

1. 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 Style (, <u>, <sub>, <sup>....)
- i) Different Physical style (<code>, , <kbd>...)
- j) Listing tags (2 types with, & each type provide different “type” attribute)

```
<!DOC  
TYPE  
html>
```

```
    <head>  
    <title>Basic_Html_Tags.html</title>  
    </head>
```

```
<bo  
dy>
```

```
<h1 align="centre">Basic HTML Tags</h1>  
<h2 align="centre"><font colour="red" size="6">Heading Tags=>font size-18  
pt, colour-RED</font></h2>  
<h3 align="centre"><font size="7">Heading H1 - 24 pt</font></h3>  
<h4><font size="6"><marquee>Heading H2 - 18 pt</marquee></font></h4>  
<h3><font size="5"><b>Heading H3 - 12 pt bold</b></font></h3>  
<h4><font size="4">Heading H4 - 12 pt</font></h4>  
<h5><font size="3">Heading H5 - 10 pt</font></h5>  
<h6><font size="2">Heading H6 - 7 pt</font></h6>  
<p><span style="font-size: 36pt;">font size-36 pt, </span><span style="font-size:  
24pt;">font size-24 pt, </span><span style="font-size: 18pt;">font size-18 pt,  
</span><span style="font-size: 12pt;"><b>font size-12 pt bold, </b></span><span  
style="font-size: 12pt;">font size-12 pt plain, </span><span style="font-size:  
9pt;">font size-9 pt</span></p>  
<hr>  
<p align="center"><font color="green" size="5">Text Elements =>font size-12 pt,  
colour-GREEN</font></p>  
  
<blockquote  
cite="https://blog.hubspot.com/website/html#:~:text=HTML%2C%20short%20for%  
20Hypertext%20Markup%20Language%2C%20is%20the,basic%20structure%20of  
%20web%20pages%20and%20online%20applications.">
```

<p>HTML, short for Hypertext Markup Language, is the core language of the World Wide Web. Originally designed as a language for semantically describing scientific documents, it has adapted to describe the basic structure of web pages and online applications. For example, HTML can be used to specify which part of the document is a title, which is a list, and which is an image. It can also be used to hyperlink a word, embed an image, italicize font, and more.</p>

</blockquote>

<!--<pre>HTML, short for Hypertext Markup Language, is the core language of the World Wide Web. Originally designed as a language for semantically describing scientific documents, it has adapted to describe the basic structure of web pages and online applications. For example, HTML can be used to specify which part of the document is a title, which is a list, and which is an image. It can also be used to hyperlink a word, embed an image, italicize font, and more.</pre>-

->

</body>

</html>

1(II). To create a simple html file to demonstrate the use of different tags.

```
<html>
<head>
<title>Basic Html Tags</title>
</head>
<body>
<center> <FONT COLOR="#0000FF"> Listing Tags</FONT></center><h4> Numbered
List:</h4><ol><li>java</li>
<li> perl </li>
<li> C++</li>
</ol><h4> Letters List: </h4><ol type="A">
<li> smtp </li><li>http </li><li>ftp </li>
</ol>
<h4> Lowercase Letters: </h4><ol type ="a" start="2">
<li> php </li><li>Javascript </li><li> ajax </li>
</ol>
<h4>Roman Numbers List:</h4><ol type="I">
<li> DTE </li><li>JCTE </li><li> SITTER </li></ol>
<h4> Lowercase Roman Number List:</h4> <ol type="i" start="4">
<li>Computer Engg. </li><li>Mechanical Engg. </li><li>Electronics Engg. </li>
<h4>Here is a Nested Ordered List:</h4><ol type="I">
<li> Module 1 </li><li>Module 2<ol type="i"> <li> Module 2.1</li><li> Module
2.2</li></ol> </li><li> Module 3 </li></ol>
<h4> Disc Bullet List:</h4> <ol type="Disc" >
<li>keyboard. </li><li>Mouse</li><li>Monitor </li>
</ol>
<h4>Circle Bullet List:</h4> <ol type="Circle">
<li>CRT< /li><li>LCD </li><li>LED </li>
</ol>
<h4>Square Bullet List:</h4> <ol type="square">
<li>Windows< /li><li>Linux </li><li>Android </li>
</ol>
<h4>A Definition List:</h4>
<dt>Coffee</dt> <dd>Black Coffee OR Milk Coffee</dd>
<dt>Milk</dt><dd> Hot White Milk OR Cold Chocolate milk</dd>
</body></html>
```

3. Design a HTML page for the time-table as given.

[illegible]

```

<td colspan="4" bgcolor="cyan"> IT0320/IT0322</td>
<td bgcolor="rgb(255,255,0)">IT0310</td>
<td >IT0304</td>
<td >IT308</td>
<tr align="center">
<td bgcolor="grey"> WEDNESDAY </td>
<td colspan="2" bgcolor="yellow">ELECTIVE -I</td>
<td>IT0306</td><td>IT310</td>
<td>IT304</td>
<td>IT308</td>
<td>COUN</td>
</tr>

<tr align="center">
<td bgcolor= "grey"> THURSDAY </td>
<td >IT302 </td> <td >IT0304 </td>
<td colspan="2" >PD0302 </td>
<td bgcolor="green" colspan="3"> It0320/IT0322</td>
</tr>

<tr align="center"> <td bgcolor= "grey">FRIDAY </td>
<td >IT0308 </td>
<td > IT0306 </td>
<td >IT0308 </td>
<td >IT0302 </td>
<td colspan="2" bgcolor="red"> ELECTIVE -I </td>
<td > </td>
</tr>
</table>
</body>
</html>

```

4. To create a simple html form to demonstrate the use of different tags.

```
<html>
<head>
<title>sample Registration form</title>
</head>
<body bgcolor=lightblue>
<h1><center><font color ="red" >ENTRY FORM</h1>
<form>
<label for="fname"> Enter your Name:</label>
<input type="text" id="fname" name="fname">
<br><br><br>
<label for="fname"> Enter your Age:</label>
<input type="text" id="fname" name="fname">
<br><br><br>
<label for="fname"> Enter your Address:</label>
<textarea name="fname" rows="10" col="12"></textarea>
<br><br><br>
<label for="fname">sex: &nbsp;  </label>

<input type="radio" id="fname" name="Female">
<label for="fname">Female</label>
<pre>  <input type="radio" id="fname" name="Male" value="Male"/>Male</pre>
<br>
<label for="fname"> Nationality:</label>
<select id="fnation" name ="fnation" >
<option value="Please Select Country ">(Please Select Country)</option>
<option value="India ">India</option>
<option value="Canada ">Canada</option>
<option value="Germany ">Germany</option>
<option value="Turkey">Turkey</option>
```

```
<option value="Russia ">Russia</option>
</select>
<br><br>
<label for="lang">Languages Known:</label>

<select id="lang" name ="lang" >
<option value="Can Select More Than One ">(Can Select More Than One)</option>
<br><br>
<pre>        <input type="checkbox" id="lang" name="lang" value="C"><label
for="lang"> C</label></pre>
<pre>        <input type="checkbox" id="lang" name="lang" value="C++"><label
for="lang"> C++</label> </pre>
<pre>        <input type="checkbox" id="lang" name="lang" value="VB"><label
for="lang"> VB</label></pre>
<pre>        <input type="checkbox" id="lang" name="lang" value="JAVA"><label
for="lang"> JAVA</label> </pre>
<pre>        <input type="checkbox" id="lang" name="lang" value="ASP"><label
for="lang"> ASP</label></pre>
<pre>        <input type="checkbox" id="lang" name="lang" value="OTHERS"><label
for="lang"> OTHERS</label> <br>
</select>
<br>
<label for="fname">Enter your Password : </label>
<pre>        <input type="password" id="fname" name="fname"></pre>
<pre>        <input type ="Reset" value="Reset"> <input type ="Submit"
value="Submit"></pre>
<br><br><br>
</body>
</html>
```

