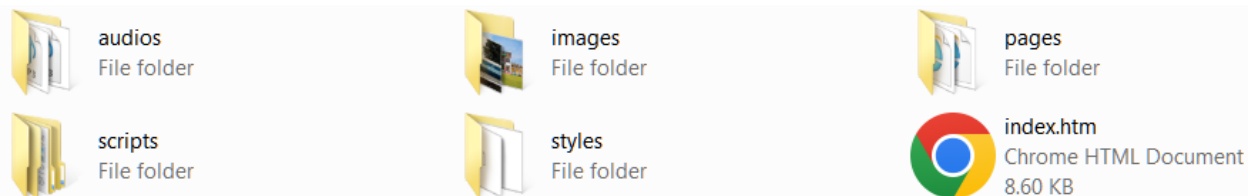


EXPERIMENT NO. 1

Working with HTML and CSS

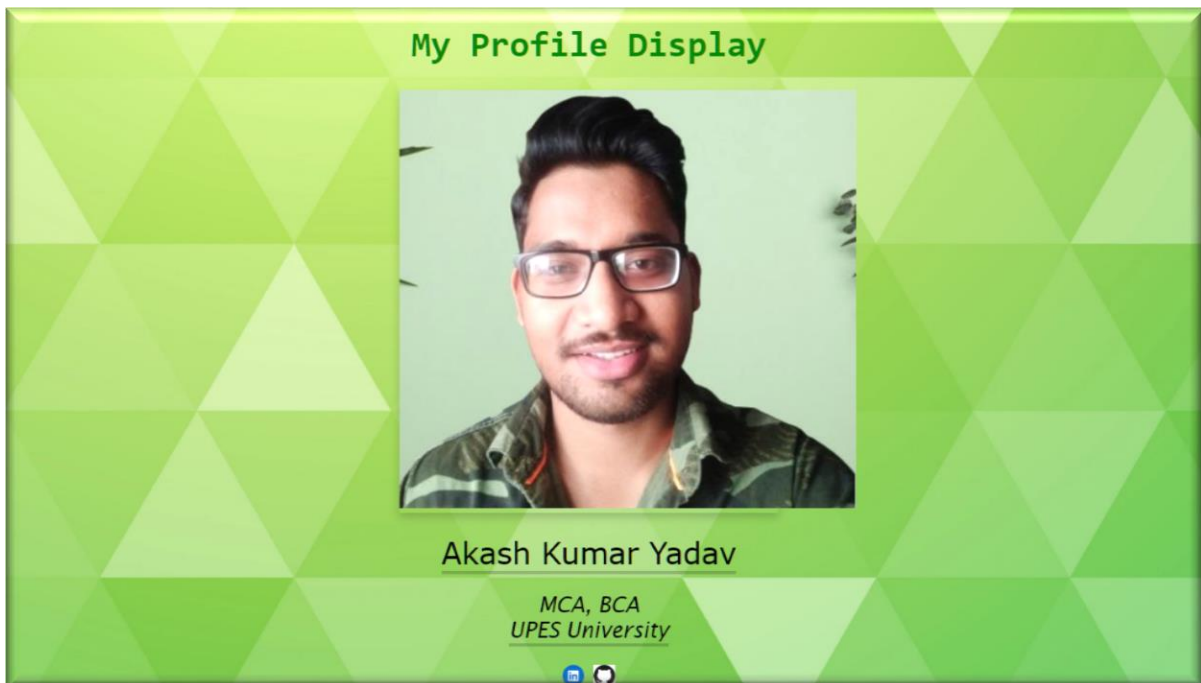
AIM: Learn to work with HTML tags and CSS properties.

DESIGN:



OUTPUT SCREENSHOT:

<u>INDEX</u>		
S.No.	Activity	Date
01	TABLE	16 AUGUST 2023
02	JAVASCRIPT	18 AUGUST 2023
03	JAVASCRIPT	22 AUGUST 2023
04	JAVASCRIPT	23 AUGUST 2023
05	BASIC TAGS	24 AUGUST 2023
06	LISTS	24 AUGUST 2023
07	#Lab Activity 1 (MY PROFILE)	24 AUGUST 2023
08	#Lab Activity 1 (CONTACT US)	24 AUGUST 2023
09	#Lab Activity 1 (TIMETABLE)	24 AUGUST 2023
10	JAVASCRIPT 'onmouseover' & 'onmouseout'	29 AUGUST 2023
11	#Lab Activity 2 (ELECTRICITY BILL)	01 SEPTEMBER 2023
12	#Lab Activity 2 (ROLL OVER BUTTONS)	01 SEPTEMBER 2023
13	#Lab Activity 2 (FLOATING ICONS)	01 SEPTEMBER 2023
14	#Lab Activity 2 (STOPWATCH)	01 SEPTEMBER 2023
15	JAVASCRIPT (Odd/Even)	05 SEPTEMBER 2023
16	JAVASCRIPT (Swap Variables)	06 SEPTEMBER 2023
17	JAVASCRIPT (Bonus)	06 SEPTEMBER 2023
18	JAVASCRIPT (Currency Converter)	06 SEPTEMBER 2023
19	#Lab Activity 2 VERSION 2 JAVASCRIPT (Electricity Bill) 2	08 SEPTEMBER 2023
20	#Lab Activity 2 VERSION 2 JAVASCRIPT (FLOATING ICONS) 2	08 SEPTEMBER 2023

[GO BACK TO INDEX](#)

Contact Us

Name:

Email:

Message:

Number:

Gender:

[GO BACK TO INDEX](#)

ODD_JULY_DEC_2023

Group Timetable - MCA-I-B3, 50077653 (Wks 1-30, 01-07-2023 - 20-01-2024)

	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM
SAT/SUN										
MONDAY		Module: Data Structure Lab Groups: MCA-I-B3; MCA-I-B4 Staff: Ambika Aggarwal Room: 4002		Module: Python Programming Groups: MCA-I-B3; MCA-I-B4 Staff: Anushree Sah Room: 4002			Module: Business Comm. & Ethics Groups: MCA-I-B3; MCA-I-B4 Staff: Neeraja Sisodia Room: 4002			
TUESDAY		Module: Web Technologies Groups: MCA-I-B3; MCA-I-B4 Staff: Dhiviya Rose J Room: 4002	Module: SOFTSKILLS Groups: MCA-I-B3; MCA-I-B4 Staff: MUSKAN Room: 4003	Module: Data Structure Groups: MCA-I-B3; MCA-I-B4 Staff: Ambika Aggarwal Room: 4002			Module: Business Comm. & Ethics Groups: MCA-I-B3; MCA-I-B4 Staff: Neeraja Sisodia Room: 4002	Module: Python Programming Groups: MCA-I-B3; MCA-I-B4 Staff: Anushree Sah Room: 4002	Module: Software Engineering Groups: MCA-I-B3; MCA-I-B4 Staff: Sonali Vyas Room: 4002	
WEDNESDAY		Module: Web Technologies Groups: MCA-I-B3; MCA-I-B4 Staff: Dhiviya Rose J Room: 4002		Module: AI Groups: MCA-I-B3; MCA-I-B4 Staff: Mitali Chugh Room: 4001	Module: Data Science Groups: MCA-I-B3; MCA-I-B4 Staff: Sanoj Kumar Room: 6205		Module: Data Structure Groups: MCA-I-B3; MCA-I-B4 Staff: Ambika Aggarwal Room: 4002	Module: EDGE Aptitude Groups: MCA-I-B3; MCA-I-B4 Staff: A Room: 4002		
THURSDAY		Module: Data Structure Lab Groups: MCA-I-B3; MCA-I-B4 Staff: Ambika Aggarwal Room: 4002		Module: AI Groups: MCA-I-B3; MCA-I-B4 Staff: Mitali Chugh Room: 4001	Module: Data Science Groups: MCA-I-B3; MCA-I-B4 Staff: Sanoj Kumar Room: 6205		Module: Software Engineering Groups: MCA-I-B3; MCA-I-B4 Staff: Sonali Vyas Room: 4002	Module: EDGE Aptitude Groups: MCA-I-B3; MCA-I-B4 Staff: A Room: 4002		
FRIDAY		Module: Python Programming Groups: MCA-I-B3; MCA-I-B4 Staff: Anushree Sah Room: 4002		Module: AI Groups: MCA-I-B3; MCA-I-B4 Staff: Mitali Chugh Room: 4001	Module: Data Science Groups: MCA-I-B3; MCA-I-B4 Staff: Sanoj Kumar Room: 6205		Module: Software Engineering Groups: MCA-I-B3; MCA-I-B4 Staff: Sonali Vyas Room: 4002	Module: Web Technologies Groups: MCA-I-B3; MCA-I-B4 Staff: Dhiviya Rose J Room: 4002		

