Exp No: 1:

Basic Html Tags Aim: To create a simple html file to demonstrate the use of different tags. Problem Statement :- Create an html page named as ": Basic_Html_Tags.html" Add the following tags detail. 1. Set the title of the page as "Basic Html Tags" 2. Within the body perform the following a) Moving text = "Basic HTML Tags" b) Different heading tags (h1 to h6) c) Paragraph d) Horizontal line e) Line Break f) Block Quote g) Pre tag h) Different Logical i) Different Physical style j) Listing tags.

Solution:

```
<!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>Basic HTML tags</title>
</head>
<body>
  <marquee direction="right" behavior="alternate"><b>Basic HTML tags</b></marquee>
  <h2>This is a heading 2</h2>
  <h3>This is a heading 3</h3>
  <h4>This is a heading 4</h4>
  <h5>This is a heading 5</h5>
  <h6>This is a heading 6</h6>
  This is a paragraph. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec
dapibus gravida purus, in
    rutrum nisl scelerisque vel. Nam sit amet imperdiet est.
 <hr>
This is some text before the <br/>br> line break.<br/>br> This is some text after the line
break.
```

purus, in rutrum nisl scelerisque vel. Nam sit amet imperdiet est.</blockquote>

<This is some preformatted text. Lorem ipsum dolor sit amet, consectetur adipiscing
elit. Donec dapibus gravida purus, in rutrum nisl scelerisque vel. Nam sit amet imperdiet
est.</pre>

```
This text has <b>bold</b>, <u>underlined</u>, <sub>subscript</sub>, and <sup>superscript</sup> formatting.
```

This text uses some <code>code</code>, deleted, and <kbd>keyboard input</kbd> formatting.

```
<h2>Here are the two types of list:</h2>
<h3>Unordered List:</h3>

        Item 1
        Item 2
        Item 3
        Ordered List:</h3>

            Item 1
        Item 3
        Item 4
        Item 4
        Item 4
        Item
```

Basic HTML tags

This is a heading 2

This is a heading 3

This is a heading 4

This is a heading 5

This is a heading 6

This is a paragraph. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec dapibus gravida purus, in rutrum nisl scelerisque vel. Nam sit amet imperdiet est.

This is some text before the

line break.

This is some text after the line break.

This is a block quote. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec dapibus gravida purus, in rutrum nisl scelerisque vel. Nam sit amet imperdiet
This is some preformatted text. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec dapibus gravida purus, in rutrum nisl scelerisque vel. Na
This text has **bold**, <u>underlined</u>, <u>subscript</u>, and <u>superscript</u> formatting.

This text uses some code, deleted, and keyboard input formatting.

Here are the two types of list:

Exp No: 2:

Html Tags (List, Table) Aim: To create a simple html file to demonstrate the use of different tags.

Solution:

Demonstration of lists

```
<!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>List tags</title>
</head>
<body>
  <center>
    <FONT COLOR="#0000FF"> Listing Tags</FONT>
  </center>
  <h4>Numbered list:</h4>
  <ol>
    java
    perl
    c++
  <h4>Letters list:</h4>

 type="A">

    smtp
```

```
http
  ftp
 <h4>Lowercase letters list:</h4>
 php
  javascript
  ajax
 <h4>Roman numbers list:</h4>

 type="I">

  DTE
  JCTE
  SITTTR
 <h4>Lowercase Roman numbers list:</h4>
 type="i" start="4">
  Computer Engg.
  Mechanical Engg.
  Electronics Engg.
 </body>
```

DEMONSTRATION OF TABLE TAG

```
<title>TIME TABLE </title>
 <style>
  table {border-collapse: collapse; }
  table, td, th { border: 1px solid black; }
 </style>
</head>
<body>
 <th>DAY</th>
  8:00-9:00
  9:00-9:55
  9:55-10:50
  11:00-12:00
  12:05-1:00
  1:00-1:55
  1:55-2:50
  3:10-4:00
  4:00-4:55
  4:55-5:50
 <b>MON</b>
  Placement Classes<br><b>B.Tech Block LT-13</b>
  LUNCH
   Software Engineering<br/><br/>b>New Lab-2</b>
  Elective
  XCS-601(Verbal)<br><b>LT-8</b>
  TCS-604<br><b>CR-6</b>
```

```
TCS-601<br><b>CR-7</b>
 LUNCH
 Compiler Design Lab<br/>br><b>New Lab-2</b>
 Elective
 TCS-604<br><b>CR-6</b>
 TCS-693<br><b>CR-6</b>
Extra Curricular Activities
 TCS-611<br/>br><b>(Discussion Class)</b><br/>br><b>CR-7</b>
 LUNCH
 Compiler Design Lab<br/><br/>b>New Lab-2</b>
 Elective
 TCS-693<br><b>CR-6</b>
 TCS-601<br><b>CR-6</b>
Placement Classes<br><b>B.Tech Block LT-13</b>
 LUNCH
 TCS-604<br><b>CR-3</b>
 XCS-601(QAR)<br><bCR-3</b>
 Elective
 Web Development Lab<br><b>New Lab-2</b>
```

Listing Tags

Numbered list:

- 1. java 2. perl 3. c++

Letters list:

- A. smtp B. http C. ftp

Lowercase letters list:

- b. php c. javascript d. ajax

Roman numbers list:

- I. DTE II. JCTE III. SITTTR

Lowercase Roman numbers list:

iv. Computer Engg.

