PRACTICAL FILE

WEB TECHNOLOGIES

(IT302)

Program Name: B. Tech

Semester: 6th

Batch: 2019-23



DEPARTMENT OF INFORMATION TECHNOLOGY AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY AMITY UNIVERSITY UTTAR PRADESH

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INDEX

Practical No.	Name of Experiment	Date of Allotment of experiment	Date of Evaluation	Max Marks	Marks Obtained	Faculty Signature
1.	To create a simple html file to demonstrate the use of different tags.	5/1/22		1		
2.	To create an html file to link to different html page which contains images, tables, and link within a page.	5/1/22		1		
3.	To create an html page with different types of frames such as floating frame, navigation frame & mixed frame.	12/1/22		1		
4.	To create a registration form as mentioned.	12/122		1		
5.	Create an HTML file and use inline, internal, and external CSS.					
6.	Create a form using HTML form tag.	19/1/22		1		
7.	Create an XML file with XML Schema Definition and style it with external CSS.	09/2/22		1		
8.	Creating and Initializing Arrays of fruits in JavaScript and display the same.	16/2/22		1		
9.	Write a script to sort an array of books names. Also sort an array of book prices. Write an appropriate code.	16/2/22		1		
10.	Write a script to create a Form Using JavaScript.	23/2/22		1		
11.	Write A Program to get browser details through JavaScript.	23/2/22		1		
12.	Write A Program in JavaScript to create a form to input Username, Password and Age.	09/3/22		1		
13.	Create a Calculator using JavaScript.	09/3/22		1		
14.	Create a Quiz using HTML forms and JavaScript.	16/3/22		1		
15.	Write a JSP script to show the use of JSP implicit objects.	23/3/22		1		
16.	Create a PHP script to 1) Print Sum of Digits 2) Check whether number is Prime or Non-prime	30/3/22		1		
17.	Create an eCommerce site using PHP & MySQL	13/4/22		1		

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

Software Used: Visual Studio 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>LAB 1 - 5/1/22</title>
</head>
<body>
  <marquee>Basic HTML Tags</marquee>
  <hr>
  <center style="color: #0000FF;">Heading '&lth1&gt', '&lth2&gt', '&lth3&gt', '&lth4&gt',
'&lth5&gt', '&lth6&gt' Tags
  </center>
  <h1>Heading H1</h1>
  <h2>Heading H2</h2>
  <h3>Heading H3</h3>
  <h4>Heading H4</h4>
  <h5>Heading H5</h5>
  <h6>Heading H6</h6>
  <hr>>
  <center style="color: #0000FF;">Text '&ltp&gt' Tag</center>
  Paragraph
  <!-- Horizontal Rule -->
  <hr>>
  <!-- Line Break -->
```

```
<center style="color: #0000FF;">Line Break '&ltbr&gt' Tag</center><br>
  This is a long piece of text consisting of three<br/>

  sentences and shows you the functions of the<br/>
<br/>br>
  Line Break tag. This tag is used quite frequently<br/><br/>br>
  to add line breaks in the HTML code. It is also used<br/>
  to add blank lines to a document.<br/>
  <hr>
  <!-- Block Quote -->
  <center style="color: #0000FF;">Block Quote '&ltblockquote&gt' Tag</center><br>
  This is some text before the quotation.
  <br/> <blockquote style="background-color: aliceblue;">"This is a long blockquote created with the
<br/>
<br/>blockquote> blockquote
       tag."</blockquote>
  </blockquote>
  <hr>>
  <!-- Pre Tag -->
  <center style="color: #0000FF;">Pre '&ltpre&gt' Tag</center><br>
  IT 302 Web Technologies
    IT307 Exploring the Networks
  <hr>
  <!-- Logical Style Tags -->
  <center style="color: #0000FF;">Logical Style '&ltbold&gt', '&ltbig&gt', '&lti&gt', '&lts&gt',
'&ltsmall&gt',
    '&ltsub&gt', '&lttt&gt', '&ltu&gt' Tags</center><br>
  This is <b>bold</b>.
  This is <big>big font</big>.
  This is <i>italic</i>.
  Was <s>$50</s>; now $40.
  This is <small>small</small>.
  H<sub>2</sub>O
```