SOURCE CODE:

Profile Page (HTML)

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

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="Chrome">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>MCA TIME TABLE</title>
  <link rel="stylesheet" href="../styles/tt.css">
  <style>
    .tt{
      background-color: cyan;
      width: fit-content;
    }
    table,th{
      border-style: solid;
      border-width: 2px;
    }
    td{
      border-style: solid;
      border-width: 1px;
      text-align: center;
    }
    th{
      writing-mode: vertical-rl;
      text-orientation: sideways;
      text-transform: uppercase;
    }
  </style>
</head>
<body>
  <table>
    <tr>
      <th></th>
      <th>08:00AM</th>
      <th>09:00AM</th>
      <th>10:00AM</th>
      <th>11:00AM</th>
      <th>12:00PM</th>
      <th>01:00PM</th>
      <th>02:00PM</th>
      <th>03:00PM</th>
      <th>04:00PM</th>
      <th>05:00PM</th>
    </tr>
    <tr>
      <th>SAT/SUN</th>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th>MONDAY</th>
      <td></td>
      <td colspan="2">Module: Data Structure Lab<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Ambika Aggarwal<br>Room: 4002</td>
      <td colspan="2">Module: Python Programming<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Anushree Sah<br>Room: 4002</td>
      <td></td>
      <td colspan="2">Module: Business Comm. & Ethics<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Neeraja Sisodia<br>Room: 4002</td>
      <td></td>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th>TUESDAY</th>
      <td></td>
      <td>Module: Web Technologies<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Dhiviya Rose J<br>Room: 4002</td>
      <td>Module: SOFTSKILLS<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: MUSKAN<br>Room: 4003</td>
      <td colspan="2">Module: Data Structure<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Ambika Aggarwal<br>Room: 4002</td>
      <td></td>
      <td>Module: Business Comm. & Ethics<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Neeraja Sisodia<br>Room: 4002</td>
      <td>Module: Python Programming<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Anushree Sah<br>Room: 4002</td>
      <td>Module: Software Engineering<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Sonali Vyas<br>Room: 4002</td>
      <td></td>
    </tr>
    <tr>
      <th>WEDNESDAY</th>
      <td></td>
      <td colspan="2">Module: Web Technologies<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Dhiviya Rose J<br>Room: 4002</td>
      <td>Module: AI<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Mitali Chugh<br>Room: 4001</td>
      <td>Module: Data Science<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Sanoj Kumar<br>Room: 6205</td>
      <td></td>
      <td>Module: Data Structure<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Ambika Aggarwal<br>Room: 4002</td>
      <td>Module: EDGE Aptitude<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: A<br>Room: 4002</td>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th>THURSDAY</th>
      <td></td>
      <td colspan="2">Module: Data Structure Lab<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Ambika Aggarwal<br>Room: 4002</td>
      <td>Module: AI<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Mitali Chugh<br>Room: 4001</td>
      <td>Module: Data Science<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Sanoj Kumar<br>Room: 6205</td>
      <td></td>
      <td>Module: Software Engineering<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Sonali Vyas<br>Room: 4002</td>
      <td>Module: EDGE Aptitude<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: A<br>Room: 4002</td>
      <td></td>
      <td></td>
    </tr>
    <tr>
      <th>FRIDAY</th>
      <td></td>
      <td colspan="2">Module: Python Programming<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Anushree Sah<br>Room: 4002</td>
      <td>Module: AI<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Mitali Chugh<br>Room: 4001</td>
      <td>Module: Data Science<br>Groups: MCA-I-B3;<br>MCA-I-B4<br>Staff: Sanoj Kumar<br>Room: 6205</td>
      <td></td>
      <td>Module: Software Engineering<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Sonali Vyas<br>Room: 4002</td>
      <td colspan="2">Module: Web Technologies<br>Groups: MCA-I-B3; MCA-I-B4<br>Staff: Dhiviya Rose J<br>Room: 4002</td>
      <td></td>
    </tr>
  </table>
</body>
</html>
```

```

        text-decoration: solid;
        color: blue;
    }
</style>
</head>
<body>
    <div align="right">
        <a href=" ../index.htm"><button onmouseover="this.style.color='red'">GO BACK TO
INDEX</button></a>
    </div>
    <center>
        <div>
            <center><h2 style="color:brown">ODD_JULY_DEC_2023</h2>
            <h3 style="color:green">Group Timetable - MCA-I-B3, 50077653 (Wks 1-30, 01-
07-2023 - 20-01-2024)</h3></center>
        </div>
        <hr>
        <div style="width:auto; height: 40%;">
            <table>
                <tr
                    <td class="tt" style="font-style: oblique;">
                        <td></td><td>08:00AM</td><td>09:00AM</td><td>10:00AM</td><td>11:00AM
</td><td>12:00PM</td><td>01:00PM</td><td>02:00PM</td><td>03:00PM</td><td>04:00PM</td><td>05:
00PM</td>
                    </tr>
                    <tr>
                        <th>Sat</th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><t
d></td><td></td><td></td><td></td><td></td>
                        </tr>
                        <tr>
                            <th>Sun</th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><t
d></td><td></td><td></td><td></td><td></td>
                            </tr>
                            <tr>
                                <th>Monday</th><td></td>
                                <td style="border-color: red;" colspan="2"><b>Module: Data Structure
Lab</b><br>
                                Groups: MCA-I-B3; MCA-I-B4<br>
                                Staff: Ambika Aggarwal<br>
                                Room: 4002</td>
                                <td style="border-color:black;" colspan="2"><b>Module: Python
Programming</b><br>
                                Groups: MCA-I-B3; MCA-I-B4<br>
                                Staff: Anushree Sah<br>
                                Room: 4002</td>
                                <td></td>
                                <td style="border-color: yellow;" colspan=2><b>Module: Business
Comm. & Ethics</b><br>
                                Groups: MCA-I-B3; MCA-I-B4<br>
                                Staff: Neeraja Sisodia<br>
                                Room: 4002</td>
                                <td></td><td></td>
                            </tr>
                            <tr>
                                <th>Tuesday</th><td></td>

```

Technologies	<div><div>Module: Web</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Dhiviya Rose J</div><div>Room: 4002</div></div>	
	<div><div>Module: SOFTSKILLS</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: MUSKAN</div><div>Room: 4003</div></div>	
Structure	<div><div>Module: Data</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Ambika Aggarwal</div><div>Room: 4002</div></div>	
Ethics	<div><div>Module: Business Comm. &</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Neeraja Sisodia</div><div>Room: 4002</div></div>	
Programming	<div><div>Module: Python</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Anushree Sah</div><div>Room: 4002</div></div>	
Engineering	<div><div>Module: Software</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Sonali Vyas</div><div>Room: 4002</div></div>	
Technologies	Wednesday	
	<div><div>Module: Web</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Dhiviya Rose J</div><div>Room: 4002</div></div>	
	<div><div>Module: AI</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Mitali Chugh</div><div>Room: 4001</div></div>	
	<div><div>Module: Data Science</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Sanoj Kumar</div><div>Room: 6205</div></div>	
Structure	<div><div>Module: Data</div><div>Groups: MCA-I-B3; MCA-I-B4</div><div>Staff: Ambika Aggarwal</div><div>Room: 4002</div></div>	
Aptitude	<div><div>Module: EDGE</div><div>Groups: MCA-I-B3; MCA-I-B4</div></div>	

```

                Staff: A<br>
                Room: 4002</td>
            <td></td>
            <td></td>
        </tr>
        <tr>
            <th>Thursday</th><td></td>
            <td style="border-color: red;" colspan="2"><b>Module: Data Structure
Lab</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Ambika Aggarwal<br>
                Room: 4002</td>
            <td style="border-color: green;"><b>Module: AI</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Mitali Chugh<br>
                Room: 4001</td>
            <td style="border-color: green;"><b>Module: Data Science</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Sanoj Kumar<br>
                Room: 6205</td>
            <td></td>
            <td style="border-color: yellow;"><b>Module: Software Engineering</b>
<br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Sonali Vyas<br>
                Room: 4002</td>
            <td style="border-color: purple;"><b>Module: EDGE Aptitude</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: A<br>
                Room: 4002</td>
            <td></td>
            <td></td>
        </tr>
        <tr>
            <th>Friday</th><td></td>
            <td style="border-color: red;" colspan="2"><b>Module: Python
Programming</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Anushree Sah<br>
                Room: 4002</td>
            <td style="border-color: green;"><b>Module: AI</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Mitali Chugh<br>
                Room: 4001</td>
            <td style="border-color: green;"><b>Module: Data Science</b><br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Sanoj Kumar<br>
                Room: 6205</td>
            <td></td>
            <td style="border-color: yellow;"><b>Module: Software Engineering</b>
<br>
                Groups: MCA-I-B3; MCA-I-B4<br>
                Staff: Sonali Vyas<br>
                Room: 4002</td>

```