DAY	8:00-9:00	9:00-9:55	9:55-10:50	11:00-12:00	12:05-1:00	1:00-1:55	1:55-2:50	3:10-4:00	4:00-4:55	4:55-5:50
MON	Placement Classes B.Tech Block LT-13				LUNCH	Software Engineering New Lab-2		Elective	XCS-601(Verbal) LT-8	TCS-604 CR-6
TUE				TCS-601 CR-7	LUNCH	Compiler Design Lab New Lab-2		Elective		TCS-693 CR-6
WED	Extra Curricular Activities		TCS-611 (Discussion Class) CR-7	LUNCH	Compiler Design Lab New Lab-2		Elective	TCS-693 CR-6	TCS-601 CR-6	
THU	Placement Classes B.Tech Block LT-13				LUNCH	TCS-604 CR-3	XCS-601(QAR) CR-3	Elective	Web Development Lab New Lab-2	
FRi	Competitive F (TOC-601)-A Onl	Audit Course	TCS-601 CR-2	TCS-604 Cr-2	LUNCH	TCS-601 CR-3	XCS-601 (Soft Skills) CR-3	TCS-693 CR-3	Software Engineering Lab New Lab 2	

Exp No: 3: Html Tags (Form)

Aim: To create a simple html file to demonstrate the use of different tags.

Solution:

```
<!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>FORM</title>
 <style>
   table, td, th { border: 1px solid black; }
  </style>
</head>
<body bgcolor="blue">
 <form autocomplete="on">
 First_Name:<input type ="text" name="first_name"/>
  Last_Name:<input type="text" name="last_name"/>
  EMAIL:<input type="email" name ="email"
placeholder="abc@gmail.com"/>
```

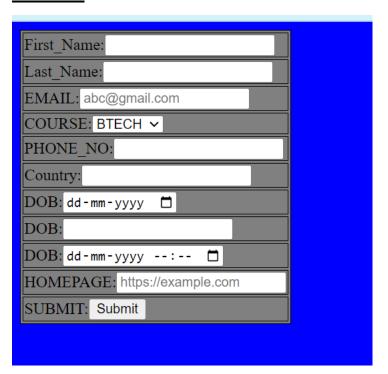
```
COURSE:<select name="dropdown">
   <option value="BTECH"selected>BTECH</option>
   <option value="BCA">BCA</option>
   <option value="BBA">BBA</option>
   <option value="BSC">BSC</option>
   <option value="LLB">LLB</option>
   <option value="MTECH">MTECH</option>
 </select>
 PHONE_NO:<input type="number" name="phoneno"/>
Country:<input list="browsers" name="browser">
 <datalist id="browsers">
   <option value="india"></option>
   <option value="indona"></option>
   <option value="indonesia"></option>
   <option value="china"></option>
   <option value="australia"></option>
 </datalist>
 DOB:<input type="date" name="dob">
DOB:<input type="datetime" name="dob1">
```

```
>DOB:<input type="datetime-local" name="dob2">

+td>HOMEPAGE:<input type="url" name="url" placeholder="https://example.com" pattern="https://.*">

SUBMIT:<input type="submit" name="submit" value="Submit">

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



Exp No: 4: Frames

Aim: To create an html page with different types of frames such as floating frame, navigation frame & mixed frame. Problem Statement: 1. Create an html page named as "frames.html". Divide the page into two columns of 20%, 80% size. In 20% size call the hyperlinks for "navigationframes.html", "floatingframes.html", "mixedframe.html", "noframe" and make the page to be get displayed on the other column when these links are clicked.2. Create an html page named as "navigationframe.html". Divide the page into two columns of 40%, 60% size. In 40% size call the hyperlink file created in above exercise, and make the page to be get displayed on the other column when the link is clicked.3Create an html page named as "floatingframes.html". In this file include a paragraph to explain floating frame, and in floating frame include the any html file created in the above exercise as inline.4Create an html page named as "mixedframe.html". Divide the page into two columns of 25% & 75% size. In 25% display an image and divide the 75% into two rows. (50% & 50%). In the first 50% display the video file created in previous exercise and other 50% the time table created in previous exercise.

SOLUTION:

Frame.html code:

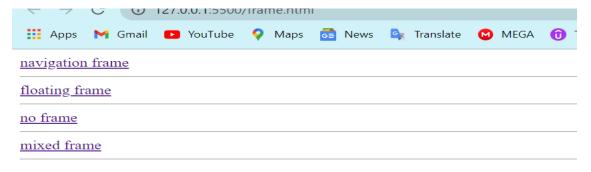
```
<a href="/mixedframe.html" target="a">mixed frame</a>
<hr>
</body>
</html>
```

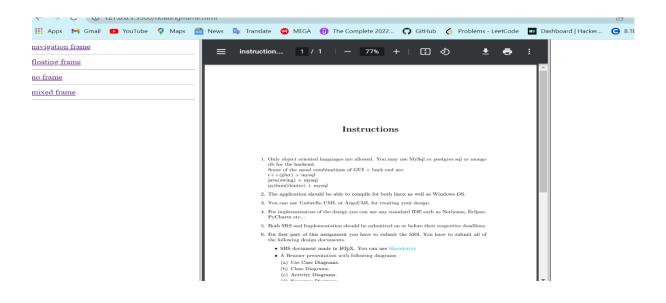
FLOATING FRAME CODE:

```
<!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>Document</title>
</head>
<frameset cols="20%,40%,20%",border="10",frameborder="1">
 <frame name="floatingframe" src="/frame.html">
     <frame name="file" src="/instruction.pdf">
     <frame name="a">
</frameset>
<body>
</body>
</html>
```

NAVIGATION FRAME CODE:

```
<title>Document</title>
</head>
<frameset cols="40%,60%",border="10",frameborder="1">
  <frame name="navigation" src="/frame.html">
    <frame name="a">
</frameset>
<body>
</body>
</html>
MIXED FRAME CODE:
<!DOCTYPE html>
<html>
<head>
      <title>Mixed Frame</title>
</head>
<frameset cols="25%,75%">
      <frame src="image.html">
      <frameset rows="50%,50%">
             <frame src="video.html">
             <frame src="timetable.html">
      </frameset>
</frameset>
</html>
```







EXP 5 MAPS

Aim: To create an html page with different types of image map such as circle, rect , poly & mixed map. Problem Statement : 1. To display an image on the website and construct a map for all circle buttons, develop the "dialler.html" HTML page. When you click on a circle, a message with a button number, such as "you push button 1," will appear

Solution:

```
<!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>Image map</title>
  <script>
    function myFunction(e) {
       x = e.clientX;
       y= e.clientY;
       coor= "Coordinates: ("+ x +"," +y +")";
       document.getElementById("demo").innerHTML= coor
    }
    function clearCoor() {
       document.getElementById("demo").innerHTML=" ";
    }
    function print(x) {
       alert("you clicked "+x);
    }
  </script>
```

```
</head>
<body>
  <img src="imagemap.png" alt="imagemap" usemap="#imagemap" width="300"</pre>
height="279">
  <br/>br/>
  <map name="imagemap">
    <area shape="circle" coords="55, 55, 40" onclick="print(1)">
    <area shape="circle" coords="160, 55, 40" onclick="print(2)">
    <area shape="circle" coords="255, 55, 40" onclick="print(3)">
    <area shape="circle" coords="55, 145, 40" onclick="print(4)">
    <area shape="circle" coords="160, 145, 40" onclick="print(5)">
    <area shape="circle" coords="255, 145, 40" onclick="print(6)">
    <area shape="circle" coords="55, 245, 40" onclick="print(7)">
    <area shape="circle" coords="160, 245, 40" onclick="print(8)">
    <area shape="circle" coords="255, 245, 40" onclick="print(9)">
  </map>
</body>
</html>
```



Exp No: 6: Inline, Internal and External Style sheets

Aim: To create an html file by applying the different styles using inline, external & internal style sheets. Problem Statement :- 1. Create a external style sheet named as "external_css.css" and provide some styles for h2, hr, p & a tags. 2. Create an html file named as "4Style_sheet.html" 1. Include the external style sheet with necessary tag. 2. Include the internal style sheet for body tags & also use class name, so that the style can be applied for all tags. 3. Include a tags with inline style sheet.

Solution:

```
<!DOCTYPE html>
<html>
<head>
       <title>Style Sheets</title>
       <!-- Link to external style sheet -->
       k rel="stylesheet" type="text/css" href="exp6a.css">
       <!-- Internal style sheet for body tags -->
       <style>
              body {
                      background-color: lightgray;
                      font-family: Arial, sans-serif;
                      font-size: 16px;
                      line-height: 1.5;
                      margin: 0;
                      padding: 0;
                      text-align: center;
               }
              /* Class for applying style to all tags */
               .my-class {
                      border: 1px solid black;
                      margin: 10px;
```

```
padding: 10px;
              }
      </style>
</head>
<body>
       <!-- Paragraph with inline style -->
       This is a paragraph with inline style.
       <!-- Paragraph with internal style class -->
       This is a paragraph with internal style class.
       <!-- Heading with external style -->
       <h2>This is a heading with external style.</h2>
       <!-- Horizontal rule with external style -->
       <hr>>
       <!-- Link with external style -->
       <a href="#" class="my-class">This is a link with external style.</a>
</body>
</html>
STYLESHEET:
/* Styles for h2, hr, p, and a tags */
h2 {
      color: blue;
      font-size: 24px;
}
```

```
hr {
      border: 1px solid black;
}

p {
      color: green;
}

a {
      color: red;
      text-decoration: none;
}
```



EXP6a: Inline, Internal and External Style sheets

Aim: To create an html file by applying the different styles using inline, external & internal style sheets. Problem Statement :- 1. Create a external style sheet named as "external_css.css" and provide some styles for h2, hr, p & a tags. 2. Create an html file named as "4Style_sheet.html" 1. Include the external style sheet with necessary tag. 2. Include the internal style sheet for body tags & also use class name, so that the style can be applied for all tags. 3. Include a tags with inline style sheet.

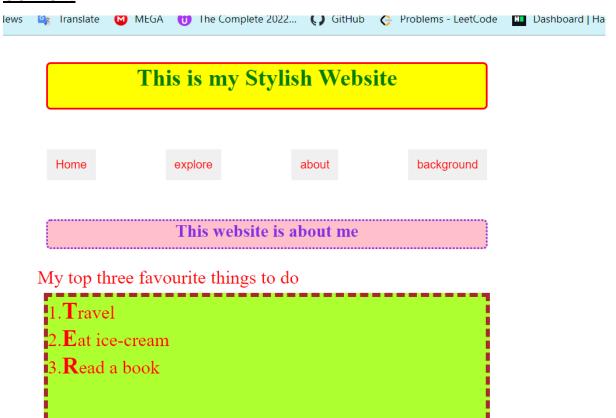
SOLUTION:

```
<!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>Document</title>
  <style>
    .yel{
       width: 500px;
       height: 50px;
       background-color: yellow;
       border-color: red;
       border-style: solid;
       border-radius: 5px;
       margin: auto;
       margin-top: 30px;
       font-size: 20pt;
       font-weight: bolder;
       font-style: normal;
       color: green;
       align-items: center;
```

```
align-content: center;
  text-align: center;
  text-justify: auto;
}
#home{
  border: none;
  width:100%;
  padding: 10px 10px;
  color: red;
}
.webs{
  width: 500px;
  height: 30px;
  background-color: pink;
  border-color: blueviolet;
  border-style: dotted;
  border-radius: 5px;
  margin: auto;
  text-align: center;
  font-size: 15pt;
  font-weight: bold;
  font-style: normal;
  color: blueviolet;
}
.text{
  width: 500px;
  height: 30px;
  color: red;
  margin: auto;
  margin-top: 20px;
```

```
margin-left: 370px;
     font-size: 16pt;
    }
   .last{
     width: 500px;
     height: 150px;
     margin-top: 40px;
     background-color: greenyellow;
     color:red;
     text-align: left;
     font-size: 16pt;
     margin :auto;
     border: 5px;
     border-style: dashed;
     border-color: brown;
    }
 </style>
</head>
<body>
 <div class="yel">
   This is my Stylish Website
 </div>
 <div>
   <input type="button" value="Home" id="home" />
       <input type="button" value="explore" id="home" />
       ="button" value="about" id="home" />
```