```
May 5<sup>th</sup> 2005
  <tt>fixed-width font</tt>
 This is <u>underlined</u>.
  <hr>
  <center style="color: #0000FF;">Physical Style '&ltcite&gt', '&ltcode&gt', '&ltdel&gt',
'&ltdfn&gt', '&ltem&gt',
   '&ltins&gt', '&ltkbd&gt', '&ltsamp&gt', '&ltstrong&gt', '&ltvar&gt' Tags</center><br>
 This is used for a short <cite>quote</cite>. This is used for a short quote.<br/>br>
  < code > y = m * x + b < / code > 
 <del>Deleted</del> text Deleted text
  <dfn>definition</dfn> text definition text
  This is <em> emphasized </em>.
  <ins>inserted</ins> text inserted text
  <kbd>code</kbd> sample code sample
 <samp>code</samp> sample code sample
 This is <strong>strong</strong>. This is strong.
 <var>program</var> variable program variable
  <hr>
 <!-- Unordered List -->
 <center style="color: #0000FF;">Listing Style '&ltol&gt', '&ltll&gt', '&ltul&gt' Tags</center><br>
  <h4>Numbered list:</h4>
 <ol>
   Apples
    Bananas
   Lemons
   Oranges
 <h4>Letters list:</h4>

 type="A">

   Apples
   Bananas
   Lemons
```

```
Oranges
<h4>Lowercase letters list:</h4>

  type="a">

 Apples
 Bananas
 Lemons
 Oranges
<h4>Roman numbers list:</h4>

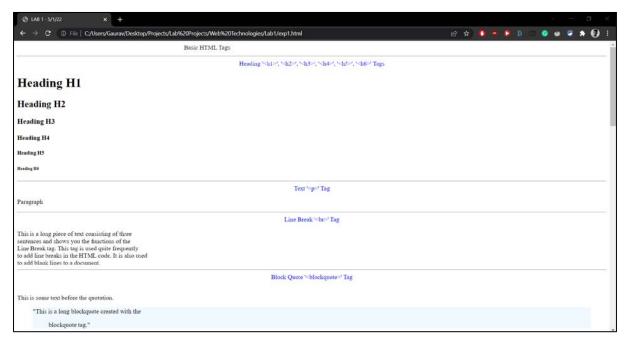
    type="I">

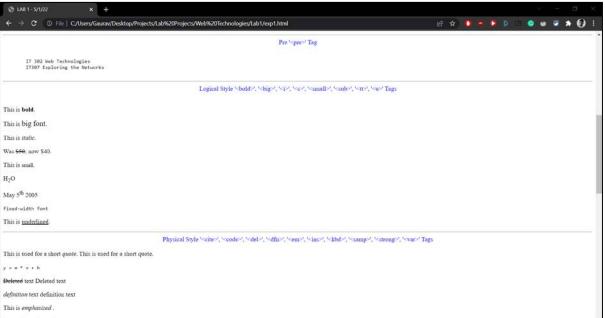
 Apples
 Bananas
 Lemons
 Oranges
<h4>Lowercase Roman numbers list:</h4>

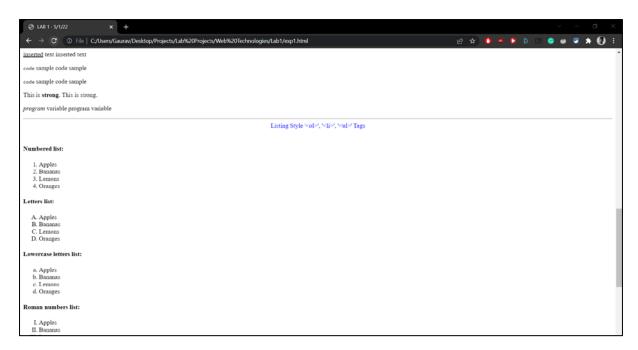
    type="i">

 Apples
 Bananas
 Lemons
 Oranges
<h4>Disc bullets list:</h4>
Apples
 Bananas
 Lemons
 Oranges
<h4>A Definition List:</h4>
< dl >
```

```
<dt>Coffee</dt>
<dd>Black hot drink</dd>
<dt>Milk</dt>
<dd>White cold drink</dd>
</dl>
</dl>
</hr>
</body>
</html>
```







Conclusion:

Hence, we have successfully demonstrated the use of different HTML tags.

Objective: To create an html file to link to different html page which contains images, tables, and link within a page.

Software Used: Visual Studio Code