```
Technologies</b><br>
        <td style="border-color: yellow;" colspan="2"><b>Module: Web
        Groups: MCA-I-B3; MCA-I-B4<br>
        Staff: Dhiviya Rose J<br>
        Room: 4002</td>
        <td></td>
    </tr>
</table>
</div>
</center>
</body>
</html>
```

Profile Page (CSS)

```
.name{
    font-size: 28px;
    font-family: 'Verdana';
    font-style: bold;
    margin:auto;
    text-align: center;
    max-width: fit-content;
    max-height: fit-content;
    box-shadow: 0 3px 0 0 rgba(0, 0, 0, 0.2);
}

.desg{
    font-size: 20px;
    font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans
Unicode', Geneva, Verdana, sans-serif;
    font-style: oblique;
    font:bolder;
    max-width: fit-content;
    max-height: fit-content;
    margin:auto;
    text-align: center;
    box-shadow: 0 3px 0 0 rgba(0, 0, 0, 0.2);
}

.title {
    color: green;
    font-size: 22px;
}

.card {
    box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
    max-width: 30%;
    max-height: auto;
    margin:auto;
    text-align: center;
}

button {
```

```
background-color: cyan;
border: none;
outline: 0;
cursor: pointer;
font-size: 14px;
}

span{
    cursor: pointer;
}

button:hover, a:hover {
    opacity: 0.7;
}

body{
    margin: 0;
    padding: 0;
}
```

Contact Us Page (HTML)

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

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="Chrome">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Contact Us</title>
</head>

<body>
    <p align="right">
        <a href="../index.htm"><button onmouseover="this.style.color='red'">GO BACK TO
INDEX</button></a>
    </p>
    <form>
        <fieldset>
            <legend>
                <h2>Contact Us</h2>
            </legend>
            <div>
                <label for="name">Name: </label>
                <input type="text" required placeholder="Enter your name" name="username"
id="name">
            </div><br>
            <div>
                <label for="email">Email: </label>
                <input type="email" required placeholder="Enter your Email" name="useremail"
id="email">
            </div><br>

            <div>Message:
```



```
        <textarea required name="usermessage" id="message" cols="17"
rows="5"></textarea>
    </div><br>

    <div>Number:
        <input required name="usernumber" id="number" type="number">
    </div><br>

    <div>Gender:
        <select required name="usergender" id="gender" size="1">
            <option value="male">Male</option>
            <option value="female">Female</option>
            <option value="space" selected> </option>
        </select>
    </div><br>
    <input type="submit" value="Submit">
    <br>
</fieldset>
</form>
</body>
</html>
```

Index Page (HTML)

```
<html>
<head>
    <title>INDEX</title>
    <style>
        body {
            background-image: linear-gradient(to left, green, lightgreen, yellowgreen,
darkgreen);
        }

        div {
            box-shadow: 2px 5px 20px greenyellow;
            max-width: fit-content;
            padding: 20px;
        }

        table {
            text-align: left;
            font-family: 'Verdana';
            display: inline;
            align-self: center;
            align-items: center;
            width: fit-content;
            box-shadow: 5px 5px 15px rgba(0, 0, 0, 0.2);
            border-collapse: collapse;
        }

        th {
            text-align: center;
            background-color: lavender;
            color: black;
            padding: 10px;
```

```
}

td {
    padding: 8px;
}

a:link {
    color: black;
    text-decoration: none;
}

a:visited {
    color: white;
    background-color: brown;
}

a:hover {
    color: red;
    text-decoration: none;
}
</style>
</head>

<body>
    <center><u>
        <h1>INDEX</h1>
    </u></center>
    <center>
        <div>
            <table>
                <tr>
                    <th>S.No.</th>
                    <th>Activity</th>
                    <th>Date</th>
                </tr>
                <tr>
                    <td>&nbsp;</td>
                    <td>&nbsp;</td>
                    <td>&nbsp;</td>
                </tr>
                <tr>
                    <td>01</td>
                    <td><a href="pages/table.htm" target="_blank">TABLE</a></td>
                    <td>16 AUGUST 2023</td>
                </tr>
                <tr>
                    <td>02</td>
                    <td><a href="pages/JavaScript_.htm" target="_blank">JAVASCRIPT</a></td>
                    <td>18 AUGUST 2023</td>
                </tr>
                <tr>
                    <td>03</td>
                    <td><a href="pages/JavaScript_2.htm" target="_blank">JAVASCRIPT</a></td>
                    <td>22 AUGUST 2023</td>
                </tr>
            </table>
        </div>
    </center>
</body>
```

```

<tr>
  <td>04</td>
  <td><a href="pages/JavaScript_3.htm" target="_blank">JAVASCRIPT</a></td>
  <td>23 AUGUST 2023</td>
</tr>
<tr>
  <td>05</td>
  <td><a href="pages/basictags.htm" target="_blank">BASIC TAGS</a></td>
  <td>24 AUGUST 2023</td>
</tr>
<tr>
  <td>06</td>
  <td><a href="pages/lists.htm" target="_blank">LISTS</a></td>
  <td>24 AUGUST 2023</td>
</tr>
<tr>
  <td>07</td>
  <td><a href="pages/Profile.htm" target="_blank">#Lab Activity 1 (MY
PROFILE)</a></td>
  <td>24 AUGUST 2023</td>
</tr>
<tr>
  <td>08</td>
  <td><a href="pages/contact.htm" target="_blank">#Lab Activity 1 (CONTACT
US)</a></td>
  <td>24 AUGUST 2023</td>
</tr>
<tr>
  <td>09</td>
  <td><a href="pages/TimeTable.htm" target="_blank">#Lab Activity 1
(TIMETABLE)</a></td>
  <td>24 AUGUST 2023</td>
</tr>
<tr>
  <td>10</td>
  <td><a href="pages/JavaScript_4.htm" target="_blank">JAVASCRIPT
'onmouseover' & 'onmouseout'</a></td>
  <td>29 AUGUST 2023</td>
</tr>
<tr>
  <td>11</td>
  <td><a href="pages/ElectricityBill.htm" target="_blank">#Lab Activity 2
(ELECTRICITY BILL)</a></td>
  <td>01 SEPTEMBER 2023</td>
</tr>
<tr>
  <td>12</td>
  <td><a href="pages/RollOverButtons.htm" target="_blank">#Lab Activity 2
(ROLL OVER BUTTONS)</a></td>
  <td>01 SEPTEMBER 2023</td>
</tr>
<tr>
  <td>13</td>
  <td><a href="pages/FloatingIcons.htm" target="_blank">#Lab Activity 2
(FLOATING ICONS)</a></td>
  <td>01 SEPTEMBER 2023</td>

```

```

        </tr>
        <tr>
            <td>14</td>
            <td><a href="pages/StopWatch.htm" target="_blank">#Lab Activity 2
(STOPWATCH)</a></td>
            <td>01 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>15</td>
            <td><a href="pages/OddEven.htm" target="_blank">JAVASCRIPT
(Odd/Even)</a></td>
            <td>05 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>16</td>
            <td><a href="pages/SwapVariables.htm" target="_blank">JAVASCRIPT (Swap
Variables)</a></td>
            <td>06 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>17</td>
            <td><a href="pages/Bonus.htm" target="_blank">JAVASCRIPT
(Bonus)</a></td>
            <td>06 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>18</td>
            <td><a href="pages/CurrencyConverter.htm" target="_blank">JAVASCRIPT
(Currency Converter)</a></td>
            <td>06 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>19</td>
            <td><a href="pages/ElectricityBill2.htm" target="_blank">#Lab Activity 2
VERSION 2 JAVASCRIPT (Electricity Bill) 2</a></td>
            <td>08 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>20</td>
            <td><a href="pages/FloatingIcons2.htm" target="_blank">#Lab Activity 2
VERSION 2 JAVASCRIPT (FLOATING ICONS) 2</a></td>
            <td>08 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>21</td>
            <td><a href="pages/StopWatch2.htm" target="_blank">#Lab Activity 2
VERSION 2 JAVASCRIPT (STOPWATCH) 2</a></td>
            <td>08 SEPTEMBER 2023</td>
        </tr>
        <tr>
            <td>22</td>
            <td><a href="pages/Loop.htm" target="_blank">LOOP</a></td>
            <td>13 SEPTEMBER 2023</td>
        </tr>
        <tr>