```
<input type="button" value="background" id="home"/>
       </div>
  <div class="webs">
    This website is about me
  </div>
  <div class="text">
    My top three favourite things to do
  </div>
  <div class="last">
    1.<span style="font-size: 20pt;font-weight: bolder;">T</span>ravel<br/>br/>
    2.<span style="font-size: 20pt;font-weight: bolder;">E</span>at ice-cream<br/>br/>
    3.<span style="font-size: 20pt;font-weight: bolder;">R</span>ead a book
  </div>
</body>
</html>
```



Exp No: 7: : Inline, Internal and External Style sheets Aim: To create an html file by applying the different styles using inline, external & internal style sheets.

SOLUTION:

```
<!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>Document</title>
</head>
<frameset rows="10%,80%,10%" frameborder="1" border="10">
  <frame name="header" src="http://127.0.0.1:5500/header6.html"/>
  <frameset cols="20%,80%" frameborder="1" border="10">
    <frame name="menu" src="http://127.0.0.1:5500/menu6.html"/>
    <frameset rows="20%,80%" frameborder="1" border="10">
      <frame name="body1" src="http://127.0.0.1:5500/body1.html"/>
      <frame name="body2" src="http://127.0.0.1:5500/body2.html"/>
    </frameset>
  </frameset>
  <frame name="footer" src="http://127.0.0.1:5500/footer6.html"/>
</frameset>
<noframes>
  <body>Your browser does not support frames. </body>
</noframes>
</html>
body1.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>Document</title>
</head>
<body align="center" bgcolor="aqua">
 <form align="center">
    <input type="button" value="add" onclick=sum()/>
       ="button" value="substract" onclick="minus()"/>
       <input type="button" value="multiply" onclick="mul()"/>
     </form>
</body>
</html>
body2.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>Document</title>
 <style>
   .he1{
```

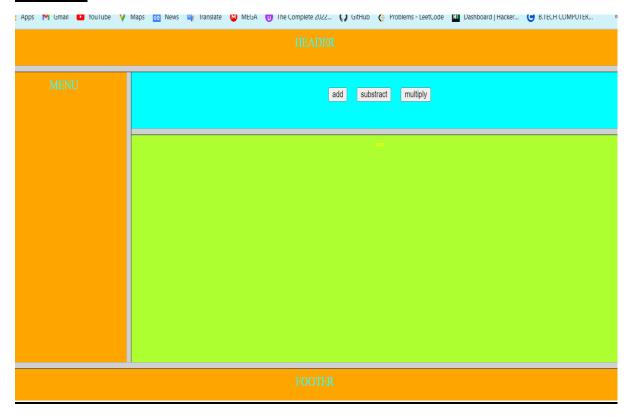
```
font-size: 10px;
       text-align: center;
       color: yellow;
      /* background-color: orange; */
    }
  </style>
</head>
<body bgcolor="greenyellow" align>
  <div class="he1">map</div>
  <!-- HEADER -->
</body>
</html>
menu6.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .he1{
       font-size: 20px;
       text-align: center;
       color: aqua;
      /* background-color: orange; */
    }
  </style>
</head>
```

Header6.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>Document</title>
  <style>
    .he1{
       font-size: 20px;
       text-align: center;
       color: aqua;
      /* background-color: orange; */
    }
  </style>
</head>
<body bgcolor="orange" align>
  <div class="he1">HEADER</div>
  <!-- HEADER -->
</body>
</html>
```

footer6.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>Document</title>
  <style>
    .he1{
      font-size: 20px;
      text-align: center;
      color: aqua;
      /* background-color: orange; */
    }
  </style>
</head>
<body bgcolor="orange" align>
  <div class="he1">FOOTER</div>
  <!-- HEADER -->
</body>
</html>
```



Exp No: 8: : Inline, Internal and External Style sheets Aim: To create an html file by applying the different styles using inline, external & internal style sheets.

SOLUTION:

```
<!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>Document</title>
  <style>
    .main{
       width: 800px;
       height: 500px;
       background-color: pink;
       margin: auto;
     }
    .top{
       width:750px;
       height:30px;
       background-color: aquamarine;
       text-align:center;
       font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
       font-size: medium;
       color: azure;
       font-weight: bold;
       text-justify:auto;
       padding-top: 20px;
       vertical-align: text-top;
```

```
}
.body{
  width:750px;
  height:330px;
  background-color: pink;
}
.last{
  width:750px;
  height:30px;
  background-color: aquamarine;
  text-align:center;
  font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;
  font-size: medium;
  color: azure;
  font-weight: bold;
  text-justify:auto;
  padding-top: 20px;
  vertical-align: text-top;
}
.aside{
  width: 200px;
  height:330px;
  background-color: aqua;
  float: left;
  margin-left: 4px;
}
.aside1{
  width: 530px;
  height:330px;
```

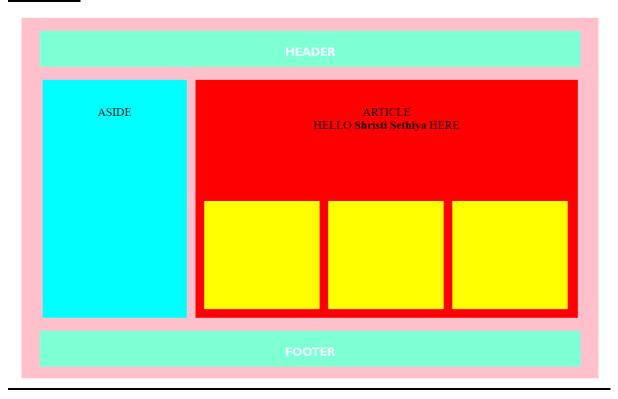
```
background-color: red;
  float: right;
  margin-right: 4px;
}
.im1{
  width:530px;
  height:150px;
  background-color: red;
}
.im2{
  width:530px;
  height:150px;
  background-color: white;
}
.bg1{
  width:160px;
  height: 150px;
  background-color: yellow;
  float: left;
  margin-left: 12px;
  background-image: url('1.png');
  background-position: center;
}
.bg2{
  width:160px;
  height: 150px;
  background-color: yellow;
  float: left;
  margin-left: 12px;
  background-image: url('2.png');
```