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

4(I) 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.

```
<html>
<body>
<a href="3navigationframes.html" target="two">navigation frame</a><br><hr>
<a href="3floatingframe.html" target="two">floating frame</a><br><hr>
<a href="3frames.html" target="two">no frame</a><br><hr>
<a href="3mixedframe.html" target="two">mixed frame</a><br><hr>
</body>
</html>
```

4(II) 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.

```
<html>
<frameset cols="20%,*" scrolling="no" noresize>
<frame name="one" src="C:\Users\TISHA\OneDrive\Documents\frames1.html"/>
<frame name="two"/>
</frameset>
</html>
```


4(III) Create 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.

```
<html>
<frameset cols="20%,*" scrolling="no" noresize>
<frame name="one" src="frames1.html"/>
<frameset cols="40%,*" scrolling="no" noresize>
<frame name="two" src="basic.html"></frame>
<frame name="three" ></frame>
</frameset>
</html>
```

```
<html>
<body>
  <h1>About Frames</h1>
  <p>Frames divide a browser window into two or more separate pieces or panes, with each
pane
containing a separate web page. One of the key advantages that frames offer is that we can
load and
reload single panes without having to reload the entire contents of the browser window. A
collection
of frames in the browser window is known as a frameset . A frameset divides the window
into rows
and columns (rather like a table). The simplest of framesets might just divide the screen into
two
rows, whereas a complex frameset could use several rows and columns.
<p>There is also a special kind of frame called an iframe which is a single window that can
sit
anywhere inside a page.
<p>If a user ' s browser does not support frames, the contents of the noframes element
should be
displayed to the user. A body element should be placed inside the noframes element because
if a
browser does not understand the frameset element, it should ignore the frameset element and
the
noframes element, then display what is inside the body element contained in the noframes
element.<p>
<iframe src="C:\Users\TISHA\OneDrive\Documents\labtimetablew3.html" height="50% "
width="80%">
</iframe>
</body>
</html>
```

4.IV Create 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.

```
<html>
<head>
  <title>Video in HTML</title>
</head>
<body>
  <video src="C:\Users\TISHA\Downloads\panda.mp4" width="560" height="340"
controls></video>
</body>
</html>
```

```
<html>
<frameset cols="25%,*">
<frame src="C:\Users\TISHA\Downloads\tulip.jpg"></frame>
<frameset rows="50%,*">
<frame src="C:\Users\TISHA\OneDrive\Documents\labtimetablew3.html">
<frame src="C:\Users\TISHA\OneDrive\Documents\frames4.html"></frame>
</frameset>
</frameset>
</html>
```

5.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.

```
<!DOCTYPE html>
<html>
<head>
  <title>Keypad</title>
  <style>
    .keypad-container {
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
    }

    .keypad {
      width: 300px;
      height: 500px;
      background-color: white;
      border: 1px solid black;
      border-radius: 20px;
      display: grid;
      grid-template-columns: repeat(3, 1fr);
      grid-gap: 10px;
      padding: 20px;
    }

    .keypad button {
      width: 100%;
      height: 100%;
      font-size: 20px;
      font-weight: bold;
      background-color: white;
      color: black;
      border-color: black;
      border-radius: 50%;
      cursor: pointer;
    }
  </style>
</head>
<body>
  <div class="keypad-container">
    <div class="keypad">
      <button onclick="showMessage(1)">1</button>
      <button onclick="showMessage(2)">2<br>ABC</button>
```

```
<button onclick="showMessage(3)">3<br>DEF</button>
<button onclick="showMessage(4)">4<br>GHI</button>
<button onclick="showMessage(5)">5<br>JKL</button>
<button onclick="showMessage(6)">6<br>MNO</button>
<button onclick="showMessage(7)">7<br>PQRS</button>
<button onclick="showMessage(8)">8<br>TUV</button>
<button onclick="showMessage(9)">9<br>WXYZ</button>
<button onclick="showMessage('*)">*</button>
<button onclick="showMessage(0)">0</button>
<button onclick="showMessage('#)">#</button>
</div>
</div>
```

```
<script>
function showMessage(buttonNumber) {
    alert("You pushed button " + buttonNumber);
}
</script>
</body>
</html>
```

6.

- I. Create a external style sheet named as “external_css.css” and provide some styles for h2, hr, p & a tags.

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Basic use of css tags.</title>
    <style>
      h1{
        color:green;
        border-style: solid;
        border-color:red;
        border-width: .25em;

        background-color: yellow;
        text-align: center;
      }
      #nav
      {
        text-align: center;
      }
      p.dotted
      {
        border-style: dotted;
        border-color: purple;
        background-color: pink;
      }
      #capital
      {
        border-color: blue;
        border-style: dashed;
        background-color:greenyellow;
      }
      li.first::first-letter
      {
        font-size: 40px;
      }
      li.second::first-letter
      {
        font-size: 40px;
      }
      li.third::first-letter
      {
```

```
        font-size: 40px;
    }
</style>
</head>

<body>
    <h1>
        This is my stylish website.
    </h1>
    <div id="nav">
        <h2>
            <pre> <a style="text-decoration:none ; color:pink" href=# >Home
BackGrounds    List    ID vs Class</a></pre>
        </h2>
    </div>
    <h2>
        <p class="dotted" ><font color="#9900FF">This website is about me!</font></p>
    </h2>
    <h3>
        <p><font color="#FF0000">My Top Three Favourite Things To Do</font></p>
    </h3>
    <div id="capital">
        <font color=#ff4500>
        <ol>
            <li class="first">Travel </li>
            <li class="second">Eat ice cream</li>
            <li class="third">Read a book</li>
        </ol>
        </font>
    </div>

</body>
</html>
```

II. Create an html file named as “4Style_sheet.html” 1. Include the external style sheet with necessary tag.

1. Include the internal style sheet for body tags & also use class name, so that the style can be applied for all tags.

2. Include a <p> tags with inline style sheet.

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

  header{
    background-color: #fdd300ef;
    border:5px black solid;
    height:80px;
    width:99.6%;

  }

  aside{
    margin-top: 20px;
    float: left;
    height:450px;
    width:15%;
    border: 5px solid black;
    background-color: #fdd300ef;

  }

  section{
    margin-top: 20px;
    background-color: rgb(176, 174, 174);
    border:5px solid black;
    height:450px;
    width:80%;
    float:right

  }
```

```
nav{
    margin-top: 15px;
    margin-left: 25px;
    background-color: #fdd300ef;
    height:60px;
    width:96%;
    border:5px solid black;
    text-align: left;
    box-sizing: border-box;
}
```

```
article{
    margin-top: 15px;
    margin-left: 25px;
    height:75%;
    width:96%;
    background-color:aqua;
    border:5px solid black;
    box-sizing: border-box;
    text-align: center;
    line-height: 200px;
}
```

```
footer{
    margin-top: 30px;
    height:70px;
    width:99.6%;
    border: 5px solid black;
    background-color: #fdd300ef;
}
```

```
.bt{
    margin-top:
10px;
    margin-left:5px;
    float: left;
    display: inline-block;
    line-height:10px;
    border-radius: 10px;
}
```

```
.bn{
    background-color:aqua;
    border:5px solid black;
```



```
        border-radius: 10px;

    }
    .main{
        width:100%;
        background-color: rgb(255, 255, 255);
        margin-bottom: 20px;
        min-height: 470px;
    }

</style>
</head>
<body>
    <header>
        <p style="margin-left: 10px;">header</p>
    </header>

    <div class="main">
        <aside >
            <p style="margin-left: 10px;">menu</p>
        </aside>

        <section>
            <nav>
                <div id="bt">
                    <button class="bn">tool1</button>
                    <button class="bn">tool2</button>
                    <button class="bn">tool3</button>

                </div>
                <p style= "text-align: center;">nav bar with buttons</p>
            </nav>

            <article>
                <p >map (through mapstruction if that matters)</p>
            </article>
        </section>
    </div>

    <footer>
        <p style="margin-left: 10px;">footer</p>
    </footer>
</body>
</html>
```