```
1) index.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>LAB 1 (Exp 2) - 5/1/22</title>
</head>
<body>
  <h1>
    <center style="color: #0000FF;">Menu</center>
  </h1>
  <a href="/Lab Projects/Web Technologies/Lab1/table.html">Table</a>
    <a href="/Lab Projects/Web Technologies/Lab1/image.html">Image</a>
    <a href="/Lab Projects/Web Technologies/Lab1/video.html">Video</a>
  <br>
<body>
</html>
2) table.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>Table Demo</title>
</head>
<body>
 <B>
   <center>
    < h3 >
     AMITY UNIVERSITY, <br>
     DEPARTMENT OF INFORMATION TECHNOLOGY<br>
     EFFECTIVE FROM: 03.01.22<br>
  </center>
 </b></h3>
 <h3>
    <caption align=left>Class: 6IT-2
    <thead>
     Periods
       1 <br/>br>8.30-9.20
       2<br/>br>9.20-10.10
       3<br>>10.20-11.10
       4<br>>11.10-12.00
       5<br>>1.30-2.20
       6<br>2.20-3.10
       7<br/>br>3.10-4.00
      Days
```

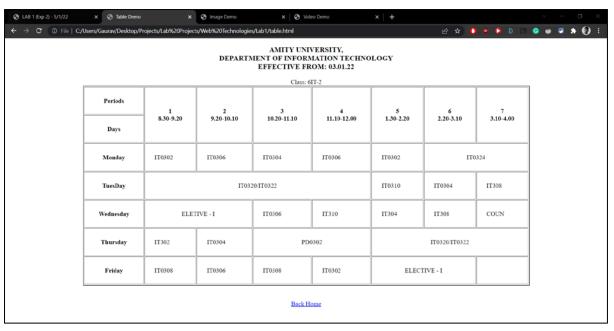
```
</thead>
Monday
 IT0302
  IT0306 
 IT0304
 IT0306
 IT0302
 <center>IT0324
 TuesDay
 <center>IT0320/IT0322
 IT0310
 IT0304
 IT308
Wednesday
 <center>ELETIVE - I
 IT0306
 IT310
 IT304
 IT308
 COUN
```

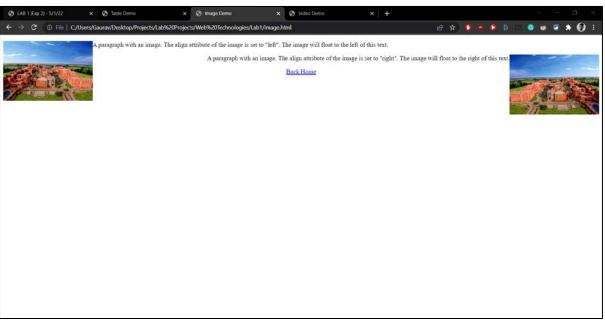
```
Thursday
       IT302
       IT0304
       <center>PD0302
       <center>IT0320/IT0322
       Friday
       IT0308
       IT0306
       IT0308
       IT0302
       <center>ELECTIVE - I
       <br>><br>>
 <center style="color: #0000FF;"><a href="/Lab Projects/Web</pre>
Technologies/Lab1/exp2.html">Back Home</a></center>
</body>
</html>
3) video.html
<!DOCTYPE html>
<html lang="en">
```

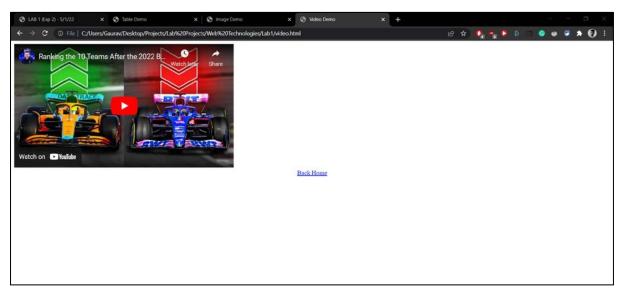
```
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Video Demo</title>
</head>
<body>
  <body><object width="560" height="340">
       <param name="movie" value="https://www.youtube.com/watch?v=APd12qg_EBA">
       </param>
       <param name="allowFullScreen" value="true">
       </param>
       <param name="allowscriptaccess" value="always">
       </param>
       <param name="allowscriptaccess" value="always">
       </param>
       <iframe width="560" height="315" src="https://www.youtube.com/embed/_cxEu5-dMec"</pre>
         title="YouTube video player" frameborder="0"
         allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-
picture"
         allowfullscreen></iframe>
    </object>
    <br>
    <center style="color: #0000FF;"><a href="/Lab Projects/Web</pre>
Technologies/Lab1/exp2.html">Back Home</a></center>
  </body>
</html>
4) image.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>Image Demo</title>
</head>
<body>
  >
    <img
src="https://images.collegedunia.com/public/college_data/images/appImage/14973308071443084987
AMITYNOIDANEW.jpg?mode=stretch"
      alt="Amity Image" width="15%" height="15%" align="left"> A paragraph with an image.
The align attribute of
    the image is set to "left". The image will float to the left of
    this text.
  A paragraph with an
    image. The align attribute of the image is set to "right". The image will float to the right of this
text. <img
src="https://images.collegedunia.com/public/college_data/images/appImage/14973308071443084987
AMITYNOIDANEW.jpg?mode=stretch"
      alt="Amity Image" width="15%" height="15%" align="right" style="transform: scaleX(-1);">
  <center style="color: #0000FF;"><a href="/Lab Projects/Web</pre>
Technologies/Lab1/exp2.html">Back Home</a></center>
</body>
</html>
```







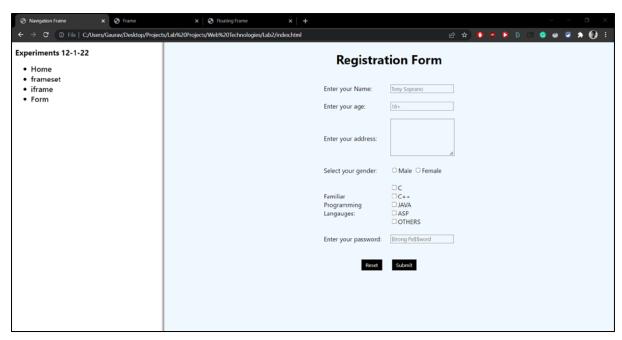


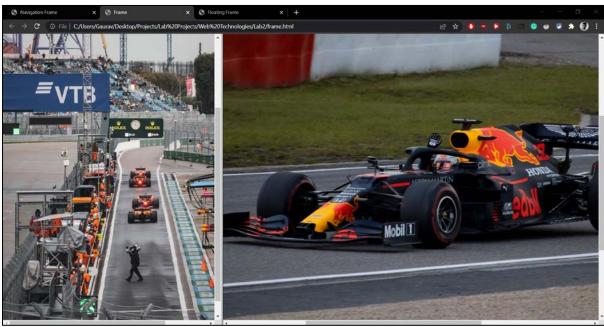
Objective: To create an html page with different types of frames such as floating frame, navigation frame & mixed frame.

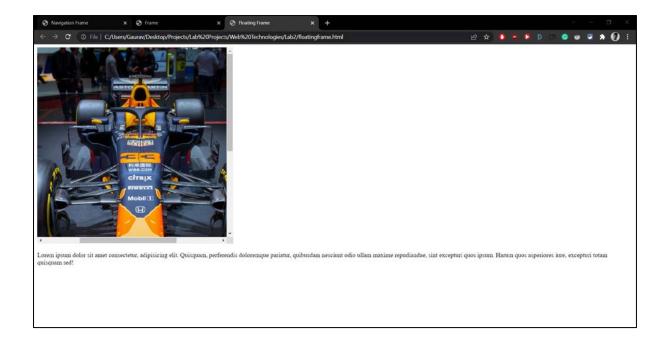
Software Used: Visual Studio Code