```

```
<td>23</td>
<td><a href="pages/Array.htm" target="_blank">Array</a></td>
<td>13 SEPTEMBER 2023</td>
</tr>
<tr>
<td>24</td>
<td><a href="pages/basiccal.htm" target="_blank">#Lab Activity 4 (Basic
Calculator)</a></td>
<td>15 SEPTEMBER 2023</td>
</tr>
<tr>
<td>25</td>
<td><a href="pages/Array2.htm" target="_blank">Array</a></td>
<td>20 SEPTEMBER 2023</td>
</tr>
<tr>
<td>26</td>
<td><a href="pages/Audio.htm" target="_blank">Audio Tag</a></td>
<td>22 SEPTEMBER 2023</td>
</tr>
<tr>
<td>27</td>
<td><a href="pages/Armstrong_Number.htm" target="_blank">#Lab Activity 3
(Armstrong Number)</a></td>
<td>29 SEPTEMBER 2023</td>
</tr>
<tr>
<td>28</td>
<td><a href="pages/Toggle.htm" target="_blank">#Lab Activity 3 (Toggle
Case)</a></td>
<td>29 SEPTEMBER 2023</td>
</tr>
<tr>
<td>29</td>
<td><a href="pages/Divideby7.htm" target="_blank">#Lab Activity 3
(Divisible By 7 & 2)</a></td>
<td>29 SEPTEMBER 2023</td>
</tr>
<tr>
<td>30</td>
<td><a href="pages/game.htm" target="_blank">GAME</a></td>
<td>12 OCTOBER 2023</td>
</tr>
<tr>
<td>31</td>
<td><a href="pages/PHPArray.htm" target="_blank">#Lab Activity 4 (PHP
Array)</a></td>
<td>20 OCTOBER 2023</td>
</tr>
</table>
</div>
</center>
</body>
</html>
```

EXPERIMENT NO. 2**Working with JavaScript****AIM:**

1. Make an Electricity Bill Calculator in using JavaScript the conditional statements with the following conditions specified below. Create a form which has name, mobile number, emailID and number of units consumed. Perform form validation on the fields Name, Mobile Number and emailID.

- For the first 50 units – Rs. 3.50/unit
- For next 100 units – Rs. 4.00/unit
- For next 100 units – Rs. 5.20/unit
- For units above 250 – Rs. 6.50/unit

The application should generate the bill and inform the amount payable using confirm() box.

2. Develop web pages to demonstrate the effect of roll over buttons. When the user places his or her mouse pointer over text, listing the various tourist places in Dehradun, the corresponding image displaying the tourist spot to be shown. Also perform the zoom in and zoom out effect on an image for that image on a button click.

3. Design a Stop Watch.

4. Validate the form given below using JavaScript. Also have floating logos in the forms.

OUTPUT SCREENSHOT:[GO BACK TO INDEX](#)**LAB ACTIVITY 2**ELECTRICITY BILL**Electricity Bill**

Name:

Mobile Number:

Email ID:

Units Consumed:

Amount here!

[GO BACK TO INDEX](#)

ROLL OVER BUTTONS



- FRI Dehradun
- Tapekeshwar Temple
- Mindrolling Monastery
- Robber's Cave
- Dehradun Zoo

[GO BACK TO INDEX](#)

Contact Us

First Name:

Last Name:

Email ID:

Phone #:

Address:

City:

State:

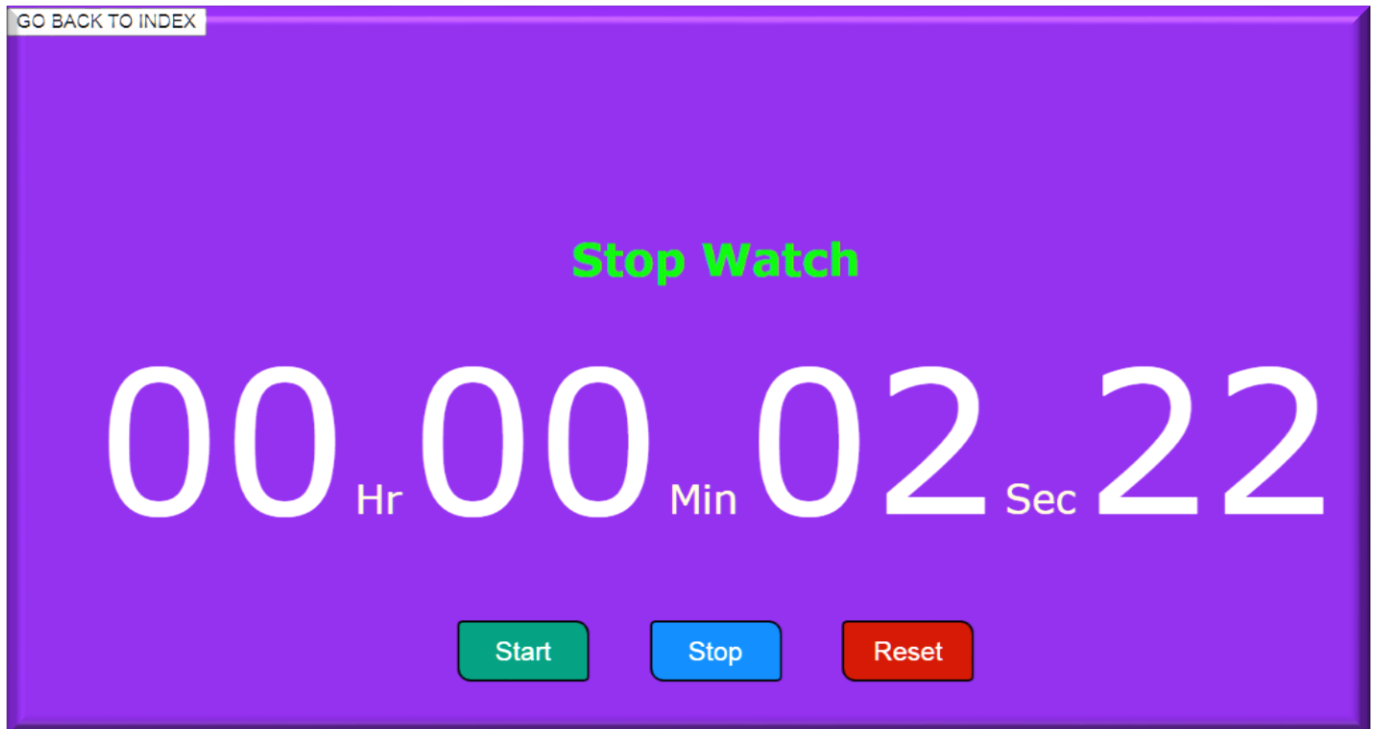
Zip Code:

Website or Domain Name:

Do you have hosting?: ☐ YES ☐ NO

Project Description:

Send

**SOURCE CODE:****Electricity Bill**

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

<head>
  <title>Electricity Bill</title>
  <style>
    .center{
      text-align: center;
    }
  </style>
  <script type="text/javascript">
    function BILL(){
      var U=document.getElementById('units').value;
      var RES
      if (0<U<=50){
        RES=U*3.50
        document.getElementById("res").innerHTML="Total bill is: Rs. "+RES;
      }
      else if (50<U<=150){
        first50=50*3.50
        next100=(U-50)*4
        RES=first50+next100
        document.getElementById("res").innerHTML="Total bill is: Rs. "+RES;
      }
    }
  </script>
</head>

<body>
  <div class="center">
    <h2>Electricity Bill</h2>
    <div>
      <input type="text" value="0" id="units"/>
      <input type="button" value="Calculate Bill"/>
    </div>
    <div id="res"></div>
  </div>
</body>
</html>
```



```

        else if (150<U<=250){
            first50=50*3.50
            next100=100*4
            nextnext100=(U-150)*5.20
            RES=first50+next100+nextnext100
            document.getElementById("res").innerHTML="Total bill is: Rs. "+RES;
        }
        else if (U>250){
            first50=50*3.50
            next100=100*4
            nextnext100=150*5.20
            unit200=(U-250)*6.50
            RES=first50+next100+nextnext100+unit200
            document.getElementById("res").innerHTML="Total bill is: Rs. "+RES;
        }
        confirm("Total payable amount is Rs. "+RES);
    }
</script>
</head>
<body>
    <div align="right">
        <a href=" ../index.htm"><button onmouseover="this.style.color='red'">GO BACK TO
INDEX</button></a>
    </div>
    <div class="center" style="background-color: purple; color:white;"><h2>LAB ACTIVITY
2</h2></div>
    <span><u>ELECTRICITY BILL</u></span>
    <div>
        <form onsubmit="return VALIDATE()" name="myForm" method="post">
            <fieldset>
                <legend>
                    <h2>Electricity Bill</h2>
                </legend>
                <table>
                    <tr>
                        <td>
                            <label for="name">Name: </label>
                        </td>
                        <td>
                            <input type="text" required placeholder="Name"
name="username" id="name" required>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <label for="mobnumber">Mobile Number:</label>
                        </td>
                        <td>
                            <input type="number" required placeholder="Mobile Number"
name="contact" id="mobnumber" required>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <label for="email">Email ID: </label>

```