III. Create an html file named as “4Style_sheet.html” 1. Include the external style sheet with necessary tag.

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

      div{
        text-align: center;
        font-size:40px;
        color:white;
      }

      header,footer{
        background-color: rgba(0, 255, 208, 0.774);}

      .content{
        background-color: rgb(242, 149, 164);
        width:100%;
        height:690px;
      }

      header{

        width:95%;
        height:80px;
        margin:0px 30px 0px 35px;
        position: relative;
        top:20px;
        line-height:70px;
      }

      aside{
        background-color: rgba(6, 184, 164, 0.759);
        height:440px;
        width:20%;
        float: left;
        margin:45px 0px 0px 30px;
        line-height: 400px;
      }

      article{
        background-color:rgb(238, 115, 136);
        height:440px;
        width:70%;
```

```

float:right;
margin:45px 40px 0px 0px;
line-height: 450px;
}
.sqbox{
    position: absolute;
    top:420px;
    background-color: rgb(206, 197, 197);
    width:20%;
    height:170px;
    display: inline-block;
    line-height:150px;
}

.sqbox:first-child {
    left: 350px;}

.sqbox:nth-child(2) {
    left: 625px;}

.sqbox:last-child {
    left:900px;}

footer{
    height:80px;
    width:95%;
    margin:510px 30px 0px 35px;
    line-height: 70px;
}
</style>
</head>
<body>
<div class="content">
    <header><p>Header</p></header>
    <aside> Aside </aside>
    <article>
        Article

        <div class="sqbox">Image</div>
        <div class="sqbox">Image</div>
        <div class="sqbox">Image</div>
    </article>
    <footer><p>Footer</p></footer>
</div>
</body>
</html>

```

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

Simple Calculator

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<title> JavaScript Calculator </title>
```

```
<style>
```

```
h1 {
```

```
    text-align: center;
```

```
    padding: 20px;
```

```
    background-color: black;
```

```
    color: white;
```

```
}
```

```
#clear{
```

```
width: 125px;
```

```
border: 3px black;
```

```
    border-radius: 5px;
```

```
    padding: 20px;
```

```
}
```

```
#equalto{
```

```
width: 125px;
```

```
border: 3px black;
```

```
    border-radius: 5px;
```

```
    padding: 20px;
```

```
}
```

```
.formstyle
```

```
{
```

```
width: 400px;
```

```
height: 500px;
```

```
margin: auto;
```

```
background-color: #B8860B;
```

```
border: 3px solid skyblue;
```

```
border-radius: 5px;
```

```
padding: 20px;
```

```
}
```

input

```
{
width: 20px;
background-color: white;
color: black;

    border-radius: 5px;
    padding: 26px;
    margin: 5px;
    font-size: 15px;
}
```

```
#calc{
width: 225px;

    border-radius: 3px;
    padding: 20px;
    margin: auto;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1> JavaScript Calculator </h1>
```

```
<div class= "formstyle">
```

```
<form name = "form1">
```

```
    <input id = "calc" type ="text" name = "answer"> <br>
```

```
    <input type = "button" value = "7" onclick = "form1.answer.value += '7' ">
```

```
    <input type = "button" value = "8" onclick = "form1.answer.value += '8' ">
```

```
    <input type = "button" value = "9" onclick = "form1.answer.value += '9' ">
```

```
    <input type = "button" value = "+" onclick = "form1.answer.value += '+' ">
```

```
    <br>
```

```
    <input type = "button" value = "4" onclick = "form1.answer.value += '4' ">
```

```
    <input type = "button" value = "5" onclick = "form1.answer.value += '5' ">
```

```
    <input type = "button" value = "6" onclick = "form1.answer.value += '6' ">
```

```
    <input type = "button" value = "-" onclick = "form1.answer.value += '-' ">
```

```
    <br>
```

```
    <input type = "button" value = "1" onclick = "form1.answer.value += '1' ">
```

```
    <input type = "button" value = "2" onclick = "form1.answer.value += '2' ">
```

```
    <input type = "button" value = "3" onclick = "form1.answer.value += '3' ">
```

```
    <input type = "button" value = "*" onclick = "form1.answer.value += '*' ">
```

```
    <br>
```

```
<input type = "button" value = "0" onclick = "form1.answer.value += '0' ">
<input type = "button" value = "%" onclick = "form1.answer.value += '%' ">
<input type = "button" value = "." onclick = "form1.answer.value += '.' ">
```

```
<input type = "button" value = "/" onclick = "form1.answer.value += '/' ">
<br>
```

```
<input type = "button" value = "=" onclick = "form1.answer.value =
eval(form1.answer.value) " id= "equalto">
```

```
<input type = "button" value = "C" onclick = "form1.answer.value = ' ' " id= "clear" >
<br>
```

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

Scientific Calculator

```
<html>
<style>
  *{padding:0;
  margin:0;
  }
  body {text-align:center;
  background-color:#637ACB;
  }
  #heading {margin-top:30px;}
  #form_wrapper {width:405px;
  height:450px;
  margin:30px auto auto 420px;
  background-color:#000;
  text-align:center;
  border-radius:10px;
  border-right:2px groove #333;
  box-shadow:4px 4px 2px #666666;}

  #formone{padding-top:10px;}

  #display {width:380px;
  height:40px;
  font-size:18px;
  color:black;
  margin:4px;
  border:2px inset black;
  border-bottom:1px inset #FFF;
  border-right:1px inset #FFF;
  background-color:#D5F192;}

  .button {width:60px;
  height:60px;
  margin:1px;}

  .number {font-size:16px;
  font-weight:bold;}

  .opps {font-size:18px;}

  .three {font-weight:bold;
  background-color:#FBB9A8;
  }
  .three:hover{background-color:#F66;}
</style>
```

```

<body>
  <div id="big_wrapper">
    <h1 id="heading">SIMPLE SCIENTIFIC CALCULATOR</h1>
    <div id="form_wrapper">
      <form id="formone" name="calc">
        <input id="display" type="text" name="display" value="" disabled
contenteditable="false">
        <br>
        <input class="button number" type="button" value="1"
onClick="calc.display.value+=1">
        <input class="button number" type="button" value="2"
onClick="calc.display.value+=2">
        <input class="button number" type="button"
value="3"onClick="calc.display.value+=3">
        <input class="button three" type="button"
value="C"onClick="Resetfunction(this.form)">
        <input class="button three" type="button" value=
"&*xF159"onClick="backspace(this.form)">
        <input class="button three" type="button" value=""onClick="evaluation(this.form)">
        <br>
        <input class="button number" type="button"
value="4"onClick="calc.display.value+=4">
        <input class="button number" type="button"
value="5"onClick="calc.display.value+=5">
        <input class="button number" type="button" value="6"onClick="calc.display.value+= ">
        <input class="button opps" type="button" value="-"onClick="calc.display.value+="- ">
        <input class="button opps" type="button"
value="%"onClick="calc.display.value+='%'">
        <input class="button" type="button" value="cos"onClick="cos_function()">
        <br>
        <input class="button number" type="button" value="7"onClick="calc.display.value+=7">
        <input class="button number" type="button" value="8"onClick="calc.display.value+=8">
        <input class="button number" type="button"
value="9"onClick="calc.display.value+=9">
        <input class="button opps" type="button" value="*"onClick="calc.display.value+= '*' ">
        <input class="button " type="button" value="n!"onClick="fact_function()">
        <input class="button " type="button" value="sin"onClick="sin_function()">
        <br>
        <input class="button opps" type="button" value="."onClick="calc.display.value+= '.' ">
        <input class="button number" type="button"
value="0"onClick="calc.display.value+=0">
        <input class="button opps" type="button" value=","onClick="calc.display.value+= ',' ">
        <input class="button opps" type="button" value="+"onClick="calc.display.value+= '+' ">
        <input class="button opps" type="button" value="/"onClick="calc.display.value+= '/' ">
        <input class="button" type="button" value="tan"onClick="tan_function()">
        <br>
        <input class="button" type="button" value="E"onClick="calc.display.value+=2.718">