```
1) index.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>Navigation Frame</title>
</head>
<frameset cols="25%,75%">
  <frame name="frame1" src="menu.html" noresize>
    <frame name="frame2" src="registration.html" noresize>
</frameset>
</html>
2) frame.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>Frame</title>
</head>
```

```
<!-- <iframe src="index.html" name="iframe1" id="iframe1" width="350" height="200"
align="left"></iframe> -->
<frameset cols="20%,35%">
  <frame src="img1.jpg"></frame>
  <frame src="img2.jpg"></frame>
</frameset>
</html>
3) iframe.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>Floating Frame</title>
</head>
<body>
  <iframe src="img3.jpg" frameborder="0" width="500px" height="500px"></iframe>
  Lorem ipsum dolor sit amet consectetur, adipisicing elit. Quisquam, perferendis doloremque
pariatur, quibusdam
    nesciunt odio ullam maxime repudiandae, sint excepturi quos ipsum. Harum quos asperiores iure,
excepturi totam
    quisquam sed!
</body>
</html>
```







Conclusion:

Hence, we have successfully demonstrated the use of different frame tags in HTML.

Objective: To create a registration form as mentioned below.

Procedure:

Create an html page named as "registration.html"

- a) set background colors
- b) use table for alignment
- c) provide font colors & size

Software Used: Visual Studio Code

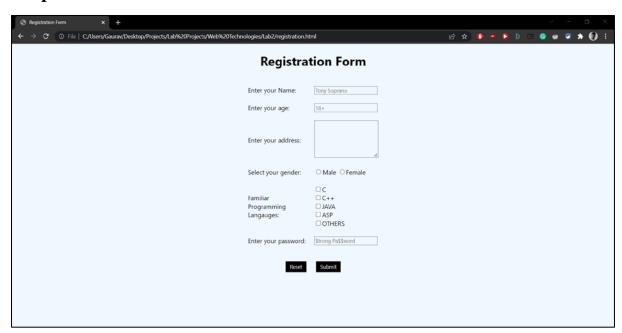
Program:

1) registration.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>Registration Form</title>
  <style>
    * {
       box-sizing: border-box;
       background-color: aliceblue;
       font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    }
    .button {
       color: white;
       background-color: black;
       margin: 0 10px;
       padding: 5px 10px;
```

```
input {
     border: 0.5px solid gray;
   }
 </style>
</head>
<body>
 <center>
   <h1>Registration Form</h1>
   <form action="">
     Enter your Name: 
        <input type="text" placeholder="Tony Soprano">
       Enter your age: 
        <input type="number" maxlength="80" minlength="18" placeholder="18+">
       Enter your address: 
        <textarea rows=5 cols=22></textarea>
       Select your gender: 
        <input type="radio" name="gender" id="" value="male">Male
          <input type="radio" name="gender" id="" value="female">Female
        Familiar<br/>Programming<br>Langauges:
```

```
<input type=checkbox name=c1 value=c>C<br>
            <input type=checkbox name=c2 value=c++>C++<br>
            <input type=checkbox name=c4 value=java>JAVA<br>
            <input type=checkbox name=c5 value=asp>ASP<br>
            <input type=checkbox name=c6 value=others>OTHERS<br>
          Enter your password: 
          <input type="password" name="pass" id="" placeholder="$trong Pa$$word">
        <div style="padding-top: 20px;">
        <input class="button" type="reset">
        <input class="button" type="submit">
      </div>
    </form>
  </center>
</body>
</html>
```



