

HTML Tables, Forms and Frames

- a. Write a HTML program, to explain the working of tables. (use tags: `<table>`, `<tr>`, `<th>`, `<td>` and attributes: `border`, `rowspan`, `colspan`)

DESCRIPTION: HTML tables are used to arrange data in rows and columns. The `<table>` tag is used to create a table, `<tr>` defines a table row, `<th>` defines table headings, and `<td>` defines table data. The `border` attribute is used to display table borders. The `rowspan` attribute merges multiple rows into a single cell, while the `colspan` attribute merges multiple columns into one cell. These features help in presenting structured data clearly using tables.

CODE:

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table Example</title>
</head>
<body>

  <h1 align="center">Working of Tables in HTML</h1>

  <table border="1" align="center" cellpadding="10">
    <tr>
      <th>Name</th>
      <th colspan="2">Subjects</th>
    </tr>

    <tr>
      <td>Arjun</td>
      <td>Math</td>
      <td>Science</td>
    </tr>

    <tr>
      <td rowspan="2">Ram</td>
      <td>History</td>
      <td>Geography</td>
    </tr>

    <tr>
      <td>Math</td>
      <td>Physics</td>
    </tr>
  </table>

</body>
</html>
```

- b. Write a HTML program, to explain the working of tables by preparing a timetable. (Note: Use tag to set the caption to the table & also use cell spacing, cell padding, `border`, `rowspan`, `colspan` etc.).

DESCRIPTION: HTML tables are used to display data in a structured form using rows and columns. In this program, a timetable is created using the `<table>` tag. The `<caption>` tag is used to provide a title to the table. Table rows are defined using `<tr>`, headings using `<th>`, and

data cells using <td>. The border attribute displays the table border, cellspacing controls the space between cells, and cellpadding controls the space inside each cell. The rowspan and colspan attributes are used to merge rows and columns, helping to clearly represent timetable information.

CODE:

```
<!DOCTYPE html>
<html>
<head>
  <title>Class Timetable</title>
</head>
<body>

  <h1 align="center">HTML Table Example: Timetable</h1>

  <table border="1" cellspacing="5" cellpadding="10" align="center">
    <caption><b>Class Timetable</b></caption>

    <tr>
      <th rowspan="2">Day</th>
      <th colspan="8">Time</th>
    </tr>

    <tr>
      <th>9:30 - 10:20</th>
      <th>10:20 - 11:10</th>
      <th>11:10 - 12:00</th>
      <th>12:00 - 12:50</th>
      <th>12:50 - 1:50</th>
      <th>1:50 - 02:40</th>
      <th>02:40 - 03:30</th>
      <th>03:30 - 04:20</th>
    </tr>

    <tr>
      <td>Monday</td>
      <td colspan="4" align="center">ML LAB</td>
      <td rowspan="5" align="center">LUNCH</td>
      <td align="center">DBMS</td>
      <td align="center">OT</td>
      <td align="center">DTI</td>
    </tr>

    <tr>
      <td>Tuesday</td>
      <td align="center">DLCO</td>
      <td align="center">DTI</td>
      <td align="center">ML</td>
      <td align="center">OT</td>
      <td align="center">P & S</td>
      <td colspan="2" align="center">APT & RES</td>
    </tr>
  </table>
</body>
</html>
```

```

</tr>

<tr>
  <td>Wednesday</td>
  <td align="center">P & S</td>
  <td align="center">ML</td>
  <td align="center">DBMS</td>
  <td align="center">ML</td>
  <td colspan="3" align="center">DBMS LAB</td>
</tr>

<tr>
  <td>Thursday</td>
  <td align="center">P & S</td>
  <td align="center">DBMS</td>
  <td align="center">ML</td>
  <td align="center">DLCO</td>
  <td align="center">OT</td>
  <td colspan="2" align="center">APT & RES</td>
</tr>

<tr>
  <td>Friday</td>
  <td align="center">OT</td>
  <td align="center">P & S</td>
  <td align="center">DLCO</td>
  <td align="center">DBMS</td>
  <td colspan="3" align="center">FSD-1 LAB</td>
</tr>
</table>