```

        </td>
        <td>
            <input type="email" required placeholder="Email ID"
name="useremail" id="email" required>
        </td>
    </tr>
    <tr>
        <td>
            <label for="units">Units Consumed: </label>
        </td>
        <td>
            <input type="number" required placeholder="Unit Consumed"
name="unitsconsumed" id="units">
        </td>
    </tr>
    <tr><td> </td><td> </td></tr>
    <tr>
        <td></td>
        <td style="text-align: right;">
            <input type="submit" value="Submit" onclick=BILL()>
        </td>
    </tr>
    <tr>
        <td><p id="res">Amount here!</p></td>
    </tr>
</table>
</fieldset>
</form>
</div>
</body>
</html>

```

Roll Over Buttons

```

<!DOCTYPE html>
<html lang="en">

<head>
    <title>LAB ACTIVITY 2</title>
    <link rel="stylesheet" href="../css/float.css">
    <style>
        img {
            max-width: 60%;
            max-height: 50%;
            box-shadow: 8px 8px 15px 8px black;
        }
    </style>
</head>

<body>
    <div align="right">
        <a href="../index.htm"><button onmouseover="this.style.color='red'">GO BACK TO
INDEX</button></a>
    </div>

```

```

<center>
  <div class="div" style="text-align: center;">
    <h2>ROLL OVER BUTTONS</h2>
  </div>
</center><br>
<br>
<div>
  <center></center>
</div>
<div>
  <ul>
    <li><span onmouseover="document.s.src='../images/FRI.jpg'"
      onmouseout="document.s.src='../images/dehra.jpg'">FRI
Dehradun</span></li>
    <li><span onmouseover="document.s.src='../images/TMM.jpg'"
      onmouseout="document.s.src='../images/dehra.jpg'">Tapekeshwar
Temple</span></li>
    <li><span onmouseover="document.s.src='../images/MM.jpg'"
      onmouseout="document.s.src='../images/dehra.jpg'">Mindrolling
Monastary</span></li>
    <li><span onmouseover="document.s.src='../images/RC.jpg'"
      onmouseout="document.s.src='../images/dehra.jpg'">Robber's
Cave</span></li>
    <li><span onmouseover="document.s.src='../images/DZ.jpg'"
      onmouseout="document.s.src='../images/dehra.jpg'">Dehradun
Zoo</span></li>
  </ul>
</div>

</body>
</html>

```

Stop Watch (HTML)

```

<!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>Design Stopwatch using HTML CSS and JavaScript</title>
  <link rel="stylesheet" href="../../styles/clock.css">
</head>

<body>
  <div class="container2">
    <a href="../../index.htm"><button onmouseover="this.style.color='red'">GO BACK TO
INDEX</button></a>
  </div>
  <div class="container">
    <h1>Stop Watch</h1>
    <div id="time">

```

```
<span class="digit" id="hr">
  00</span>
<span class="txt">Hr</span>
<span class="digit" id="min">
  00</span>
<span class="txt">Min</span>
<span class="digit" id="sec">
  00</span>
<span class="txt">Sec</span>
<span class="digit" id="count">
  00</span>
</div>
<div id="buttons">
  <button class="btn" id="start">
    Start</button>
  <button class="btn" id="stop">
    Stop</button>
  <button class="btn" id="reset">
    Reset</button>
</div>
</div>

<script src="../scripts/js/clock.js"></script>
</body>
</html>
```

Stop Watch (JavaScript)

```
let startBtn = document.getElementById('start');
let stopBtn = document.getElementById('stop');
let resetBtn = document.getElementById('reset');

let hour = 00;
let minute = 00;
let second = 00;
let count = 00;

startBtn.addEventListener('click', function () {
  timer = true;
  stopWatch();
});

stopBtn.addEventListener('click', function () {
  timer = false;
});

resetBtn.addEventListener('click', function () {
  timer = false;
  hour = 0;
  minute = 0;
  second = 0;
  count = 0;
  document.getElementById('hr').innerHTML = "00";
  document.getElementById('min').innerHTML = "00";
  document.getElementById('sec').innerHTML = "00";
});
```

```
document.getElementById('count').innerHTML = "00";
});

function stopWatch() {
    if (timer) {
        count++;

        if (count == 100) {
            second++;
            count = 0;
        }

        if (second == 60) {
            minute++;
            second = 0;
        }

        if (minute == 60) {
            hour++;
            minute = 0;
            second = 0;
        }

        let hrString = hour;
        let minString = minute;
        let secString = second;
        let countString = count;

        if (hour < 10) {
            hrString = "0" + hrString;
        }

        if (minute < 10) {
            minString = "0" + minString;
        }

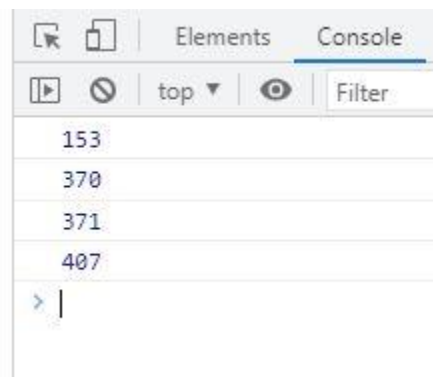
        if (second < 10) {
            secString = "0" + secString;
        }

        if (count < 10) {
            countString = "0" + countString;
        }

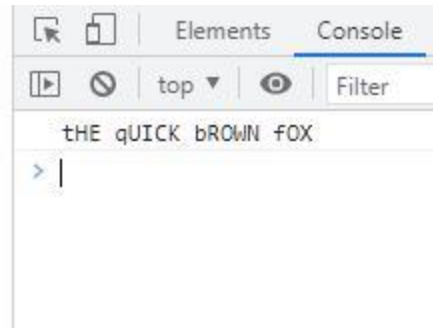
        document.getElementById('hr').innerHTML = hrString;
        document.getElementById('min').innerHTML = minString;
        document.getElementById('sec').innerHTML = secString;
        document.getElementById('count').innerHTML = countString;
        setTimeout(stopWatch, 10);
    }
}
```

EXPERIMENT NO. 3**Working with JavaScript Arrays and Functions****AIM:**

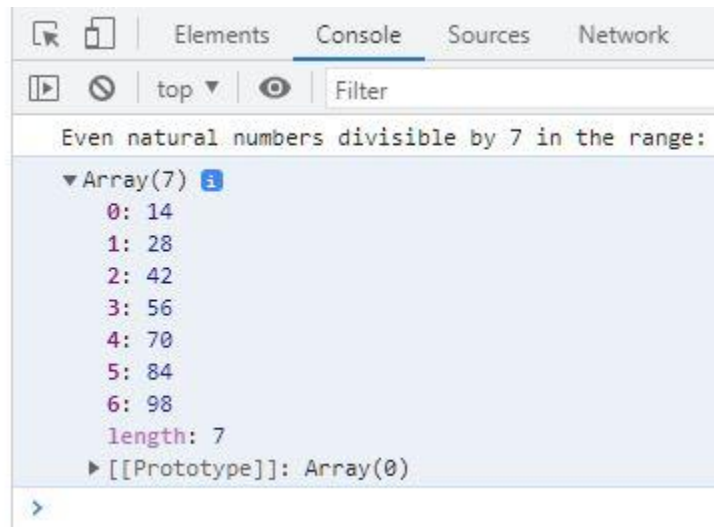
1. Implement the below-given software design using JS. This algorithm finds all 3-digit Armstrong numbers.
 - Step 1. [INITIALIZE N WITH THE FIRST 3-DIGIT NUMBER] $N \leftarrow 100$
 - Step 2. REPEAT STEPS 3 THROUGH 10 UNTIL $N > 999$
 - Step 3. [INITIALIZE S, WHICH HOLDS THE SUM OF THE CUBES] $S \leftarrow 0$
 - Step 4. $M \leftarrow N$ [THIS IS TO MAKE A COPY OF N]
 - Step 5. REPEAT STEP 6 THROUGH STEP 8 WHILE $M > 0$
 - Step 6. COMPUTE $REM \leftarrow \text{REMAINDER OF } (M/10)$
 - Step 7. COMPUTE $S \leftarrow S + REM * REM * REM$
 - Step 8. COMPUTE $M \leftarrow \text{INTEGER PART OF } (M/10)$
 - Step 9. IF $S = N$ THEN PRINT N END-IF
 - Step 10. [INCREMENT N TO TAKE THE NEXT NUMBER] COMPUTE $N \leftarrow N + 1$ END-REPEAT
 - Step 11. END
2. Develop a JS code to show how to find all even natural numbers that are divisible by 7 in a given range. Create suitable functions to achieve it.
3. Write a JavaScript program that accepts a string as input and swaps the case of each character. For example if you input 'The Quick Brown Fox' the output should be 'tHE qUICK bROWN fOX'.
4. Develop a flowchart to show how to find out all the groups of three successive numbers under 1000 that have the property that the square of the middle number is greater by unity than the product of the other two numbers (for example, $182 = 17 \times 19 + 1$).

OUTPUT SCREENSHOT:[GO BACK TO INDEX](#)

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[GO BACK TO INDEX](#)



SOURCE CODE:

Armstrong Number