```



```

<input class="button" type="button" value="pi"onClick="calc.display.value+=3.141">
<input class="button" type="button" value="x^y"onClick="power_function(">
<input class="button" type="button" value="("onClick="openpara(this.value)">
<input class="button" type="button" value=")"onClick="closepara(this.value)">
<input class="button" type="button" value="log"onClick="log_function">
<br>
<input class="button" type="button" value="sqrt"onClick="sqrt_function(">
<input class="button" type="button"
value="LN2"onClick="calc.display.value+=0.693">
<input class="button" type="button" value="LN10"
onClick="calc.display.value+=2.302">
<input class="button" type="button"
value="log2E"onClick="calc.display.value+=1.442">
<input class="button" type="button"
value="log10E"onClick="calc.display.value+=0.434">
<input class="button" type="button" value="EXP"onClick="exp_function">

</form>
</div>
</div>
</body>
<script>
    flag = 0;
    function openpara(val)
    {
        calc.display.value+=val;
        flag+=1;
    }
    function closepara(valval)
    {
        calc.display.value+=valval;
        flag-=1;
    }
    function backspace(calc)
    {
        var size = calc.display.value.length;
        calc.display.value=calc.display.value.substring(0,size-1);
    }
    function Resetfunction(calc)
    {
        calc.display.value=" ";

        flag=0;
    }
    function cos_function()
    {
        flag+=1;

```

```
calc.display.value+='Math.cos()';
}
function sin_function()
{
flag+=1;
calc.display.value+='Math.sin()';
}
function tan_function()
{
flag+=1;
calc.display.value+='Math.tan()';
}
function log_function()
{
flag+=1;
calc.display.value+='Math.log()';
}
function sqrt_function()
{
flag+=1;
calc.display.value+='Math.sqrt()';
}
function exp_function()
{
flag+=1;
calc.display.value+='Math.exp()';
}
function fact(x)
{
factvar=1;
for (i=1;i<=x;i++)
{
factvar=factvar*i;
}
return factvar;
}
function fact_function(x)
{
flag+=1;
calc.display.value+='fact()';
}
function power_function(x)
{
flag+=1;
calc.display.value+='Math.pow(x,y)';
}
function evaluation(calc)
```

```
{
n = calc.display.value;
var size = calc.display.value.length;
var lastchar = calc.display.value.charAt(size)
if(isNaN(lastchar) && (lastchar!="") && lastchar!="!" )
{calc.display.value="syntax error";}
else if(flag!=0){calc.display.value="error:paranthesis";}
else {
result=eval(n);
calc.display.value=result;}
}
</script>
```

```
</html>
```

10. To create an html page to explain the use of various predefined functions in window object in java script.

Window Object methods alert() , prompt() , confirm(), open(), close() , print()

```
<!DOCTYPE html>
<html>
<head>
  <title>Window Object Methods </title>
  <script>
    function showAlert() {
      alert("Hello! This is an alert box.");
    }

    function showPrompt() {
      var result = prompt("Please enter your name:");
      if (result) {
        alert("Hello, " + result + "!");
      } else {
        alert("You did not enter any name.");
      }
    }

    function showConfirm() {
      var result = confirm("Are you sure you want to proceed?");
      if (result) {
        alert("You clicked OK.");
      } else {
        alert("You clicked Cancel.");
      }
    }

    function openWindow() {
      window.open("https://www.bing.com/?pc=U316&form=CHROMN", "_blank");
    }

    function closeWindow() {
      window.close();
    }

    function printPage() {
      window.print();
    }
  </script>
</head>
<body>
  <h1>Window Object Methods </h1>
  <button onclick="showAlert()">Click me to show an alert</button><br><br>
```

```
<button onclick="showPrompt()">Click me to show a prompt</button><br><br>
<button onclick="showConfirm()">Click me to show a confirm</button><br><br>
<button onclick="openWindow()">Click me to open a new window</button><br><br>
<button onclick="closeWindow()">Click me to close this window</button><br><br>
<button onclick="printPage()">Click me to print this page</button><br><br>
</body>
</html>
```

11. To create an html page to change the background color for every click of a button using javascript. Create a html page named as changebackground_color.html and 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 Example</title>
```

```
  <style>
```

```
    body {
```

```
      display: flex;
```

```
      justify-content: centre; }
```

```
  .box {
```

```
    width: 400px;
```

```
    height: 200px;
```

```
    background-color: whitesmoke ;}
```

```
</style>
```

```
<script>
```

```
  function random_color() {
```

```
    var red = Math.floor(Math.random() * 256);
```

```
    var green = Math.floor(Math.random() * 256);
```

```
    var blue = Math.floor(Math.random() * 256);
```

```
    document.getElementById("box").style.backgroundColor = "rgb(" + red + "," +  
green + "," + blue + ")"; }
```

```
</script>
```

```
</head>
```

```
<body onclick="random_color()">
```

```
  <div class="box" id="box" >
```

```
    <p><h1>Click me to change my color!</h1></p>
```

```
</div>
```

```
</body>
```

```
</html>
```

12.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.

```
<html>
<head>
<script language="javascript" type="text/javascript">
var i=0,j,cnt=0,c;
var days=["sun","mon","tue","wed","thu","fri","sat"];
var yr,k,mon;
var last=[31,28,31,30,31,30,31,31,30,31,30,31];
var mn=
["January","February","March","April","May","June","July","August","September","October",
"November","December"];
function my()
{
yr=document.form1.qual.value;
k=(document.form1.qual1.value);
if(yr%4==0)
{
last[1]=29;
}
var k1=k-1
document.write("<table width='50%' height='60%' border='9' bgcolor='cyan'>");
document.write("<tr><td colspan='7'><center>" + mn[k1] + " " + yr + "</center></td></tr>");
document.write("<tr>");
for(i=0;i<=6;i++)
{ document.write("<td align='center' > <b>" + days[i] + "</b></td>");}
document.write("</tr>");
var date2=new Date(yr,k1,1);
var daz=date2.getDay();
cnt=0;
```

```
for(i=0;i<=daz-1;i++)
{
document.write("<td></td>");
cnt=cnt+1;
}
for(j=1;j<=last[k1];j++)
{
c=cnt%7;
if(c==0)
{
document.write("</tr><tr><td align='center' >" +j+"</td>");
cnt++;
}
else
{
document.write("<td align='center' >" +j+"</td>");
cnt++;
}
}
document.write("</tr></table>");
}
</script>
</head>
<body bgcolor="green">
<h1>Calender</h1>
<h2>Select Year</h1>
<form name="form1">
<select name="qual">
<option>2016</option>
<option>2017</option>
```



```
<option>2018</option>
<option>2019</option>
<option>2020</option>
<option>2021</option>
<option>2022</option>
<option>2023</option>
</select>

<h2>Select Month</h1>
<select name="qual1">
<option value=1>JAN </option>
<option>2</option>
<option>3</option>
<option>4</option>
<option>5</option>
<option>6</option>
<option>7</option>
<option>8</option>
<option>9</option>
<option>10</option>
<option>11</option>
<option value=12>DEC</option>
</select>

<input type="button" value="ok" onclick=my()></input></form>
</body>
</html>
```

13.

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

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>JavaScript current day and time</title>
```

```
</head>
```