Objective: Create an HTML file and use inline, internal, and external CSS.

Software Used: Visual Studio Code

Program:

```
1) index.html
```

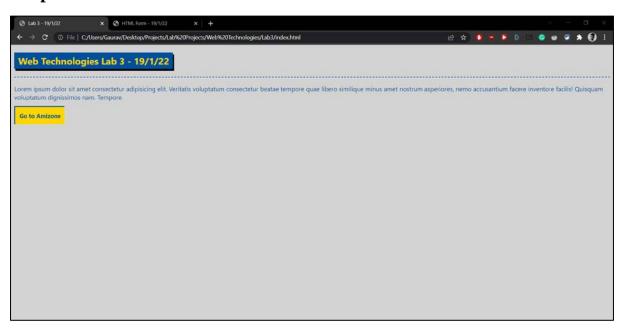
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="external_css.css">
  <title>Lab 3 - 19/1/22</title>
  <style>
    body {
      background-color: lightgrey;
  </style>
</head>
<body>
  <h2>Web Technologies Lab 3 - 19/1/22</h2>
  <hr>>
  >
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Veritatis voluptatum consectetur beatae tempore quae

libero similique minus amet nostrum asperiores, nemo accusantium facere inventore facilis! Quisquam voluptatum

```
style="border-top: 3px solid #00509d; border-left: 3px solid #00509d;">Go to Amizone</a>
  </div>
</body>
</html>
2) external_css.css
*{
  font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
}
h2{
  background-color: #00509d;
  width: fit-content;
  color: #ffd500;
  padding: 5px 10px;
  box-shadow: 3px 5px black;
}
p{
  color: #00509d;
}
.button{
  margin-top: 25px;
}
a{
  text-decoration: none;
        background-color: #ffd500;
        padding:12px 10px;
       color:#00509d;
       font-size: 15px;
  font-weight: bold;
  border: 0;
}
a:hover{
```

```
animation: ease-in 0.1;
box-shadow: 3px 5px #00509d;
}
hr{
border-top: 2px dashed #00509d;
}
```



Conclusion:

Hence, we have successfully created an HTML file and demonstrated the use of inline, internal, and external CSS.

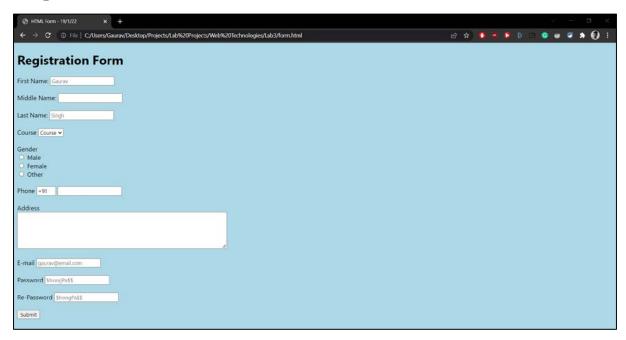
Objective: Create a form using HTML form tag.