```
<html>
<head>
  <title>Armstrong Number</title>
  <script>
    function isArmstrongNumber(N) {
      var M = N;
      var S = 0;

      while (M > 0) {
        var REM = M % 10;
        S += REM*REM*REM;
        M = Math.floor(M / 10);
      }

      return S === N;
    }

    function findArmstrongNumbers() {
      var lowerLimit = 100;
    }
  </script>
</head>
</html>
```

```
        var upperLimit = 999;

        for (var i = lowerLimit; i <= upperLimit; i++) {
            if (isArmstrongNumber(i)) {
                console.log(i);
            }
        }

        findArmstrongNumbers();
    </script>
</head>
<body>
    <div style="border: none;" class="container2">
        <a href="../index.html"><button style="border: none;"
onmouseover="this.style.color='red'">GO BACK TO INDEX</button></a>
    </div>
</body>
</html>
```

Divisible by 7

```
<html>
<head>
    <title>Divisibility by 7</title>
    <script>
        function DivisibleBy7(start, end) {
            const result = [];

            for (let i = start; i <= end; i++) {
                if (i % 2 === 0 && i % 7 === 0) {
                    result.push(i);
                }
            }
            return result;
        }

        const start = 1;
        const end = 100;

        const evenNumbersDivisibleBy7 = DivisibleBy7(start, end);
        console.log("Even natural numbers divisible by 7 in the range:");
        console.log(evenNumbersDivisibleBy7);

    </script>
</head>

<body>
    <div style="border: none;" class="container2">
        <a href="../index.html"><button style="border: none;"
onmouseover="this.style.color='red'">GO BACK TO INDEX</button></a>
    </div>
</body>
</html>
```


Toggle Case

```
<!DOCTYPE html>
<html>

<head>
  <title>Toggle Case</title>
  <script>
    function swapCase(inputString) {
      let swappedString = '';

      for (let i = 0; i < inputString.length; i++) {
        const char = inputString.charAt(i);

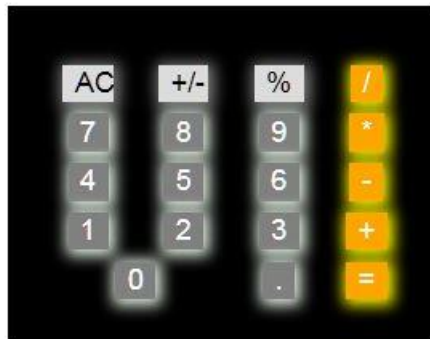
        if (char === char.toLowerCase()) {
          swappedString += char.toUpperCase();
        } else {
          swappedString += char.toLowerCase();
        }
      }
      return swappedString;
    }

    const input = 'The Quick Brown Fox';
    const swappedResult = swapCase(input);
    console.log(swappedResult);

  </script>
</head>
<body>
  <div style="border: none;" class="container2">
    <a href="../index.htm"><button style="border: none;"
onmouseover="this.style.color='red'">GO BACK TO INDEX</button></a>
  </div>
</body>
</html>
```

EXPERIMENT NO. 4**Working on Functions & Button Controls in JavaScript**

AIM: Perform a CSS-based Calculator Panel Using JavaScript.

OUTPUT SCREENSHOT:**SOURCE CODE:**

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

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="Chrome">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Basic Calculator</title>
  <style>
    td{text-align: center;}
    input{text-align: center; max-height: 40%;max-width: 100%;border: none;background-
color: black;color: white;}
    button{ cursor: pointer; border: none;color: white;background-color: gray;max-width:
25px;max-height: 25px;box-shadow: 1px 1px 8px 2px honeydew;}
    .btn_gray{color: black;background-color: gainsboro;box-shadow: 1px 1px 8px 2px
gray;}
    .btn_yellow{color: white;background-color: orange;box-shadow: 1px 1px 8px 2px
yellow;}
    div{display:block;background-color: black;max-width: 20%;}
  </style>
</head>

<body>
  <p align="right">
    <a href="../index.htm"><button onmouseover="this.style.color='red'">R</button></a>
  </p>
  <br><center>
    <div><center>
```

```

<table>
  <tr>
    <td colspan=4 rowspan=3><input type="text" id="num"></td>
  </tr>
  <tr></tr>
  <tr></tr>
  <tr>
    <td><button id="clear" class="btn_gray">AC</button></td>
    <td><button id="neg" class="btn_gray">+/-</button></td>
    <td><button id="percent" class="btn_gray">%</button></td>
    <td><button id="div" class="btn_yellow">/</button></td>
  </tr>
  <tr>
    <td><button id="7">7</button></td>
    <td><button id="8">8</button></td>
    <td><button id="9">9</button></td>
    <td><button id="mul" class="btn_yellow">*</button></td>
  </tr>
  <tr>
    <td><button id="4">4</button></td>
    <td><button id="5">5</button></td>
    <td><button id="6">6</button></td>
    <td><button id="sub" class="btn_yellow">-</button></td>
  </tr>
  <tr>
    <td><button id="1">1</button></td>
    <td><button id="2">2</button></td>
    <td><button id="3">3</button></td>
    <td><button id="add" class="btn_yellow">+</button></td>
  </tr>
  <tr>
    <td><button id="0">0</button></td>
    <td><button id="00">00</button></td>
    <td><button id="decimal">.</button></td>
    <td><button id="equal" class="btn_yellow">=</button></td>
  </tr>
</table><br>
</center>
</div></center>
<script>
  var n1, n2, f1, f2, result, choice;
  let btn1 = document.getElementById('1');
  let btn2 = document.getElementById('2');
  let btn3 = document.getElementById('3');
  let btn4 = document.getElementById('4');
  let btn5 = document.getElementById('5');
  let btn6 = document.getElementById('6');
  let btn7 = document.getElementById('7');
  let btn8 = document.getElementById('8');
  let btn9 = document.getElementById('9');
  let btn0 = document.getElementById('0');
  let btn00 = document.getElementById('00');
  let btnclear = document.getElementById('clear');
  let btnneg = document.getElementById('neg');
  let btnpercent = document.getElementById('percent');

```

```
let btndiv = document.getElementById('div');
let btnmul = document.getElementById('mul');
let btnadd = document.getElementById('add');
let btnsub = document.getElementById('sub');
let btnequal = document.getElementById('equal');
let btndeci = document.getElementById('decimal');

btn1.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"1";
});
btn2.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"2";
});
btn3.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"3";
});
btn4.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"4";
});
btn5.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"5";
});
btn6.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"6";
});
btn7.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"7";
});
btn8.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"8";
});
btn9.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"9";
});
btn0.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"0";
});
btn00.addEventListener('click', function () {
    document.getElementById("num").value = document.getElementById("num").value +
"00";
});

btnadd.addEventListener('click', function() {
    n1 = parseInt(document.getElementById("num").value);
    document.getElementById("num").value = " ";
});
```

```
        choice = 1
    })
    btnsub.addEventListener('click', function() {
        n1 = parseInt(document.getElementById("num").value);
        document.getElementById("num").value = " ";
        choice = 2
    })
    btnmul.addEventListener('click', function() {
        n1 = parseInt(document.getElementById("num").value);
        document.getElementById("num").value = " ";
        choice = 3
    })
    btndiv.addEventListener('click', function() {
        n1 = parseInt(document.getElementById("num").value);
        document.getElementById("num").value = " ";
        choice = 4
    })
    btnneg.addEventListener('click', function() {
        n1 = 0 - parseInt(document.getElementById("num").value);
        document.getElementById("num").value = n1;
    })
    btnpercent.addEventListener('click', function() {
        n1 = parseInt(document.getElementById("num").value);
        document.getElementById("num").value = n1/100;
    })
    btndeci.addEventListener('click', function() {
        document.getElementById("num").value = document.getElementById("num").value+ ".";
        f1 = parseFloat(document.getElementById("num").value);
        choice = 5
    })

    btnequal.addEventListener('click', function() {
        n2 = parseInt(document.getElementById("num").value);
        document.getElementById("num").value = " ";
        if (choice == 1) {
            result = n1 + n2;
        }
        else if (choice == 2) {
            result = n1 - n2;
        }
        else if (choice == 3) {
            result = n1 * n2;
        }
        else if (choice == 5) {
            alert(f1,f2)
            if (choice == 1){
                result = f1 + f2;
                alert(choice,f1,f2)
            }
            else if (choice == 2){
                result = f1 - f2;
                alert(choice,f1,f2)
            }
            else if (choice == 3){
                result = f1 * f2;
            }
        }
    })
```

```
        alert(choice,f1,f2)
    }
    else {
        result = f1 / f2;
        alert(choice,f1,f2)
    }
}
else {
    result = n1 / n2;
}
document.getElementById("num").value = result;
})
btnclear.addEventListener('click', function() {
    document.getElementById("num").value = "";
})
</script>
</body>
</html>
```