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

```
</html>
```

```
var today = new Date();
```

```
var day = today.getDay();
```

```
var daylist = ["Sunday","Monday","Tuesday","Wednesday",  
"Thursday","Friday","Saturday"];
```

```
console.log("Today is : " + daylist[day] + ".");
```

```
var hour = today.getHours();
```

```
var minute = today.getMinutes();
```

```
var second = today.getSeconds();
```

```
var prepand = (hour >= 12)? " PM ":" AM ";
```

```
hour = (hour >= 12)? hour - 12: hour;
```

```
if (hour===0 && prepand===' PM ') {
```

```
if (minute===0 && second===0){
```

```
hour=12;
```

```
prepand=' Noon';
```

```
}
```

```
else {
```

```
hour=12;
```

```
prepand=' PM';
```

```
}
```

```
}
```

```
if (hour===0 && prepand===' AM ') {
```

```
if (minute===0 && second===0) {
```

```
hour=12;
```

```
prepand=' Midnight';
```

```
}
```

```
else {
```

```
hour=12;
```

```
prepand=' AM';
```

```
}
```

```
}
```

```
console.log("Current Time : "+hour + prepand + " : " + minute + " : " + second);
```

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

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Write a JavaScript program to get the current date.</title>
</head>
<body>
</body>
</html>
```

```
var today = new Date();
var dd = today.getDate();

var mm = today.getMonth()+1;
var yyyy = today.getFullYear();
if(dd<10)
{
    dd='0'+dd;
}

if(mm<10)
{
    mm='0'+mm;
}
today = mm+'-'+dd+'-'+yyyy;
console.log(today);
today = mm+'/'+dd+'/'+yyyy;
console.log(today);
today = dd+'-'+mm+'-'+yyyy;
console.log(today);
today = dd+'/'+mm+'/'+yyyy;
console.log(today);
```

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

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>JavaScript difference between two dates in days</title>
</head>
<body>
</body>
</html>
```

```
var date_diff_indays = function(date1, date2) {
    dt1 = new Date(date1);
    dt2 = new Date(date2);
    return Math.floor((Date.UTC(dt2.getFullYear(), dt2.getMonth(), dt2.getDate()) -
Date.UTC(dt1.getFullYear(), dt1.getMonth(), dt1.getDate())) / (1000 * 60 * 60 * 24));
}
console.log(date_diff_indays('04/02/2014', '11/04/2014'));
console.log(date_diff_indays('12/02/2014', '11/04/2014'));
```

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

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>JavaScript function to count the number of days passed since beginning of the
year</title>
</head>
<body>
</body>
</html>
```

```
function days_passed(dt) {
    var current = new Date(dt.getTime());
    var previous = new Date(dt.getFullYear(), 0, 1);
```

```

    return Math.ceil((current - previous + 1) / 86400000);
}
console.log(days_passed(new Date(2015, 0, 15)));
console.log(days_passed(new Date(2015, 11, 14)));

```

e) Write a JavaScript program to find 1st January is being a Sunday between year1 and year2.

```

<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>A Program to find 1st January is being a Sunday between 2014 and 2050.</title>
</head>
<body>
</body>
</html>

```

```

console.log('-----');
for (var year = 2020; year <= 2040; year++)
{
    var d = new Date(year, 0, 1);
    if ( d.getDay() === 0 )
        console.log("1st January is being a Sunday "+year);
}
console.log('-----');

```

f) Write a JavaScript program to calculate days left until next Christmas.

```

<html>
  <body>
<h1 style="color: red;">
  Christmas Days Calculator
</h1>
<h3>
  Program to calculate days left until
  next Christmas using JavaScript?
</h3>
<script>

    let today = new Date();
    let christmasYear = today.getFullYear();

    if (today.getMonth() == 11 &&
        today.getDate() > 25) {

        christmasYear = christmasYear + 1;
    }

```

```

    }

    let christmasDate =
        new Date(christmasYear, 11, 25);

    let dayMilliseconds =
        1000 * 60 * 60 * 24;
    let remainingDays = Math.ceil(
        (christmasDate.getTime() - today.getTime()) /
        (dayMilliseconds)
    );

    document.write("There are " + remainingDays +
        " days remaining until Christmas.");
</script>
</body>
</html>

```

g) Write a JavaScript program to calculate days remains in your birthday.

```

function calculateDaysUntilBirthday(birthday) {
    const today = new Date();
    const birthdayDate = new Date(birthday);
    birthdayDate.setFullYear(today.getFullYear());
    if (birthdayDate < today) {
        birthdayDate.setFullYear(today.getFullYear() + 1);
    }
    const timeDifference = birthdayDate.getTime() - today.getTime();
    const daysRemaining = Math.ceil(timeDifference / (1000 * 60 * 60 * 24));
    return daysRemaining;
}

const birthday = '2023-08-17';
const daysRemaining = calculateDaysUntilBirthday(birthday);
console.log(`There are ${daysRemaining} days remaining until your birthday on
${birthday}.`);

```

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.**
- 5. When the button save lap is clicked it should save the lap**

Code:

```
<!DOCTYPE html>
<html>
<head>
  <title>Stopwatch</title>
  <style>
    body {
      background-color: seashell;
      text-align: center;
    }

    #timer {
      font-size: 48px;
      color: lightseagreen;
    }

    #buttons {
      margin-top: 20px;
    }
    .buttons button {
      background-color: grey;
      color: white;
      padding: 10px 20px;
      margin: 0 5px;
      border: none;
      cursor: pointer;
    }

    #lap {
      margin-top: 20px;
      font-size: 18px;
      text-align: center;
    }
  </style>
</head>
<body>
  <div id="timer">00:00:00</div>
```

```

<div id="buttons",color= "grey">
  <button onclick="start()">START</button>
  <button onclick="pause()">PAUSE</button>
  <button onclick="reset()">RESET</button>
</div>
<div id="lap",color= "grey">
  <button onclick="saveLap()">Save Lap</button>
</div>

<script src="stopwatch.js"></script>
</body>
</html>

```

```

var startTime;
var running = false;
var timerInterval;
var lapCount = 1;

```

```

function start() {
  if (!running) {
    startTime = Date.now();
    timerInterval = setInterval(updateTimer, 1000);
    running = true;
  }
}

```

```

function pause() {
  if (running) {
    clearInterval(timerInterval);
    running = false;
  }
}

```

```

function reset() {
  clearInterval(timerInterval);
  running = false;
  document.getElementById('timer').innerText = '00:00:00';
  document.getElementById('lap').innerHTML = "";
  lapCount = 1;
}

```

```

function updateTimer() {
  var elapsedTime = Date.now() - startTime;
  var hours = Math.floor(elapsedTime / 3600000);
  var minutes = Math.floor((elapsedTime % 3600000) / 60000);
  var seconds = Math.floor((elapsedTime % 60000) / 1000);

  var timer = padTime(hours) + ':' + padTime(minutes) + ':' + padTime(seconds);

```



```

    document.getElementById('timer').innerText = timer;
}

function saveLap() {
    if (running) {
        var lapTime = document.getElementById('timer').innerText;
        var lapElement = document.createElement('div');
        lapElement.innerText = 'Lap ' + lapCount + ': ' + lapTime;
        document.getElementById('lap').appendChild(lapElement);
        lapCount++;
    }
}

```

```

function padTime(value) {
    return value.toString().padStart(2, '0');
}

```

stopwatch.js

```

var startTime;
var running = false;
var timerInterval;
var lapCount = 1;

function start() {
    if (!running) {
        startTime = Date.now();
        timerInterval = setInterval(updateTimer, 1000);
        running = true;
    }
}

```

```

function pause() {
    if (running) {
        clearInterval(timerInterval);
        running = false;
    }
}

```

```

function reset() {
    clearInterval(timerInterval);
    running = false;
    document.getElementById('timer').innerText = '00:00:00';
    document.getElementById('lap').innerHTML = "";
    lapCount = 1;
}

```

