`: all breakpoints (extra small), small, medium, large, and extra large.
- Grid breakpoints are based on minimum width media queries, meaning they apply to that one breakpoint and all those above it (e.g., `.col-sm-4` applies to small, medium, large, and extra large devices, but not the first `xs` breakpoint).
- You can use predefined grid classes (like `.col-4`) or `Sass mixins` for more semantic markup.

Code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Bootstrap</title>
```

```
<!-- CSS only -->

<link
  href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
  rel="stylesheet"
  integrity="sha384-1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
  crossorigin="anonymous"

/>

<!-- JavaScript Bundle with Popper -->

<script
  src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
  integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBOOLRn5q+8nbTov4+1p"
  crossorigin="anonymous"

></script>

</head>

<body>

<div class="container bg-primary"><h1>This is Bootstrap</h1></div>

<br /><br />

<div class="container">

<div class="row">

<div class="col-sm-4 bg-primary">
  Lorem ipsum dolor sit amet consectetur adipisicing elit. Minus,
  voluptas?
</div>

<div class="col-sm-4 bg-warning">
  Lorem ipsum dolor sit amet consectetur, adipisicing elit. Voluptates
  labore obcaecati quidem reiciendis perspiciatis libero, quam totam.
  Nesciunt praesentium obcaecati esse molestiae? Voluptates, dolore qui
  consequatur voluptate doloremque placeat velit.
</div>

<div class="col-sm-4 bg-secondary">
  Lorem ipsum dolor, sit amet consectetur adipisicing elit. Eligendi
  sint unde voluptatum eius vitae deleniti! Consequatur reprehenderit,

```

```
ea illo placeat voluptas esse? Quaerat doloremque, nisi in inventore  
iure amet dicta?  
</div>  
</div>  
</div>  
</body>  
</html>
```

Output:-

This is Bootstrap

Lorem ipsum dolor sit amet consectetur adipisicing elit. Minus, voluptas?

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Voluptates labore obcaecati quidem reiciendis perspiciatis libero, quam totam. Nesciunt praesentium obcaecati esse molestiae? Voluptates, dolore qui consequatur voluptate doloremque placeat velit.

Lorem ipsum dolor, sit amet consectetur adipisicing elit. Eligendi sint unde voluptatum eius vitae deleniti! Consequatur reprehenderit, ea illo placeat voluptas esse? Quaerat doloremque, nisi in inventore iure amet dicta?

This is Bootstrap

Lorem ipsum dolor sit amet consectetur adipisicing elit. Minus, voluptas?

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Voluptates labore obcaecati quidem reiciendis perspiciatis libero, quam totam. Nesciunt praesentium obcaecati esse molestiae? Voluptates, dolore qui consequatur voluptate doloremque placeat velit.

Lorem ipsum dolor, sit amet consectetur adipisicing elit. Eligendi sint unde voluptatum eius vitae deleniti! Consequatur reprehenderit, ea illo placeat voluptas esse? Quaerat doloremque, nisi in inventore iure amet dicta?

Practical 20

Theory:-

The `.table` class adds basic styling to a table

The `.table-striped` class adds zebra-stripes to a table

The `.table-bordered` class adds borders on all sides of the table and cells

The `.table-hover` class adds a hover effect (grey background color) on table rows

The `.table-dark` class adds a black background to the table

The `.table-borderless` class removes borders from the table

The contextual classes that can be used are:

Class	Description
<code>.table-primary</code>	Blue: Indicates an important action
<code>.table-success</code>	Green: Indicates a successful or positive action
<code>.table-danger</code>	Red: Indicates a dangerous or potentially negative action
<code>.table-info</code>	Light blue: Indicates a neutral informative change or action
<code>.table-warning</code>	Orange: Indicates a warning that might need attention
<code>.table-active</code>	Grey: Applies the hover color to the table row or table cell
<code>.table-secondary</code>	Grey: Indicates a slightly less important action
<code>.table-light</code>	Light grey table or table row background
<code>.table-dark</code>	Dark grey table or table row background

The `.table-sm` class makes the table smaller by cutting cell padding in half

The `.table-responsive` class adds a scrollbar to the table when needed (when it is too big horizontally)

You can also decide when the table should get a scrollbar, depending on the screen width:

Class	Screen width
-------	--------------

.table-responsive-sm	< 576px
.table-responsive-md	< 768px
.table-responsive-lg	< 992px
.table-responsive-xl	< 1200px
.table-responsive-xxl	< 1400px

Code:-