Software Used: Visual Studio 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>HTML Form - 19/1/22</title>
  <style>
    * {
      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    }
    body {
      background-color: lightblue;
    }
    form div {
      margin: 20px 0;
    }
    div div {
      margin: 0;
    }
  </style>
</head>
<body>
  <h1>Registration Form</h1>
  <form action="">
```

```
<div>
  <label>First Name:</label>
  <input type="text" placeholder="Gaurav">
</div>
<div>
  <label>Middle Name:</label>
  <input type="text">
</div>
<div>
  <label>Last Name:</label>
  <input type="text" placeholder="Singh">
</div>
<div>
  <label for="">Course</label>
  <select name="languages" id="lang" placeholder="Course">
    <option value="course">Course</option>
    <option value="btech">B.Tech</option>
    <option value="bba">BBA</option>
    <option value="ba">BA</option>
    <option value="ballb">BA LLB</option>
    <option value="bcom">B.Com</option>
  </select>
</div>
<div>
  <label for="">Gender</label>
  <div>
    <input type="radio" name="gender" id="">
    <label for="">Male</label>
  </div>
  <div>
    <input type="radio" name="gender" id="">
    <label for="">Female</label>
```

```
</div>
      <div> <input type="radio" name="gender" id="">
         <label for="">Other</label>
      </div>
    </div>
    <div>
       <label for="">Phone</label>
      <input type="text" name="country code" value="+91" size="2" />
      <input type="number" name="" id="">
    </div>
    <div>
      <label for="">Address</label>
      <br>>
      <textarea cols="80" rows="5" value="address"></textarea>
    </div>
    <div>
      <label for="">E-mail</label>
      <input type="email" name="" id="" placeholder="gaurav@email.com">
    </div>
    <div>
      <label for="">Password</label>
      <input type="password" name="" id="" placeholder="$trongPa$$">
    </div>
    <div>
      <label for="">Re-Password</label>
      <input type="password" name="" id="" placeholder="$trongPa$$">
    </div>
    <button>Submit</button>
  </form>
</body>
</html>
```



Conclusion:

Hence, we have successfully created an form using HTML form tag.

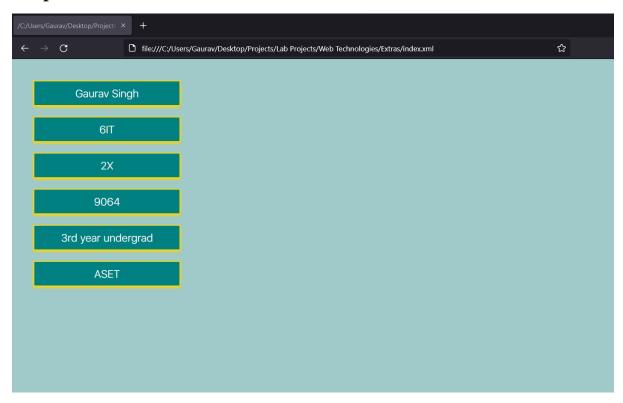
Objective: Create an XML file with XML Schema Definition and style it with external CSS.

Software Used: Visual Studio Code

```
1) student.xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="xmlstyles.css"?>
<ss:student
  xmlns:ss="./"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:SchemaLocation="./ student.xsd"
> <name>Gaurav Singh</name>
  <semester>6IT</semester>
  <section>2X</section>
  <rollnum>9064</rollnum>
  <body>3rd year undergrad</body>
  <college>ASET</college>
</ss:student>
2) student.xsd
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="./"
  xmlsns="./"
  elementFormDefault="qualified"
  <xs:simpletype name="semesterType">
    <xs:restriction base="xs:string">
      <xs:pattern value="[1-8][A-Z][A-Z][A-Z]"/>
```

```
</xs:restriction>
  </xs:simpletype>
  <xs:simpletype name="sectionType">
    <xs:restriction base="xs:string">
       <xs:pattern value="[1-10][XY]"/>
    </xs:restriction>
  </xs:simpletype>
  <xs:simpletype name="collegeType">
    <xs:restriction base="xs:string">
       <xs:enumeration value="ASET"/>
       <xs:enumeration value="AIP"/>
       <xs:enumeration value="ALS"/>
       <xs:enumeration value="ASAP"/>
    </r></restriction>
  </xs:simpletype>
  <xs:complextype name="studentType">
    <xs:sequence>
       <xs:element name="name" type="xs:string"/>
       <xs:element name="semester" type="semesterType"/>
       <xs:element name="section" type="sectionType"/>
       <xs:element name="rollnum" type="xs:integer"/>
       <xs:element name="body" type="xs:string"/>
       <xs:element name="college" type="collegeType"/>
    </r></re></re>
  </xs:complextype>
  <xs:element name="student" type="studentType"/>
</xs:schema>
3) xmlstyles.css
*{
  display: block;
  font-size: 20px;
  width: 250px;
```