```

function updateTimer() {
    var elapsedTime = Date.now() - startTime;
    var hours = Math.floor(elapsedTime / 3600000);

```

```
var minutes = Math.floor((elapsedTime % 3600000) / 60000);
var seconds = Math.floor((elapsedTime % 60000) / 1000);

var timer = padTime(hours) + ':' + padTime(minutes) + ':' + padTime(seconds);
document.getElementById('timer').innerText = timer;
}

function saveLap() {
  if (running) {
    var lapTime = document.getElementById('timer').innerText;
    var lapElement = document.createElement('div');
    lapElement.innerText = 'Lap ' + lapCount + ': ' + lapTime;
    document.getElementById('lap').appendChild(lapElement);
    lapCount++;
  }
}

function padTime(value) {
  return value.toString().padStart(2, '0');
}
```

OUTPUT:

00:00:00

START

PAUSE

RESET

Save Lap

00:00:10

START

PAUSE

RESET

Save Lap

Lap 1: 00:00:03

Lap 2: 00:00:09

15:

- a. Install and configure PHP, web server, MYSQL (XAMPP)**
- b. Write a program to print “Welcome to PHP”**
- c. Create a php program to find odd or even number from given number.**
- d. Write a php program to find maximum of three numbers.**

Code:

b. <?php

```
echo "welcome to PHP";
```

```
?>
```

c. <html>

```
<body>
```

```
<form method="get" action="evenodd.php">
```

```
<input type="number" name="num">
```

```
<input type="submit" name="submit">
```

```
</form>
```

```
<?php
```

```
$n= $_GET["num"];
```

```
if($n%2==0)
```

```
{
```

```
    echo "number is even";
```

```
}
```

```
else
```

```
{
```

```
    echo "number is odd";
```

```
}
```

```
?>
```

```
</body>
```

```
</html>
```

d.< ?php

```
$num1=20;
```

```
$num2=15;
```

```
$num3=22;
```

```
if($num1>$num2 && $num1>$num3){  
    echo $num1;  
}  
else{  
    if($num2>$num1 && $num2>$num3){  
        echo $num2;  
    }  
    else  
        echo $num3;  
}  
?>
```

Output:

welcome to PHP

number is odd



localhost/PHPprog/evenodd.php

number is even

16. Write a program to enter TWO numbers and print the Swap Numbers using PHP Example.

Code:

```
<?php
$a=234;
$b=345;
echo "Numbers Before swapping:</br>";
echo "NUM1= $a</br>";
echo "NUM2= $b</br>";
$a=$a+$b;
$b=$a-$b;
$a=$a-$b;
echo "Numbers after swapping:</br>" ;
echo "NUM1= $a</br>";
echo "NUM2= $b</br>";
?>
```

Output:

Numbers Before swapping:

NUM1= 234

NUM2= 345

Numbers after swapping:

NUM1= 345

NUM2= 234

17.

a. Write a PHP Program to demonstrate the variable function: `gettype()` and `settype()`

b. Write a PHP Program to demonstrate the variable function: `isset()`

c. Write a PHP Program to demonstrate the variable function: `unset()`

Code:

```
a. <?php
$a=5.2;
echo gettype($a);
echo "<br>";
settype($a,"int");
echo gettype($a);
?>
```

```
b. <?php
$a = 0;
if (isset($a)) {
    echo "Variable 'a' is set.<br>";
}
$b = null;
if (isset($b)) {
    echo "Variable 'b' is set.";
}
?>
```

```
c. <?php
$a = "Hello world!";
echo "The value of variable 'a' before unset: " . $a . "<br>";
unset($a);
echo "The value of variable 'a' after unset: " . $a;
?>
```

a. output

< > ↺ ☐☐ 🌐 localhost/PHPT/17a.php

double
integer

b. output

< > ↺ ☐☐ 🌐 localhost/PHPT/17b.php

Variable 'a' is set.

c. output

< > ↺ ☐☐ | 🌐 localhost/PHPT/17c.php

The value of variable 'a' before unset: Hello world!

Warning: Undefined variable \$a in **D:\New folder\htdocs\PHPT\17c.php** on line 5
The value of variable 'a' after unset:

18 Electricity Bill Using PHP (To Understand Form Handling in PHP)

Aim: Prepare Electricity bill from user input based on a given tariff.

Problem Statement

Write a PHP program to input previous reading and present reading and prepare an electricity bill using the following conditions

Code:

```
<html>
<head>
  <title>ELECTRICITY BILL</title>
  <style>
    tr:nth-child(even) {
      background-color: #f2f292}
    th {
      background-color: #FCAF50;
      color: white; } th,
    td {
      padding: 12px; }
  </style>
</head>
<body>
<?php

$servername = "localhost";
$username = "root";
$password = "";
$dbname = "electricity_db";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

if ($_SERVER["REQUEST_METHOD"] == "POST") {

    $consumerNumber = $_POST["consumer_number"];
    $consumerName = $_POST["consumer_name"];
    $previousReading = $_POST["previous_reading"];
    $presentReading = $_POST["present_reading"];

    $difference = $presentReading - $previousReading;
    $amountToPay = $difference * 6;

    $sql = "INSERT INTO electricity_bills (consumer_number, consumer_name,
previous_reading, present_reading, difference, amount_to_pay)
```

```
VALUES ('$consumerNumber', '$consumerName', $previousReading,
$presentReading, $difference, $amountToPay)";
```

```
if ($conn->query($sql) === TRUE) {
    echo "Data inserted successfully.";
} else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}
}
```

```
$sql = "SELECT * FROM electricity_bills";
$result = $conn->query($sql);
?>
<br><br>
<center>
<h2>Electricity Bill Calculator</h2>
</center>
<form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]); ?>">
<center>
    <table width="50%" border="0" cellspacing="0" cellpadding="10">
        <tr><th colspan="2"><h2>ELECTRICITY BILL</h2></th></tr>
        <tr> <td>Enter the consumer number</td>
        <td><input type="text" name="consumer_number" required></td></tr>

        <tr> <td>Enter the customer name</td>
        <td><input type="text" name="consumer_name" required></td> </tr>

        <tr> <td>Enter the previous reading</td>
        <td><input type="number" name="previous_reading" required></td>
</tr> <tr>

        <td>Enter the present reading</td>
        <td><input type="number" name="present_reading" required></td> </tr>

        <tr> <th colspan="2"><input type="submit" id="submit"
value="SUBMIT"></th>
        </tr>
    </table>
</center>
</form>
<center>
<br><br>
<table>
    <tr>
        <th>Consumer Number</th>
        <th>Consumer Name</th>
```

```
<th>Previous Reading</th>
<th>Present Reading</th>
<th>Difference</th>
<th>Amount to Pay</th>
```

```
</tr>
```

```
</center>
```

```
<?php
```

```
if ($result->num_rows > 0) {
```

```
    while ($row = $result->fetch_assoc()) {
```

```
        echo "<tr>";
```

```
        echo "<td>" . $row["consumer_number"] . "</td>";
```

```
        echo "<td>" . $row["consumer_name"] . "</td>";
```

```
        echo "<td>" . $row["previous_reading"] . "</td>";
```

```
        echo "<td>" . $row["present_reading"] . "</td>";
```

```
        echo "<td>" . $row["difference"] . "</td>";
```

```
        echo "<td>" . $row["amount_to_pay"] . "</td>";
```

```
        echo "</tr>";
```

```
    }
```

```
    } else {
```

```
        echo "<tr><td colspan='6'>No records found.</td></tr>";
```

```
    }
```

```
?>
```

```
</table>
```

```
<?php
```

```
$conn->close();
```

```
?>
```

```
</body>
```

```
</html>
```

Output:

ELECTRICITY BILL

Enter the consumer number

1212

Enter the customer name

gaf

Enter the previous reading

123

Enter the present reading

567

SUBMIT

| Consumer Number | Consumer Name | Previous Reading | Present Reading | Difference | Amount to Pay |
|-----------------|---------------|------------------|-----------------|------------|---------------|
| 1212 | gaf | 123 | 567 | 444 | 2664 |
| 1212 | gaf | 123 | 567 | 444 | 2664 |
| 6521 | dee | 769 | 980 | 211 | 1266 |
| 3654 | anc | 535 | 960 | 425 | 2550 |



19 Write PHP program to implement a cookie and session-based counter.

- **Create Cookies variable using PHP**
- **Create a session variable using PHP**
- **Display the session variable using PHP**
- **Display the cookies variable using PHP**

Code:

```
<?php
session_start();
if (!isset($_SESSION['counter'])) {
    $_SESSION['counter'] = 0;
}
if (!isset($_COOKIE['counter'])) {
    setcookie('counter', 0, time() + 86400);
}
$_SESSION['counter']++;
setcookie('counter', $_SESSION['counter'] + 1, time() + 86400);
echo "Session counter: " . $_SESSION['counter'] . "<br>";
echo "Cookie counter: " . $_COOKIE['counter'] . "<br>";
?>
```

Output:

 |  localhost/PHPprog/cookie.php

Session counter: 2

Cookie counter: 1

20. File Uploading Using PHP (To Understand File Uploading in PHP)

To upload the user input file and using constraints file type, file size.

Code:

```
<?php
if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $allowedTypes = ['image/jpeg', 'image/png', 'application/pdf'];
    $maxFileSize = 15 * 1024 * 1024;
    if (isset($_FILES['file'])) {
        $file = $_FILES['file'];
        if ($file['error'] === UPLOAD_ERR_OK) {
            $fileType = mime_content_type($file['tmp_name']);
            $fileSize = $file['size'];
            if (in_array($fileType, $allowedTypes)) {
                if ($fileSize <= $maxFileSize) {
                    $uploadDir = 'uploads/';
                    $uploadPath = $uploadDir . basename($file['name']);
                    if (move_uploaded_file($file['tmp_name'], $uploadPath)) {
                        echo 'File uploaded successfully!';
                    } else {
                        echo 'Failed to move uploaded file.';
                    }
                } else {
                    echo 'File size exceeds the maximum limit.';
                }
            } else {
                echo 'Invalid file type.';
            }
        } else {
            echo 'Error occurred during file upload.';
        }
    } else {
        echo 'No file uploaded.';
    }
}
?>
<!DOCTYPE html>
<html>
<head>
    <title>File Upload</title>
</head>
<body>
    <form method="POST" enctype="multipart/form-data">
        <input type="file" name="file">
        <input type="submit" value="Upload">
    </form>
</body>
</html>
```

Output:

File Upload

Choose File

image_2023...311934.png

Upload

File uploaded successfully!

File Upload

Choose File

No file chosen

Upload

21 PHP with MySQL Develop a simple application to -

a. Enter data into database

b. Retrieve and present data from database

c. Develop a simple application to Update, Delete table data from database.

Code:

form.php

```
<html>
  <head>
    <title>Registration Form</title>
  </head>

  <body>
    <style>
      .container {
        max-width: 1350px;
        width: 100%;
        margin: 50px;
        height: auto;
        display: block;
      }

      body {
        color: #8A2BE2;
        font-size: 16px;
        font-family: Verdana, Arial, Helvetica, monospace;
        background-color: #F0E8A0;
      }

      h2 {
        text-align: center;
      }

      .form_group {
        padding: 10px;
        display: block;
      }

      .form_group1 {
        padding: 10px;
        display: block;
        font-size: 10px;
      }

      label {
        float: left;
        padding-right: 50px;
        line-height: 10%;
        display: block;
```

```
width: 208px;
}</style>
<h2>Sign Up</h2>
<form name = "form1" action="data.php" method = "post">
  <div class = "container">
    <div class = "form_group">
      <label>First Name:</label>
      <input type = "text" name = "fname" id="fname">
    </div>
    <div class = "form_group">
      <label>Middle Name:</label>
      <input type = "text" name = "mname" id="mname">
    </div>
    <div class = "form_group">
      <label>Last Name:</label>
      <input type = "text" name = "lname" id="lname">
    </div>
    <div class = "form_group">
      <label>Password:</label>
      <input type = "password" name = "pwd" id="password">
    </div>
    <div class = "form_group">
      <label>Confrim Password:</label>
      <input type = "password" name = "cpwd" id="cpassword">
    </div>
    <div class = "form_group">
      <label for="email">Email:</label>
      <input type="email" name="email" id="email">
    </div>
    <div class = "form_group">
      <label for="contact_number">Contact Number:</label>
      <input type="tel" name="contact_number" id="contact_number">
    </div>
    <div class = "form_group">
      <label for="gender">Gender:</label>
      <input type = "text" name = "gender" id="gender">
    </div >
    <div class = "form_group">
      <label for="address">Address:</label>
      <textarea id="address" name="address"></textarea>
    </div>
    <div class = "form_group">
      <label for="pincode">Pin Code:</label>
      <input type="text" id="pincode" name="pincode" required>
    </div>
    <div class = "form_group">
      <label for="city">City:</label>
      <input type="text" id="city" name="city" required>
```

```

</div>
<div class = "form_group">
  <label for="country">Country:</label>
  <select id="country" name ="country" >
    <option value="India ">India</option>
    <option value="Canada ">Canada</option>
    <option value="Germany ">Germany</option>
    <option value="Turkey">Turkey</option>
    <option value="Russia ">Russia</option>
  </select>
</div>
<div class = "form_group">
  <label for="skills">Skills:</label>
  <input type = "text" name = "skills" id="skills">
</div>
<div class = "form_group">
  <input type="file" id="file" name="file">
</div>
<div class = "form_group1" >
  <input type="checkbox" id="terms" name="terms" required>
  <label for="terms" >I have read the terms and conditions
  </label>
</div>
<div class = "form_group"><input type="submit"
value="Submit"></div>
</div>
</form>
</body>
</html>

```

data.php

```

<!DOCTYPE html>
<html>

<head>
  <title>Insert Page page</title>
</head>

<body>
  <center>
    <?php

    $conn = mysqli_connect("localhost", "root", "", "form");

    if($conn === false){
      die("ERROR: Could not connect. "
        . mysqli_connect_error());
    }

```

```

    $first_name = $_REQUEST['fname'];
    $middle_name = $_REQUEST['mname'];
    $last_name = $_REQUEST['lname'];
    $password = $_REQUEST['password'];
    $confirmpassword = $_REQUEST['cpassword'];
    $email = $_REQUEST['email'];
    $contact_number = $_REQUEST['contact_number'];
    $gender = $_POST['male'];
    $address = $_REQUEST['address'];
    $pincode = $_REQUEST['pincode'];
    $city = $_REQUEST['city'];
    $country = $_REQUEST['country'];
    $skills = $_REQUEST['skills'];
    $file = $_REQUEST['file'];

```

```

    $sql = "INSERT INTO db VALUES
('$first_name','$middle_name','$last_name','$password','$confirmpassword',
'$email','$contact_number','$gender','$address','$pincode','$city','$country','$skills',
'$file')";

```