```
background-position: center;
    }
    .bg3{
      width:160px;
      height: 150px;
      background-color: yellow;
       float: left;
       margin-left: 12px;
       background-image: url('3.png');
       background-position: center;
    }
  </style>
</head>
<body align="center">
  <div class="main" align="center">
    <div><br/></div>
    <div class="top">HEADER</div>
    <div><br/></div>
    <div class="body">
       <div class="aside">
         <br/>dr/>ASIDE
       </div>
       <div class="aside1">
         <div class="im1"><br/>>cbr/>ARTICLE<br/>>
           HELLO <b>Shristi Sethiya </b> HERE
         </div>
         <div><br/></div>
         <div>
           <div class="bg1">
```

```
</div>
<div class="bg2">

</div>
<div class="bg3">

</div>
</div>
</div>
</div>
<div><br/>></div>
<div class="last">FOOTER</div>
</div>
</div>
</html>
```



Ex No: 9 Input Output In JavaScript

Aim: To create an HTML page to explain input and output using a calculator with the use of various predefined functions and objects in JavaScript.

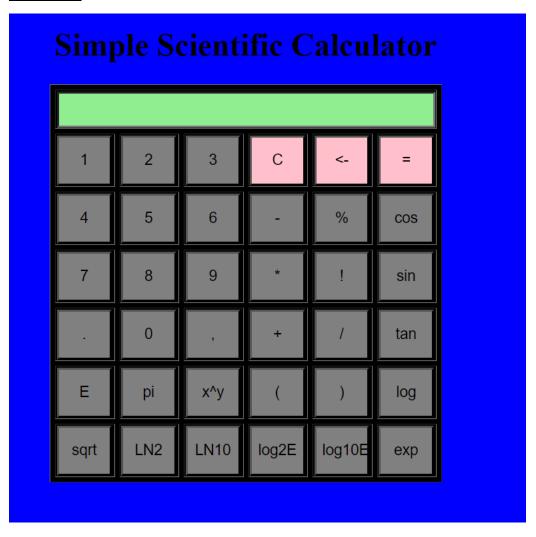
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Calculator</title>
  <style>
              .title {
                     margin-bottom: 10px;
                     padding: 5px 0;
                     font-size: 20px;
                     font-weight:bold;
                     text-align:center;
                     width: 447px;
                     color:black;
              }
              #btn {
                     width: 55px;
                     height: 50px;
                     font-size: 15px;
              }
              input[type="button"] {
```

```
background-color:gray;
                    color: black;
                    width:100%
             }
            /* Set input textarea */
            input[type="text"] {
                    background-color:lightgreen;
                    width: 370px;
    height: 30px;
     </style>
<script>
  function backspace(calc) {
     size = calc.display.value.length;
     calc.display.value = calc.display.value.substring(0, size-1);
  }
  function sum(calc)
  {
     if(calc.display.value.includes("!")) {
       size = calc.display.value.length;
       n = Number(calc.display.value.substring(0, size-1));
       f = 1;
       for(i = 2; i \le n; i++)
          f = f*i;
       calc.display.value = f;
  }
  else
  {
     calc.display.value=eval(calc.display.value);
```

```
}
    }
 </script>
</head>
<body bgcolor="blue">
  <form name="calc" >
    <h1 align="center">Simple Scientific Calculator</h1>
    cellspacing="5px">
      <input id="display" type="text" name="disp"
onkeypress="return event.charCode>=48 && event.charCode<=57"> 
     <input type="button" id="btn" value="1" onclick="calc.display.value+='1">
<input type="button" id="btn" value="2" onclick="calc.display.value+='2"">
<input type="button" id="btn" value="3" onclick="calc.display.value+='3">
<input style="background-color:pink" type="button" id="btn" value="C"
onclick="calc.display.value=""> 
       <input style="background-color:pink" type="button" id="btn" value="<-"
onclick="backspace(this.form)"> 
       <input style="background-color:pink" type="button" id="btn" value="="
onclick="sum(this.form)"> 
     <input type="button" id="btn" value="4" onclick="calc.display.value+='4">
<input type="button" id="btn" value="5" onclick="calc.display.value+='5"">
<input type="button" id="btn" value="6" onclick="calc.display.value+='6">
```

```
<input type="button" id="btn" value="-" onclick="calc.display.value+='-">
<input type="button" id="btn" value="%" onclick="calc.display.value+='%"">
<input type="button" id="btn" value="cos"
onclick="calc.display.value+='Math.cos("'>
      <input type="button" id="btn" value="7" onclick="calc.display.value+='7"">
<input type="button" id="btn" value="8"
onclick="calc.display.value+='8'">
        <input type="button" id="btn" value="9" onclick="calc.display.value+='9"">
<input type="button" id="btn" value="" onclick="calc.display.value+="">
<input type="button" id="btn" value="!" onclick="calc.display.value+='!">
<input type="button" id="btn" value="sin"
onclick="calc.display.value+='Math.sin(""> 
      <input type="button" id="btn" value="." onclick="calc.display.value+='."'>
<input type="button" id="btn" value="0" onclick="calc.display.value+='0"">
<input type="button" id="btn" value="," onclick="calc.display.value+=',"'>
<input type="button" id="btn" value="+" onclick="calc.display.value+='+">
<input type="button" id="btn" value="/" onclick="calc.display.value+='/">
<input type="button" id="btn" value="tan"
onclick="calc.display.value+='Math.tan("'>
```

```
<input type="button" id="btn" value="E" onclick="calc.display.value+='E">
<input type="button" id="btn" value="pi"
onclick="calc.display.value+='Math.PI""> 
        <input type="button" id="btn" value="x^y"
onclick="calc.display.value+='Math.pow(""> 
        <input type="button" id="btn" value="(" onclick="calc.display.value+='("'>
<input type="button" id="btn" value=")" onclick="calc.display.value+=')"">
<input type="button" id="btn" value="log"
onclick="calc.display.value+='Math.log("'
      <input type="button" id="btn" value="sqrt"
onclick="calc.display.value+='Math.sqrt(""> 
        <input type="button" id="btn" value="LN2"
onclick="calc.display.value+='Math.LN2"">
        <input type="button" id="btn" value="LN10"
onclick="calc.display.value+='Math.LN10""> 
        <input type="button" id="btn" value="log2E"
onclick="calc.display.value+='Math.LOG2E"'>
        <input type="button" id="btn" value="log10E"
onclick="calc.display.value+='Math.log10""> 
        <input type="button" id="btn" value="exp"
onclick="calc.display.value='Math.exp("'>
      </form>
</body>
</html>
```