</body>
</html>

```

- c. **Write a HTML program, to explain the working of forms by designing Registration form. (Note: Include text field, password field, number field, date of birth field, checkboxes, radio buttons, list boxes using & tags, and two buttons ie. submit and reset. Use tables to provide a better view).**

DESCRIPTION:

HTML forms are used to collect user input. In this program, a registration form is designed using the <form> tag and arranged neatly using a table. The <input> tag is used to create text, password, number, date, radio button, checkbox, submit, and reset fields. The <select> and <option> tags are used to create a list box. Radio buttons allow the user to select one option, while checkboxes allow multiple selections. The submit button sends the form data, and the reset button clears all entered data. Using tables helps in aligning the form elements properly for better appearance.

CODE:

```

<!DOCTYPE html>
<html>
<head>
  <title>Registration Form</title>

```

```
</head>
<body>

<h1 align="center">Registration Form</h1>

<form action="#" method="post">
  <table border="1" cellpadding="10" cellspacing="5" align="center">

    <tr>
      <th colspan="2">Registration Details</th>
    </tr>

    <tr>
      <td>Full Name:</td>
      <td>
        <input type="text" name="fullname" placeholder="Enter your name">
      </td>
    </tr>

    <tr>
      <td>Password:</td>
      <td>
        <input type="password" name="password">
      </td>
    </tr>

    <tr>
      <td>Age:</td>
      <td>
        <input type="number" name="age">
      </td>
    </tr>

    <tr>
      <td>Date of Birth:</td>
      <td>
        <input type="date" name="dob">
      </td>
    </tr>

    <tr>
      <td>Gender:</td>
      <td>
        <input type="radio" name="gender" value="Male"> Male
        <input type="radio" name="gender" value="Female"> Female
      </td>
    </tr>

    <tr>
      <td>Hobbies:</td>
```

```

        <td>
            <input type="checkbox" name="hobby1" value="Reading"> Reading
            <input type="checkbox" name="hobby2" value="Sports"> Sports
            <input type="checkbox" name="hobby3" value="Music"> Music
        </td>
    </tr>

    <tr>
        <td>Country:</td>
        <td>
            <select name="country">
                <option>Select Country</option>
                <option>India</option>
                <option>USA</option>
                <option>UK</option>
            </select>
        </td>
    </tr>

    <tr>
        <td>Address:</td>
        <td>
            <textarea name="address" rows="4" cols="20"></textarea>
        </td>
    </tr>

    <tr>
        <td colspan="2" align="center">
            <input type="submit" value="Submit">
            <input type="reset" value="Reset">
        </td>
    </tr>
</table>
</form>
</body>
</html>

```

- d. Write a HTML program, to explain the working of frames, such that page is to be divided into 3 parts on either direction. (Note: first frame image, second frame paragraph, third frame hyperlink. And also make sure of using “no frame” attribute such that frames to be fixed).

DESCRIPTION:

HTML frames are used to divide the browser window into multiple sections, where each section can display a different HTML document. In this program, the <frameset> tag is used to divide the webpage into three parts in one direction. Each part is created using the <frame> tag. The first frame is used to display an image, the second frame displays a paragraph of text, and the third frame contains hyperlinks. The <noframes> tag is used to display alternate content when the browser does not support frames. Thus, frames help in organizing different types of content within a single webpage layout.

CODE:

```
<!DOCTYPE html>
```

```
<html>
<head>
  <title>Frames Example</title>
</head>

<frameset cols="33%,33%,34%">
  <frame src="image1.html">
  <frame src="text.html">
  <frame src="link.html">

  <noframes>
    <body>
      <p>Your browser does not support frames.</p>
    </body>
  </noframes>
</frameset>
```

image1.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Image Frame</title>
</head>
<body>
  <h3 align="center">Image Frame</h3>
  
</body>
</html>
```

text.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Text Frame</title>
</head>
<body>
  <h3>Text Frame</h3>
  <p>
    This frame contains a paragraph.
    Frames divide the browser window into multiple sections,
    where each section displays a separate HTML document.
  </p>
</body>
</html>
```

link.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Link Frame</title>
</head>
```

```
<body>
  <h3>Hyperlink Frame</h3>
  <a href="https://www.google.com" target="_blank">Google</a><br>
  <a href="https://www.wikipedia.org" target="_blank">Wikipedia</a><br>
  <a href="https://www.github.com" target="_blank">GitHub</a>
</body>
</html>
```