```
margin: 20px;
}
name, semester, section, rollnum, body, college{
  padding: 10px;
  border: 2px solid gold;
  color: whitesmoke;
  font-family: sans-serif;
  font-weight: 200;
  background-color: teal;
  box-shadow: 0px 2px 5px gold;
  text-align: center;
}
student\{
  /* width: fit-content;
  padding: 20px 0; */
  background-color: rgb(160, 201, 201);
  /* box-shadow: 10px 5px teal; */
}
```



Objective: Creating and Initializing Arrays of fruits in JavaScript and display the same.

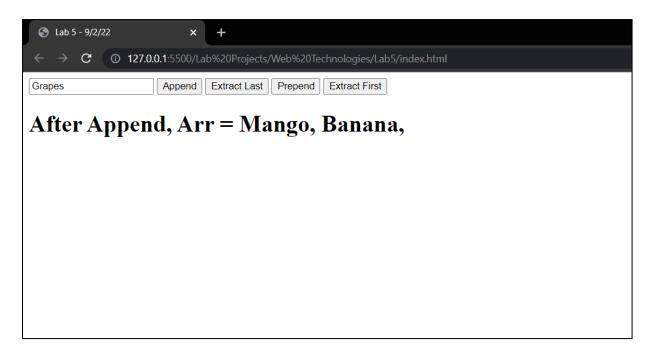
- a. Extracts the last element of the array and returns it
- b. Append the element to the end of the array:
- c. Extracts the first element of the array and returns it:
- d. Add the element to the beginning of the array

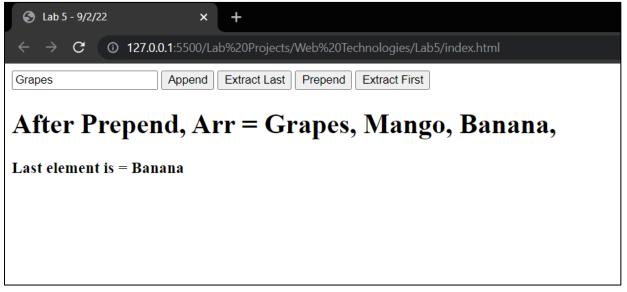
Software Used: Visual Studio Code

```
1) File – index.html
```

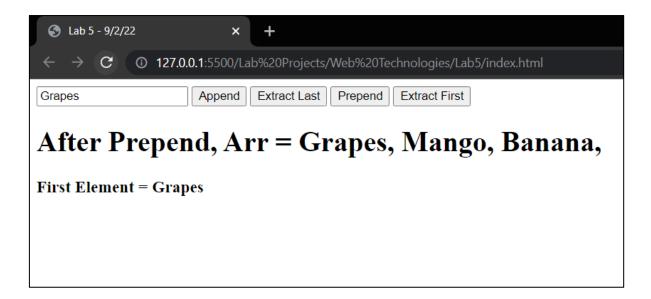
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Lab 5 - 9/2/22</title>
</head>
<body>
  <input type="text" name="input" id="input">
  <button onclick="appendEle()">Append</button>
  <button onclick="extractLast()">Extract Last</button>
  <button onclick="prependEle()">Prepend</button>
  <button onclick="extractFirst()">Extract First</button>
  <h1 id="arr"></h1>
  <h3 id="ele"></h3>
  <script>
    var arr = [];
    function appendEle() {
       var data = document.getElementById("input").value;
       arr.push(data);
       var op = "After Append Arr = ";
       for (let i = 0; i < arr.length; i++) {
         op += arr[i];
         op += ", "
       document.getElementById("arr").innerHTML = op;
```

```
function extractLast() {
       var op = arr[arr.length - 1];
       if (op === undefined) {
         document.getElementById("ele").innerHTML = "Cannot extract last element, Array is
empty!";
       else {
         document.getElementById("ele").innerHTML = "Last element is = " + op;
       }
    function prependEle() {
       var data = document.getElementById("input").value;
       var new_arr = [data].concat(arr);
       arr = new_arr;
       var op = "After Prepend Arr = ";
       for (let i = 0; i < arr.length; i++) {
         op += arr[i];
         op += ", "
       document.getElementById("arr").innerHTML = op;
    function extractFirst() {
       var op = arr[0];
       if (op === undefined) {
         document.getElementById("ele").innerHTML = "Cannot extract first element, Array is
empty!";
       else {
         document.getElementById("ele").innerHTML = "First Element = " + op;
       }
     }
  </script>
</body>
</html>
```









Conclusion:

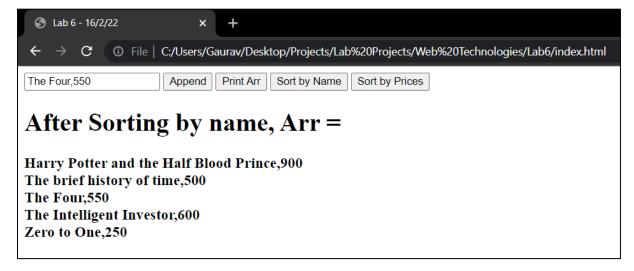
Hence, we have successfully created and initialized an array in JavaScript and performed appending, prepending, extracting first element & extracting last element operations on the array.