Ex No: 10 Object methods alert(), prompt(), confirm(), open(), close(), print()

Aim: To create an html page to explain the use of various predefined functions in window object in java script. Create an html page named as "window.html" and within the script tag. 1. Use different window object.

```
<!DOCTYPE html>
<html>
<head>
       <title>Window Object Methods</title>
       <script>
              function show_alert() {
                      alert("This is an alert message!");
              }
              function show_prompt() {
                      var name = prompt("Please enter your name:");
                      if (name != null) {
                             alert("Hello " + name + "!");
                      }
              }
              function show_confirm() {
                      var result = confirm("Are you sure you want to proceed?");
                      if (result == true) {
                             alert("You clicked OK!");
                      } else {
                             alert("You clicked Cancel!");
                      }
              }
```

```
function open_window() {
                    window.open("https://www.google.com/");
             }
             function close_window() {
                    window.close();
             }
             function print_page() {
                    window.print();
             }
      </script>
</head>
<body>
      <h1>Window Object Methods</h1>
      <button onclick="show_alert()">Show Alert</button><br>
      <button onclick="show_prompt()">Show Prompt</button><br>
      <button onclick="show_confirm()">Show Confirm</button><br>
      <button onclick="open_window()">Open Window</button><br>
      <button onclick="close_window()">Close Window</button><br>
      <button onclick="print_page()">Print Page</button>
</body>
</html>
```



Ex No: 11: Event Handling - Background Color Change

Aim: To create an html page to change the background color for every click of a button using javascript. Problem Statement: 1. Create a html page named as changebackground_color.html 2. Define a method named as random_color() which is to be called when you click on the body. This method should generate random number, which is used to set the background color.

```
<!DOCTYPE html>
<html>
<head>
       <title>Change Background Color</title>
       <script>
              function random_color() {
                     // generate random values for RGB
                     var r = Math.floor(Math.random() * 256);
                     var g = Math.floor(Math.random() * 256);
                     var b = Math.floor(Math.random() * 256);
                     // set the background color using the generated values
                     document.body.style.backgroundColor = "rgb(" + r + "," + g + "," + b
+")";
              }
       </script>
</head>
<body onclick="random_color()">
       <button onclick="random_color()">Change Color</button>
</body>
</html>
```



Ex No: 12: Event Handling - calendar for the month and year by combo box

Aim: To create an html page with 2 combo box populated with month & year, to display the calendar for the selected month & year from combo box using javascript.

```
<!DOCTYPE html>
<html>
  <head>
    <script>
       var days=["sun","mon","tue","wed","thu","fri","sat"];
       var mn=
["January", "February", "March", "April", "May", "June", "July", "August", "September", "October
","November","December"];
       var last=[31,28,31,30,31,30,31,30,31,30,31];
       var i=0,j,cnt=0,c;
       var yr,k,mon;
       function my()
         yr = document.getElementById("year").value
         k = document.getElementById("month").value \\
         if(yr\%4==0)
            last[1]=29;
          }
         k1 = k-1
         var date2 = new Date(yr,k1,1)
         // var date6 = new Date(yr,k1)
         // console.log(date2);
         var daz = date2.getDay()
```

```
//alert(days[daz])
      document.write("");
      //document.write("<center>"+ mn[k1]+"
"+yr+"</center>");
      document.write(""+ mn[k1]+"
"+yr+"");
      document.write("");
      for(i=0;i<=6;i++)
      {
       document.write(" <b>"+days[i]+"</b>");
      }
      document.write("");
      document.write("");
      cnt=0;
      for(i=0;i<=daz-1;i++)
      {
       document.write("");
       cnt=cnt+1;
      }
      for(j=1;j<=last[k1];j++)
      {
       c=cnt%7;
       if(c==0)
        {
         document.write(""+j+"");
         cnt++;
        }
       else
```

```
{
          document.write(""+j+"");
          cnt++;
        }
      }
      document.write("");
      }
    </script>
</head>
<body bgcolor="green">
  <h1>Calender</h1>
  <h2>Select Year</h1>
  <form name="form1">
  <select name="qual" id="year">
  <option value=2014>2014
  <option value=2015>2015</option>
  <option value=2016>2016
  <option value=2017>2017</option>
  <option value=2018>2018</option>
  <option value=2019>2019</option>
  <option value=2020>2020</option>
  <option value=2021>2021</option>
  <option value=2022>2022</option>
  <option value=2023>2023</option>
  <option value=2024>2024</option>
  </select>
  <h2>Select Month</h1>
  <select name="qual1" id="month">
  <option value=1>JAN</option>
```

```
<option value=2 >2</option>
<option value=3>3</option>
<option value=4>4</option>
<option value=5>5</option>
<option value=6>6</option>
<option value=7>7</option>
<option value=8>8</option>
<option value=9 >9</option>
<option value=10>10</option>
<option value=11>11</option>
<option value=12>DEC</option>
</select>
<input type="button" value="ok" onclick=my()></input></form> </body>
</html>
```