```

<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <!-- CSS only -->

    <link

      href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
      crossorigin="anonymous"

    />

    <!-- JavaScript Bundle with Popper -->

    <script

      src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
      integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBOOLRn5q+8nbTov4+1p"
      crossorigin="anonymous"

    ></script>

    <title>Table using Bootstrap</title>

  </head>

  <body>

    <h1 class="text-center border border-width: 2px">Table Using Bootstrap</h1>

    <h2 class="text-center">class="table table-border table-striped"</h2>

```

```
<table class="table table-border table-striped">

<thead>

<tr>
<th>Roll No.</th>
<th>Name</th>
<th>Subject 1</th>
<th>Subject 2</th>
</tr>
</thead>

<tbody>

<tr>
<td>01</td>
<td>Manu</td>
<td>Hindi</td>
<td>History</td>
</tr>

<tr>
<td>02</td>
<td>Naman</td>
<td>Geography</td>
<td>Maths</td>
</tr>

<tr>
<td>03</td>
<td>Walker</td>
<td>Science</td>
<td>Computer</td>
</tr>

<tr>
<td>04</td>
<td>Tarun</td>
<td>Economics</td>
</tr>


```

```

<td>Chemistry</td>
</tr>
</tbody>
<tfoot>
<caption>
    Student List
</caption>
</tfoot>
</table>

<!-- Table For Hover -->

<h2 class="text-center">class="table table-borderless table-hover table-dark "</h2>

<table class="table table-borderless table-hover table-dark">
    <thead>
        <tr>
            <th>Roll No.</th>
            <th>Name</th>
            <th>Subject 1</th>
            <th>Subject 2</th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>01</td>
            <td>Manu</td>
            <td>Hindi</td>
            <td>History</td>
        </tr>
        <tr>
            <td>02</td>

```

```

<td>Naman</td>
<td>Geography</td>
<td>Maths</td>
</tr>
<tr>
<td>03</td>
<td>Walker</td>
<td>Science</td>
<td>Computer</td>
</tr>
<tr>
<td>04</td>
<td>Tarun</td>
<td>Economics</td>
<td>Chemistry</td>
</tr>
</tbody>
<tfoot>
<caption>
    Student List
</caption>
</tfoot>
</table>
<!-- Different color classes in Table --&gt;
&lt;h2 class="text-center"&gt;Different color classes&lt;/h2&gt;

&lt;table class="table table-border"&gt;
&lt;thead class="table-dark"&gt;
&lt;tr&gt;
&lt;th&gt;Roll No.&lt;/th&gt;
&lt;th&gt;Name&lt;/th&gt;
&lt;th&gt;Subject 1&lt;/th&gt;
</pre>

```

```
<th>Subject 2</th>
</tr>

</thead>

<tbody>

<tr class="table-danger">
    <td>01</td>
    <td>Manu</td>
    <td>Hindi</td>
    <td>History</td>
</tr>

<tr class="table-info">
    <td>02</td>
    <td>Naman</td>
    <td>Geography</td>
    <td>Maths</td>
</tr>

<tr class="table-primary">
    <td>03</td>
    <td>Walker</td>
    <td>Science</td>
    <td>Computer</td>
</tr>

<tr class="table-warning">
    <td>04</td>
    <td>Tarun</td>
    <td>Economics</td>
    <td>Chemistry</td>
</tr>