```

    if(mysqli_query($conn, $sql)){
        echo "<h3>data stored in a database successfully."
        . " Please browse your localhost php my admin"
        . " to view the updated data</h3>";

        echo nl2br("\n$first_name\n $middle_name\n $last_name\n "
        . "$password\n $confirmpassword\n $email\n
$contact_number\n"
        . "$gender\n $address\n $pincode\n $city\n $country\n $skills\n $file\n
");
    } else{
        echo "ERROR: Hush! Sorry $sql. "
        . mysqli_error($conn);
    }

    mysqli_close($conn);
?>
</center>
</body>
</html>

```

Output:

<>⌂

file:///C:/Xampp/htdocs/PHPprog/reg.html

Sign Up

First Name:

Mullagura

Middle Name:

aws

Last Name:

Deepika

Password:

Confrim Password:

Email:

mullagaradeepika1121@gn

Contact Number:

9493

Gender:

Female

Male

Address:

sdc

Pin Code:

515002

City:

ap

Country:

India

Skills:

PHP

Java

Ajax

Jquery

.Net

Choose File

No file chosen

I have read the terms and conditions

☒

Submit

data stored in a database successfully. Please browse your localhost php my admin to view the updated data

| | | | | | | | | | | | | | |
|---------|-----|-----------|--|--|--------------------------------|------|--|-----|--------|----|-------|----------|------------|
| Deepika | aws | Mullagura | | | mullagaradeepika1121@gmail.com | 9493 | | sdc | 515002 | ap | India | php.java | desert.jpg |
|---------|-----|-----------|--|--|--------------------------------|------|--|-----|--------|----|-------|----------|------------|

☐ Show all

Number of rows: 25

Filter rows: Search this table

22 Create a PHP page for login page with sql connection.

Code:

LOGIN.PHP

```
<!DOCTYPE html>
<html>
<head>
  <title>Login Page</title>
</head>
<body>
  <div class="container">
    <form action="login.php" method="post">
      <h1>Login Page</h1>
      <label for="username"><b>Username</b></label>
      <input type="text" placeholder="Enter Username" name="username"
required><br>

      <label for="password"><b>Password</b></label>
      <input type="password" placeholder="Enter Password" name="password"
required><br>

      <button type="submit">Login</button>
    </form>
    <button><a style="text-decoration:none;color:black"
href="credentials.php">NEW USER</a></button><br>
  <?php

  if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $username = $_POST['username'];
    $password = $_POST['password'];
    $servername = "localhost";
    $username = "root";
    $password = "";
    $database="form";

    $conn = new mysqli($servername, $username, $password,$database);

    $sql = "SELECT username,pwd FROM cred where username='$username'";
    $result = $conn->query($sql);
    if($result->num_rows>0)
    while($row=$result->fetch_assoc())
    {
      if($username==$row['username']&&$password==$row['pwd'])
      {
        session_start();
        $_SESSION['user'] = $username;
        header("Location: form.php");
      }
    }
  }
}
```



```

        }
        else
        {
            echo "Invalid password<br>";
        }
    }
    else
    echo "Invalid Username";
}
?>
</div>
</body>
</html>

```

Form.php

```

<!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>
</head>
<style>
    input{
        margin-top: 5px;
        margin-bottom: 5px;
    }
</style>
<body>
    <?php
    session_start();
    echo "Welcome user, ".$_SESSION['user'];?>
    <form action="form.php" method="post">
    Name: <input type="text" name="name"><br>
    E-mail: <input type="email" name="email"><br>
    Description:<br>
    <textarea rows="9" cols="40" name="description" placeholder="Enter Text
Here"></textarea>
    <br>

    <input type="submit" name="submit" >
    <input type="submit" name="view" value="View">
    <input type="submit" name="clear" value="Clear">
    </form>
    <?php

    if($_SERVER['REQUEST_METHOD']=='POST')
    {

```

```

$email=$_POST['email'];
$name=$_POST['name'];
$desc=$_POST['description'];

$servername = "localhost";
$username = "root";
$password = "";
$dbase="form";

$conn = new mysqli($servername, $username, $password,$dbase);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);}
echo "Connected successfully <br>";

if(isset($_POST['submit']))
{
    echo "Thank You " . $name . " for filling this form <br>";
    $sql = "INSERT INTO formData1 (user_name, email,user_description)
VALUES ( '$name' , '$email' , '$desc')";
    if ($conn->query($sql) === TRUE)
    {
        echo "New record created successfully<br>";
    }
    else
    {
        echo "Error: " . $sql . "<br>" . $conn->error;
    }
}
if(isset($_POST['view']))
{
    echo "Details of all enteries";
    $sql = "SELECT id, user_name, email,user_description FROM
formData1";
    $result = $conn->query($sql);

    if ($result->num_rows > 0)
    {
        echo '<table border="2px solid
black"><tr><th>id</th><th>name</th><th>Email</th><th>Description</th></tr>
<tr>';
        while($row = $result->fetch_assoc())
        {
            echo " <tr><td>". $row["id"]."
</td><td>". $row["user_name"]."</td><td> ". $row["email"]."</td><td>
". $row["user_description"] . "</td></tr>";
        }
        echo '</table>';
    }
}

```

```

    }
    else
    {
        echo "0 results";
    }
}
if(isset($_POST['clear'])){
    echo "clear";
}
$conn->close();
}
?>
</body>
</html>

```

Credentials.php

```

<!DOCTYPE html>
<html>
    <head>
        <title>new user registration</title>
    </head>
    <body>
        <form action="credentials.php" method="POST">
            Name:<input type="text" placeholder="username" name="username"><br>
            password:<input type="password" name="password1"><br>
            confirm password:<input type="password" name="password2">
            <input type="submit">
        </form>
        <?php
            if ($_SERVER['REQUEST_METHOD'] === 'POST')
            {
                $uname=$_POST['username'];
                $password1=$_POST['password1'];
                $password2=$_POST['password2'];
                if($uname=="")
                    echo "username cannot be null";
                else if($password1 != $password2)
                    echo "passwords does not match ";
                else if(strlen($password1)<8)
                    echo "password shouls have minimum 8 characters";
                else {

                    $servername = "localhost";
                    $username = "root";
                    $password = "";
                    $database="form";

                    $conn = new mysqli($servername, $username, $password,$database);

```

```
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);}
echo "Connected successfully <br>";

$sql = "SELECT username,pwd FROM cred where username='$uname'";
//$sql="SELECT id, user_name, email,user_description FROM formData1";
$result = $conn->query($sql);
if($result->num_rows>0)
while($row=$result->fetch_assoc())
    echo "user ".$row['username']." already exist use different name <br>";
else
{
    echo $uname." ".$password1." <br>";
    $sql = "INSERT INTO cred (username, pwd) VALUES ( '$uname' ,
'$password1' )";
    if ($conn->query($sql) === TRUE)
        echo "New record created successfully<br>";
    else
        echo "Error: " . $sql . "<br>" . $conn->error;
    }}}
?>
</body>
</head>
</html>
```

Output:

Login Page

Username

Enter Username

Password

Enter Password

Login

NEW USER

< > ↺ ☐ 🌐 localhost/PHPprog/credentials.php

Name:

Deepika

password:

.....

confirm password:

.....

Submit

< > ↺ ☐ 🌐 localhost/PHPprog/form.php

Warning: Undefined array key "user" in C:\Xampp\htdocs\PHPprog\form.php on line 18
Welcome user,

Name:

E-mail:

Description:

Enter Text Here

Submit View Clear

Connected successfully
Thank You Deepika for filling this form

23 File Handling Using PHP

a. Write a php program to Read from existing file.

b. Write a php program to Write a file

code:

read.php

```
<?php
$file = "testfile.txt";
if (file_exists($file)) {
    $handle = fopen($file, "r");

    if ($handle) {
        while (($line = fgets($handle)) !== false) {
            echo $line;
        }
        fclose($handle);
    } else {
        echo "Failed to open the file.";
    }
} else {
    echo "The file does not exist.";
}
?>
```

Write.php

```
<?php
$file = "writefile.txt";
$handle = fopen($file, "a");
if ($handle) {
    fwrite($handle, "Hello writing to this file.\n");
    fclose($handle);
    echo "Content written to the file.";
} else {
    echo "Failed to open the file.";
}
?>
```

Output:

< > ↺ ☐

localhost/PHPprog/read.php

this file is to read

< > ↺ ☐

localhost/PHPprog/write.php

Content written to the file.