Ex No: 13: Date Handling - calendar for the month and year by combo box

Aim: To understand the date in java Script. a) Write a JavaScript program to display the current day and time in the following format. Sample Output: Today is: Friday. Current time is: 4 PM: 50: 22 b) Write a JavaScript program to get the current date. Expected Output: mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy c) Write a JavaScript function to get difference between two dates in days. Test Data: console.log(date_diff_indays('04/02/2014', '11/04/2014')); console.log(date_diff_indays('12/02/2014', '11/04/2014')); Output: 216-28 d) 16. Write a JavaScript function to count the number of days passed since beginning of the year. Go to the editor Test Data: console.log(days_passed(new Date(2015, 0, 15))); 15 console.log(days_passed(new Date(2015, 11, 14))); 348 e) Write a JavaScript program to find 1st January is being a Sunday between year1 and year2. f) Write a JavaScript program to calculate days left until next Christmas. g) Write a JavaScript program to calculate days remains in your birthday

```
<!DOCTYPE html>
<html>
<head>
    <title>Date Handling in JavaScript</title>
</head>
<body>

<h2>Part a) Display current day and time</h2>

<h2>Part b) Get current date</h2>
<label for="date-format">Choose date format:</label>
<select id="date-format">
        <option value="mdy">mm-dd-yyyy</option>
        <option value="dmy">dd-mm-yyyy</option>
        <option>
        <option>
        <option value="dmy">dd-mm-yyyy</option>
```

```
<option value="mdy2">mm/dd/yyyy</option>
  <option value="dmy2">dd/mm/yyyy</option>
</select>
<h2>Part c) Get difference between two dates in days</h2>
<label for="date1">Enter first date:</label>
<input type="date" id="date1">
<label for="date2">Enter second date:</label>
<input type="date" id="date2">
<button id="date-diff-btn">Calculate Difference</button>
<h2>Part d) Count number of days passed since beginning of the year</h2>
<label for="year">Enter year:</label>
<input type="number" id="year">
<button id="days-passed-btn">Calculate Days Passed</button>
<h2>Part e) Find 1st January is being a Sunday between year1 and year2</h2>
<label for="year1">Enter start year:</label>
<input type="number" id="year1">
<label for="year2">Enter end year:</label>
<input type="number" id="year2">
<button id="jan1-sun-btn">Check</button>
<h2>Part f) Calculate days left until next Christmas</h2>
<button id="days-to-christmas-btn">Calculate Days to Christmas</button>
```

```
<h2>Part g) Calculate days remains in your birthday</h2>
  <label for="bday">Enter your birthday:</label>
  <input type="date" id="bday">
  <button id="days-to-bday-btn">Calculate Days to Birthday</button>
  <script>
    // Part a
    const daysOfWeek = ["Sunday", "Monday", "Tuesday", "Wednesday", "Thursday",
"Friday", "Saturday"];
    let now = new Date():
    let dayOfWeek = daysOfWeek[now.getDay()];
    let hours = now.getHours() % 12;
    let amPm = now.getHours() >= 12 ? "PM" : "AM";
    let minutes = now.getMinutes();
    let seconds = now.getSeconds();
    document.getElementById("current-day-time").innerHTML = `Today is :
$\{\dayOfWeek\}.<br>Current time is: $\{\text{hours}\} $\{\text{amPm}\}: $\{\text{minutes}\}: $\{\text{seconds}\}';
    // Part b
    let currentDate = new Date();
    let day = currentDate.getDate();
    let month = currentDate.getMonth() + 1;
    let year = currentDate.getFullYear();
    let dateFormatSelect = document.getElementById("date-format");
    let separator = dateFormatSelect.value === "dmy" || dateFormatSelect.value ===
"dmy2" ? "/" : "-";
```

```
let formattedDate = "";
    if (dateFormatSelect.value === "mdy" || dateFormatSelect.value === "dmy") {
       formattedDate = month + separator + day + separator + year;
     } else {
       formattedDate = day + separator + month + separator + year;
     }
    console.log("Current date: " + currentDate.toLocaleDateString());
    console.log("Formatted date: " + formattedDate);
    // Outputs: mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy based on the
selection made in the date format dropdown
    // Part c
    function date_diff_indays(date1, date2) {
       let dt1 = new Date(date1);
       let dt2 = new Date(date2);
       let diff_in_time = dt2.getTime() - dt1.getTime();
       let diff_in_days = diff_in_time / (1000 * 3600 * 24);
       return Math.round(diff_in_days);
     }
    document.getElementById("date-diff-btn").addEventListener("click", function () {
       let date1 = document.getElementById("date1").value;
       let date2 = document.getElementById("date2").value;
       let result = date_diff_indays(date1, date2);
       document.getElementById("date-diff-result").innerHTML = `Difference in days:
${result}`;
     });
    // Part d
```

```
function days_passed(date) {
       let year_start = new Date(date.getFullYear(), 0, 0);
       let diff_in_time = date - year_start;
       let diff_in_days = diff_in_time / (1000 * 3600 * 24);
       return Math.floor(diff in days);
     }
    document.getElementById("days-passed-btn").addEventListener("click", function () {
       let current_date = new Date();
       let result = days_passed(current_date);
       document.getElementById("days-passed-result").innerHTML = `Days passed in
${current_date.getFullYear()}: ${result}`;
     });
    // Part e
    function find_jan1_sunday(year1, year2) {
       for (let year = year1; year <= year2; year++) {
         let jan1 = new Date(year, 0, 1);
         if (jan1.getDay() === 0) {
            return year;
          }
       }
       return -1;
     }
    document.getElementById("jan1-sun-btn").addEventListener("click", function () {
       let year1 = document.getElementById("year1").value;
       let year2 = document.getElementById("year2").value;
       let result = find_jan1_sunday(year1, year2);
       if (result === -1) {
```

```
document.getElementById("jan1-sun-result").innerHTML = "No 1st January is
being a Sunday in the specified range.";
       } else {
         document.getElementById("jan1-sun-result").innerHTML = `1st January is being a
Sunday in the year ${result}.`;
       }
     });
    // Part f
    function days_to_christmas() {
       let today = new Date();
       let christmas = new Date(today.getFullYear(), 11, 25);
       if (today.getMonth() === 11 && today.getDate() > 25) {
         christmas.setFullYear(christmas.getFullYear() + 1);
       }
       let diff_in_time = christmas.getTime() - today.getTime();
       let diff_in_days = diff_in_time / (1000 * 3600 * 24);
       return Math.round(diff_in_days);
     }
    document.getElementById("days-to-christmas-btn").addEventListener("click", function
() {
       let result = days_to_christmas();
       document.getElementById("days-to-christmas-result").innerHTML = `Days left until
Christmas: ${result}`;
     });
     // Part g
    function daysToBirthday() {
       let bdayInput = document.getElementById("bday");
       let bdayString = bdayInput.value;
       let bday = new Date(bdayString);
```

```
let today = new Date();
       bday.setFullYear(today.getFullYear());
       if (bday.getTime() < today.getTime()) {</pre>
         bday.setFullYear(today.getFullYear() + 1);
       }
       let diff = bday.getTime() - today.getTime();
       let days = Math.ceil(diff / (1000 * 60 * 60 * 24));
       return days;
     }
    let daysToBdayBtn = document.getElementById("days-to-bday-btn");
    let daysToBdayResult = document.getElementById("days-to-bday-result");
    daysToBdayBtn.addEventListener("click", function () {
       let days = daysToBirthday();
       let result = `There are ${days} days left until your birthday!`;
       daysToBdayResult.innerHTML = result;
     });
  </script>
</body>
```