EXPERIMENT NO. 5**Working on PHP Basic Controls**

AIM: To create simple PHP applications using the various Control Structures like sequence, decision, loop and switch cases.

1. Make an Electricity Bill Calculator in PHP using the conditional statements with the following conditions specified below.
 - For the first 50 units – Rs. 3.50/unit
 - For next 100 units – Rs. 4.00/unit
 - For next 100 units – Rs. 5.20/unit
 - For units above 50 – Rs. 6.50/unit
2. Implement the below-given software design using PHP. This algorithm finds all 3-digit Armstrong numbers.
 - Step 1. [INITIALIZE N WITH THE FIRST 3-DIGIT NUMBER] $N \leftarrow 100$
 - Step 2. REPEAT STEPS 3 THROUGH 10 UNTIL $N > 999$
 - Step 3. [INITIALIZE S, WHICH HOLDS THE SUM OF THE CUBES] $S \leftarrow 0$
 - Step 4. $M \leftarrow N$ [THIS IS TO MAKE A COPY OF N]
 - Step 5. REPEAT STEP 6 THROUGH STEP 8 WHILE $M > 0$
 - Step 6. COMPUTE $REM \leftarrow$ REMAINDER OF $(M/10)$
 - Step 7. COMPUTE $S \leftarrow S + REM * REM * REM$
 - Step 8. COMPUTE $M \leftarrow$ INTEGER PART OF $(M/10)$
 - Step 9. IF $S = N$ THEN PRINT N END-IF
 - Step 10. [INCREMENT N TO TAKE THE NEXT NUMBER] COMPUTE $N \leftarrow N + 1$ END-REPEAT
 - Step 11. END
3. Determine the difference between the two given dates. Construct a flowchart to show how to do it.

OUTPUT SCREENSHOT:[INDEX](#)**Electricity Bill in PHP**

Enter your electricity units:

Electricity Bill for 5676 units is: Rs. 36624

No. of days left till April 8, 2025 is: 1 years 4 months 13 days

SOURCE CODE:**Date Difference**

```
<?php
$sd = date_create(date('Y-m-d'));
$ed = date_create('2025-04-08');
$time = date_diff($sd, $ed);
```

```
echo "No. of days left till April 8, 2025 is: " . $time->format("%y years %m months %d days")
. "<br><hr>";
?>
```

Electricity Bill

```
<html>
  <head>
    <title>Electricity Bill in PHP</title>
  </head>
  <body>
    <p align="right">
      <a href="http://localhost/phpScripts/"><button
onmouseover="this.style.color='red'">INDEX</button></a>
    </p>
    <center>
      <h2>Electricity Bill in PHP</h2>
      <form method="post">
        <div>
          <label for="funits">Enter your electricity units: </label>
          <input type="number" name="units">
        </div>
        <div>
          <input type="submit" value="Submit">
        </div>
      </form>
    </center>
    <?php
    $U=$_POST["units"];
    $RES;
    if (0<$U && $U<=50){
      $RES=$U*3.50;
      echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
    }
    else if (50<$U && $U<=150){
      $first50=50*3.50;
      $next100=($U-50)*4;
      $RES=$first50+$next100;
      echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
    }
    else if (150<$U && $U<=250){
      $first50=50*3.50;
      $next100=100*4;
      $nextnext100=($U-150)*5.20;
      $RES=$first50+$next100+$nextnext100;
      echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
    }
    else if ($U>250){
      $first50=50*3.50;
      $next100=100*4;
      $nextnext100=150*5.20;
      $Unit200=($U-250)*6.50;
      $RES=$first50+$next100+$nextnext100+$Unit200;
      echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
```



```
    }  
    echo "<br><hr>";  
?>  
</body>  
</html>
```

EXPERIMENT NO. 6**Working with String Manipulation, Numbers, and Math Functions in PHP**

AIM: To develop web pages to perform String Manipulations, Numbers and Math functions in PHP.

1. Implement an similar program to create an calculator that has the functionality like 1-Add,2-Subtract,3-Multiply,4-Divide,5- Modulus as various options as buttons in the HTML Page. Format the web page similar to a calculator using various borders and colors using CSS.
2. Write a PHP program to perform an transpose on 2-D matrices using Indexed Array

OUTPUT SCREENSHOT:

INDEX

First Number: 4545

Second Number: 67

Operator: Add

Calculate

Result: 4612

Matrix Transpose

Enter Matrix (comma-separated values): Transpose

Original Matrix:

2 4 5 6

Transposed Matrix:

2
4
5
6

SOURCE CODE:**Calculator**

```
<!DOCTYPE html>
<html>
<head>
    <title>Activity 2</title>
</head>
<body>
<p align="right">
    <a href="http://localhost/phpScripts/"><button
onmouseover="this.style.color='red'">INDEX</button></a>
</p>
<form method="GET">
    First Number: <input type="text" name="first"><br>
    Second Number: <input type="text" name="second"><br>
    Operator:
    <select name="operator">
        <option value="Add">Add</option>
        <option value="Sub">Subtract</option>
        <option value="Mul">Multiply</option>
        <option value="Div">Divide</option>
    </select>
    <input type="submit" value="Calculate">
</form>
<?php
if (isset($_GET['first']) && isset($_GET['second']) && isset($_GET['operator'])) {
    class myclass {
        public $f, $s, $r;

        public function __construct($first, $second, $operator) {
            $this->f = $first;
            $this->s = $second;

            if ($operator == "Add") {
                $this->add();
            } elseif ($operator == "Sub") {
                $this->sub();
            } elseif ($operator == "Mul") {
                $this->mul();
            } elseif ($operator == "Div") {
                $this->div();
            }
        }

        public function add() {
            $this->r = $this->f + $this->s;
            echo "Result: " . $this->r;
        }

        public function sub() {
            $this->r = $this->f - $this->s;
            echo "Result: " . $this->r;
        }
    }
}
```

```
        public function mul() {
            $this->r = $this->f * $this->s;
            echo "Result: " . $this->r;
        }

        public function div() {
            $this->r = $this->f / $this->s;
            echo "Result: " . $this->r;
        }
    }

    $neww = new myclass($_GET['first'], $_GET['second'], $_GET['operator']);
}
?>
</body>
</html>
```

Matrix Transpose

```
<!DOCTYPE html>
<head>
    <title>Matrix Transpose</title>
</head>
<body>

<h2>Matrix Transpose</h2>

<form method="post" action="">
    <label for="matrix">Enter Matrix (comma-separated values): </label>
    <input type="text" name="matrix" id="matrix" required>
    <button type="submit">Transpose</button>
</form>

<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $matrixInput = $_POST["matrix"];
    $rows = explode("\n", $matrixInput);
    $matrix = array_map(function($row) {
        return explode(",", $row);
    }, $rows);
    $transposedArray = transposeMatrix($matrix);
    echo "<h3>Original Matrix:</h3>";
    printMatrix($matrix);

    echo "<h3>Transposed Matrix:</h3>";
    printMatrix($transposedArray);
}

function transposeMatrix($matrix) {
    $transposedArray = [];
```

```
        foreach ($matrix as $rowIndex => $row) {
            foreach ($row as $colIndex => $value) {
                $transposedArray[$colIndex][$rowIndex] = $value;
            }
        }

        return $transposedArray;
    }

function printMatrix($matrix) {
    echo "<pre>";
    foreach ($matrix as $row) {
        echo implode(" ", $row) . "<br>";
    }
    echo "</pre>";
}
?>

</body>
</html>
```

EXPERIMENT NO. 7**Working with Files in PHP**

AIM: To develop web apps in understanding the use of Files in PHP

1. Study how JSON format looks like.
2. Develop a web application using PHP to work with files, reading data from a file and writing user data into file.
 - a. Create a Page to enter student data using form controls.
 - b. Have a SUBMIT button, when clicked the message has to be saved at the backend in a JSON format text file.
 - c. Add the Timestamp along with the file when it's saved.
 - d. In another PHP page have a text box, while entering a specific student ID(To address) on it and a submit button clicked it should show the student details as the output in PHP file

OUTPUT SCREENSHOT:

Enter your Name:	<input type="text" value="Akash Kumar Yadav"/>
Enter your Roll No.:	<input type="text" value="114"/>
Enter your Course:	<input type="text" value="MCA"/>
	<input type="button" value="Click to Save!"/>
	File Created!