</tbody>

<tfoot>

<caption>
    Student List
</caption>
```

```

</caption>

</tfoot>

</table>

<!-- Table sm -->

<h2 class="text-center">Table Small & Table Responsive</h2>

<!-- .table-responsive-sm < 576px

.table-responsive-md   < 768px

.table-responsive-lg   < 992px

.table-responsive-xl   < 1200px

.table-responsive-xxl < 1400px -->

<div class="table-responsive-sm">

<table class="table table-border table-sm">

<thead>

<tr>

<th>Roll No.</th>

<th>Name</th>

<th>Subject 1</th>

<th>Subject 2</th>

</tr>

</thead>

<tbody>

<tr>

<td>01</td>

<td>Manu</td>

<td>Hindi</td>

<td>History</td>

</tr>

<tr>

<td>02</td>

<td>Naman</td>

<td>Geography</td>

```

```
<td>Maths</td>
</tr>

<tr>
<td>03</td>
<td>Walker</td>
<td>Science</td>
<td>Computer</td>
</tr>

<tr>
<td>04</td>
<td>Tarun</td>
<td>Economics</td>
<td>Chemistry</td>
</tr>

</tbody>
<tfoot>
<caption>
    Student List
</caption>
</tfoot>
</table>
</div>
</body>
</html>
```

Output:-

Table Using Bootstrap class="table table-border table-striped"

Roll No.	Name	Subject 1	Subject 2
01	Manu	Hindi	History
02	Naman	Geography	Maths
03	Walker	Science	Computer
04	Tarun	Economics	Chemistry

Student List

class="table table-borderless table-hover table-dark"

Roll No.	Name	Subject 1	Subject 2
01	Manu	Hindi	History
02	Naman	Geography	Maths
03	Walker	Science	Computer
04	Tarun	Economics	Chemistry

Student List

Different color classes

Roll No.	Name	Subject 1	Subject 2
01	Manu	Hindi	History
02	Naman	Geography	Maths
03	Walker	Science	Computer
04	Tarun	Economics	Chemistry

Student List

Table Small & Table Responsive

Roll No.	Name	Subject 1	Subject 2
01	Manu	Hindi	History
02	Naman	Geography	Maths
03	Walker	Science	Computer
04	Tarun	Economics	Chemistry

Student List

Practical 21

Theory:-

Images in Bootstrap are made responsive with `.img-fluid`. This applies `max-width: 100%;` and `height: auto;` to the image so that it scales with the parent element.

```

```

In addition to our [border-radius utilities](#), you can use `.img-thumbnail` to give an image a rounded 1px border appearance.

```

```

Align images with the [helper float classes](#) or [text alignment classes](#). **block**-level images can be centered using [the .mx-auto margin utility class](#).

```
  
  
  
<div class="text-center">  
    
</div>
```

If you are using the `<picture>` element to specify multiple `<source>` elements for a specific ``, make sure to add the `.img-*` classes to the `` and not to the `<picture>` tag.

```
<picture>  
  <source srcset="..." type="image/svg+xml">  
    
</picture>
```

Use the `border` classes to add or remove borders from an element

Use `.border-1` to `.border-5` to change the width of the border

Add a color to the border with any of the contextual border color classes

```
<span class="border border-primary"></span>  
<span class="border border-secondary"></span>  
<span class="border border-success"></span>  
<span class="border border-danger"></span>  
<span class="border border-warning"></span>  
<span class="border border-info"></span>  
<span class="border border-light"></span>  
<span class="border border-dark"></span>  
<span class="border border-white"></span>
```

Add rounded corners to an element with the `rounded` classes

```
<span class="rounded"></span>  
<span class="rounded-top"></span>  
<span class="rounded-end"></span>  
<span class="rounded-bottom"></span>  
<span class="rounded-start"></span>  
<span class="rounded-circle"></span>  
<span class="rounded-pill" style="width:130px"></span>  
<span class="rounded-0"></span>  
<span class="rounded-1"></span>  
<span class="rounded-2"></span>  
<span class="rounded-3"></span>
```

Float an element to the right with the `.float-end` class or to the left with `.float-start`, and clear floats with the `.clearfix` class

Float an element to the left or to the right depending on screen width, with the responsive float classes (`.float-* Start|end` - where * is `sm` ($\geq 576\text{px}$), `md` ($\geq 768\text{px}$), `lg` ($\geq 992\text{px}$), `xl` ($\geq 1200\text{px}$) or `xxl` ($\geq 1400\text{px}$))

Code:-

```
<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Bootstrap Images with Border</title>

    <!-- CSS only -->

    <link

      href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
      crossorigin="anonymous"

    />

    <!-- JavaScript Bundle with Popper -->

    <script

      src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
      integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBOOLRn5q+8nbTov4+1p"
      crossorigin="anonymous"

    ></script>

  </head>

  <body>











</body>

</html>
```

Output:-