OUTPUT: Apps M Gmail YouTube Maps Mews News MEGA Translate MEGA The Complete 2022... GitHu Part a) Display current day and time Today is: Sunday. Current time is: 5 PM: 9: 34 Part b) Get current date Choose date format: mm-dd-yyyyy V

Part d) Count number of days passed since beginning of the year

Enter year: Calculate Days Passed

Part e) Find 1st January is being a Sunday between year1 and year2

Enter start year: Enter end year: Check

Enter first date: dd-mm-yyyy 📋 Enter second date: dd-mm-yyyy 📋 Calculate Difference

Part f) Calculate days left until next Christmas

Part c) Get difference between two dates in days

Calculate Days to Christmas

Ex No: 14: Window object method setInterval, clearInterval

Aim: To create an html page with three button START PAUSE and RESET for controlling stopwatch Problem Statement: Create a html file named as "stopwatch.html" 1. Add number div display HH MM SS. 2. When the button is clicked START start watch. 3. When the button is clicked PAUSE stop watch. 4. When the button is clicked RESET reset div values 00:00:00.

```
<!DOCTYPE html>
<html>
<head>
  <title>Stopwatch</title>
  <style >
     body {
       font-family: Arial, sans-serif;
     }
     .container {
       display: flex;
       flex-direction: column;
       align-items: center;
       margin-top: 50px;
     }
     .display {
       font-size: 48px;
       margin-bottom: 20px;
     }
     .buttons {
```

```
display: flex;
  flex-direction: row;
  align-items: center;
  justify-content: center;
  margin-bottom: 20px;
}
.button {
  font-size: 24px;
  padding: 10px 20px;
  margin: 0px 10px;
  border: none;
  border-radius: 5px;
  background-color: #007bff;
  color: white;
  cursor: pointer;
}
.button:hover {
  background-color: #0062cc;
}
.laps {
  display: flex;
  flex-direction: column;
  align-items: center;
}
.lap {
  font-size: 18px;
```

```
margin-bottom: 5px;
    }
  </style>
</head>
<body>
  <div class="container">
    <div class="display" id="display">00:00:00</div>
    <div class="buttons">
       <button class="button" id="startBtn">Start</button>
       <button class="button" id="pauseBtn">Pause</button>
       <button class="button" id="resetBtn">Reset</button>
       <button class="button" id="lapBtn">Lap</button>
    </div>
    <div class="laps" id="laps"></div>
  </div>
  <script >
    // Get the display element and buttons
    var display = document.getElementById("display");
    var startBtn = document.getElementById("startBtn");
    var pauseBtn = document.getElementById("pauseBtn");
    var resetBtn = document.getElementById("resetBtn");
    var lapBtn = document.getElementById("lapBtn");
    var laps = document.getElementById("laps");
    // Initialize the variables
    var seconds = 0;
    var minutes = 0;
    var hours = 0;
```

```
var intervalId = null;
     // Format the time values
     function formatTime(value) {
       return value < 10 ? "0" + value.toString() : value.toString();
     }
     // Update the display
     function updateDisplay() {
       display.textContent = formatTime(hours) + ":" + formatTime(minutes) + ":" +
formatTime(seconds);
     }
     // Start the timer
     function startTimer() {
       intervalId = setInterval(function () {
          seconds++;
          if (seconds >= 60) {
            seconds = 0;
            minutes++;
            if (minutes >= 60) {
               minutes = 0;
               hours++;
            }
          }
          updateDisplay();
       }, 1000);
     }
     // Pause the timer
     function pauseTimer() {
```

```
clearInterval(intervalId);
       intervalId = null;
     }
    // Reset the timer
    function resetTimer() {
       pauseTimer();
       seconds = 0;
       minutes = 0;
       hours = 0;
       updateDisplay();
       laps.innerHTML = "";
     }
    // Save lap time
    function saveLap() {
       var lapTime = formatTime(hours) + ":" + formatTime(minutes) + ":" +
formatTime(seconds);
       var lap = document.createElement("div");
       lap.className = "lap";
       lap.textContent = lapTime;
       laps.appendChild(lap);
     }
    // Add event listeners to the buttons
    startBtn.addEventListener("click", function () {
       startTimer();
    });
    pauseBtn.addEventListener("click", function () {
```

```
pauseTimer();
});

resetBtn.addEventListener("click", function () {
    resetTimer();
});

lapBtn.addEventListener("click", function () {
    saveLap();
});

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