SOURCE CODE:

```
<html>
  <head>
    <title>PHP File Handling</title>
    <style>
      fieldset{
        border: 2px solid;
        margin-left: 15rem;
        margin-right: 15rem;
      }
      table, td, tr{
        margin-left:8%;
        margin-right:8%;
        border-collapse:collapse;
      }
    </style>
    <script>
      document.addEventListener("DOMContentLoaded", function () {
        const btn = document.getElementById("btn");
        const msg = document.getElementById("msg");

        btn.addEventListener("click", function (event) {
          event.preventDefault();
          msg.textContent = "File Created!";
        });
      });
    </script>
  </head>
</html>
```

```
        });
    });
</script>
</head>

<body>
    <div>
        <form method="post">
            <fieldset>
                <table>
                    <tr>
                        <td>Enter your Name: </td>
                        <td><input type="text" name="fname"></td>
                    </tr>
                    <tr>
                        <td>Enter your Roll No.: </td>
                        <td><input type="number" name="roll"></td>
                    </tr>
                    <tr>
                        <td>Enter your Course: </td>
                        <td><input type="text" name="course"></td>
                    </tr>
                    <tr>
                        <td></td>
                        <td><input type="submit" value="Click to Save!" id="btn"></td>
                    </tr>
                    <tr>
                        <td></td>
                        <td id="msg"></td>
                    </tr>
                </table>
            </fieldset>
        </form>
    </div>
</body>

<?php

$StudentData = ["Name" => $_POST['fname'],
                "Roll No." => $_POST['roll'],
                "course" => $_POST["course"],
                "Timestamp" => date('y-m-d H:i:s')
                ];

$jsondata = json_encode($StudentData);
$filename = "data_".time().".json";
file_put_contents($filename, $jsondata);
?>
</html>
```

EXPERIMENT NO. 8**Working with OOPs concepts in PHP**

AIM: To develop understanding of implementing OOPs concepts in PHP.

OUTPUT SCREENSHOT:**Classes and Objects**

hello, John Doe
hello, Jane Doe

Using *\$this* Keyword

hello, Jonnie Roe

Chaining Methods and Properties

hello, Jane >> registered >> email sent

Public v/s Private

Joe

Magic Methods and Constants

John Doe

Inheritance

Hello admin, Balthazar

Abstract Classes and Methods

admin

Interface

Balthazar has the following privileges: write text, add punctuation, edit text, edit punctuation.

Polymorphism

100
105

SOURCE CODE:

```
<?php
echo "<b>Classes and Objects</b><br>";
class User{
    public $firstname;
    public $lastname;

    public function hello($firstname, $lastname){
        echo "hello, ". $firstname. " ". $lastname. "<br>";
    }
}

$user1 = new User();
$user2 = new User();
$user1->hello("John", "Doe");
$user2->hello("Jane", "Doe");
```



```
echo "<hr>";
echo "<b>Using <i>\$this</i> Keyword</b><br>";
class User2{
    public $firstname;
    public $lastname;

    public function hello(){
        echo "hello, ". $this->firstname. " ". $this->lastname. "<br>";
    }
}

$user3 = new User2();
$user3->firstname="Jonnie";
$user3->lastname="Roe";
$user3->hello();
echo "<hr>";
echo "<b>Chaining Methods and Properties</b><br>";
class User3{
    public $firstName;

    public function hello()
    {
        echo "hello, " . $this -> firstName;
        return $this;
    }

    public function register()
    {
        echo " >> registered";
        return $this;
    }

    public function mail()
    {
        echo " >> email sent";
    }
}

$user4 = new User3();
$user4 -> firstName = "Jane";
$user4 -> hello() -> register() -> mail();
echo "<hr>";
echo "<b>Public v/s Private</b><br>";
class User4{
    private $firstName;

    public function set($str)
    {
        $this -> firstName = $str;
    }

    public function get()
    {
        return $this -> firstName;
    }
}
```

```
}

$user5 = new User4();
$user5 -> set("Joe");
echo $user5 -> get();
echo "<hr>";
echo "<b>Magic Methods and Constants</b><br>";
class User5{
    private $firstName;
    private $lastName;

    public function __construct($firstName,$lastName)
    {
        $this -> firstName = $firstName;
        $this -> lastName = $lastName;
    }

    public function getName()
    {
        echo $this -> firstName . " " . $this -> lastName;
    }
}

$user6 = new User5("John", "Doe");
echo $user6->getName();
echo "<hr>";
echo "<b>Inheritance</b><br>";
class User6{
    protected $username;

    public function set($name)
    {
        $this -> username = $name;
    }
}

class Admin extends User6{
    public function expressYourRole()
    {
        return strtolower(__CLASS__);
    }

    public function sayHello()
    {
        return "Hello admin, " . $this -> username;
    }
}

$admin1 = new Admin();
$admin1 -> set("Balthazar");
echo $admin1 -> sayHello();
echo "<hr>";
echo "<b>Abstract Classes and Methods</b><br>";
abstract class User7{
```

```
protected $username;

public function set($name){
    return $this->username=$name;
}

public function get(){
    echo $this->username;
}

abstract function stateYourRole();
}

class Admin2 extends User7{
    public function stateYourRole(){
        echo "admin";
    }
}

class Viewer extends User7{
    public function stateYourRole(){
        echo "viewer";
    }
}

$admin2 = new Admin2();
$admin2 -> set("Balthazar");
echo $admin2 -> stateYourRole();
echo "<hr>";
echo "<b>Interface</b><br>";
class User8{
    protected $username;

    public function set($name){
        return $this->username=$name;
    }

    public function get(){
        return $this->username;
    }
}
interface Author{
    public function setAuthorPrivileges($array);
    public function getAuthorPrivileges();
}
interface Editor{
    public function setEditorPrivileges($array);
    public function getEditorPrivileges();
}

class AuthorEditor extends User8 implements Author, Editor{
    private $authorPrivilegesArray = array();
    private $editorPrivilegesArray = array();

    public function setAuthorPrivileges($array){
```

```
        $this->authorPrivilegesArray = $array;
    }
    public function getAuthorPrivileges(){
        return $this->authorPrivilegesArray;
    }
    public function setEditorPrivileges($array){
        $this->editorPrivilegesArray = $array;
    }
    public function getEditorPrivileges(){
        return $this->editorPrivilegesArray;
    }
}
$user9 = new AuthorEditor();
$user9 -> set("Balthazar");
$user9 -> setAuthorPrivileges(array("write text","add punctuation"));
$user9 -> setEditorPrivileges(array("edit text","edit punctuation"));
$username = $user9 -> get();
$userPrivileges = array_merge($user9 -> getAuthorPrivileges(),
    $user9 -> getEditorPrivileges());

echo $username . " has the following privileges: ";
echo implode(", ", $userPrivileges);
echo ".";
echo "<hr>";
echo "<b>Polymorphism</b><br>";
abstract class User9{
    protected $scores = 0;
    protected $numberOfArticles = 0;

    public function setNumberOfArticles($int)
    {
        $numberOfArticles = (int)$int;
        $this -> numberOfArticles = $numberOfArticles;
    }

    public function getNumberOfArticles()
    {
        return $this -> numberOfArticles;
    }

    abstract public function calcScores();
}

class Author2 extends User9{
    public function calcScores()
    {
        return $this -> scores = $this -> numberOfArticles * 10 + 20;
    }
}
class Editor2 extends User9{
    public function calcScores()
    {
        return $this -> scores = $this -> numberOfArticles * 6 + 15;
    }
}
```

```
$author2 = new Author2();  
$author2 -> setNumberOfArticles(8);  
echo $author2 -> calcScores();  
echo "<br>";  
$author3 = new Editor2();  
$author3 -> setNumberOfArticles(15);  
echo $author3 -> calcScores();  
echo "<hr>";  
?>
```