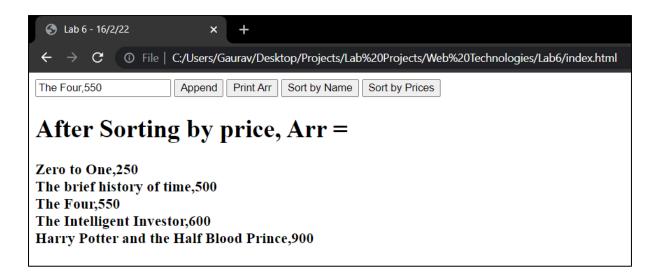
Objective: Write a script to sort an array of books names. Also sort an array of book prices. Write an appropriate code.

Software Used: Visual Studio 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>Lab 6 - 16/2/22</title>
</head>
<body>
  <input type="text" name="input" id="input">
  <button onclick="appendEle()">Append</button>
  <button onclick="printArr()">Print Arr</button>
  <button onclick="sortbyName()">Sort by Name</button>
  <button onclick="sortbyPrices()">Sort by Prices</button>
  <h1 id="operation"></h1>
  <h3 id="arr"></h3>
  <script>
    var arr = [["Harry Potter and the Half Blood Prince", 900], ["Zero to One", 250], ["The brief
history of time", 500], ["The Intelligent Investor", 600]];
    function printArr(arr1 = arr) {
       var op = "";
       for (let i = 0; i < arr1.length; i++) {
         op += arr1[i];
         op += "<br>"
       document.getElementById("arr").innerHTML = op;
    function appendEle() {
       var data = document.getElementById("input").value.split(",");
       arr.push([data[0], parseInt(data[1])]);
       printArr();
     }
    function sortbyName() {
       var sortedArr1 = arr.sort(function (a, b) {
```

```
var nameA = a[0].toLowerCase(), nameB = b[0].toLowerCase();
         if (nameA < nameB)
            return -1;
         else if (nameA > nameB)
            return 1;
         else
            return 0;
       });
       console.log(sortedArr1);
       document.getElementById("operation").innerHTML = "After Sorting by name, Arr = ";
       printArr(sortedArr1);
    function sortbyPrices() {
       var sortedArr2 = arr.sort(function (a, b) {
         return a[1] - b[1];
       });
       console.log(sortedArr2);
       document.getElementById("operation").innerHTML = "After Sorting by price, Arr = ";
       printArr(sortedArr2);
    }
  </script>
</body>
</html>
```





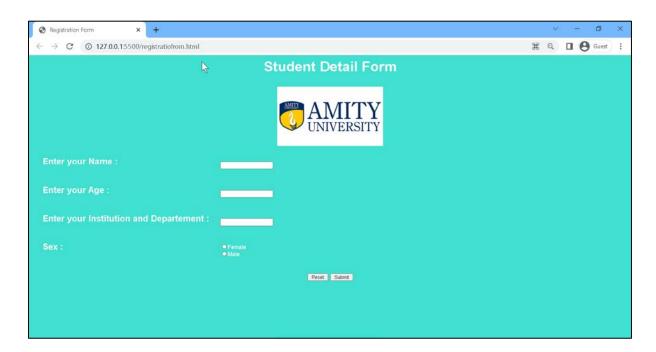
Conclusion:

Hence, we have successfully created script to sort an array of books names. Also sort an array of book prices.

Objective: Write a script to create a Form Using JavaScript.

Software Used: Visual Studio Code

```
<html>
<head>
<title>Registration Form </title>
</head>
<body bgcolor="turquoise" text="white" style="font-size:20pt;font-family:Arial" ><center>
<h2>Student Detail Form</h2></center>
<center><img src="au.png"width="301" height="167"></center>
<form name=form1 >
align=left><h2>Enter your Name :</h2> align=right><input type=text</td>
name=t1 size=18>
<h2>Enter your Age :</h2> <input type=text
name=t2 maxlength=3 size=18>
align=right><input type=text name=t2 maxlength=12 size=18>
align=left><h2>Sex :</h2> align=left><input type=radio name=r1
value="female">Female<br>
<input type=radio name=r1 value=male>Male
<center>
<input type=reset value=" Reset " >
<input type=submit value=" Submit " >
</form>
</body>
</html>
```



Conclusion:

Hence, we have successfully created to create a form using JavaScript.

Objective: Write a script to get browser details through JavaScript.

Software Used: Visual Studio Code

Program:

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>
      Get browser details through JavaScript
    </title>
  </head>
  <body>
<!-- The text field -->
<div id="example"></div>
<script>
txt = "Browser CodeName: " + navigator.appCodeName + "";
txt+= "Browser Name: " + navigator.appName + "";
txt+= "Browser Version: " + navigator.appVersion + "";
document.getElementById("example").innerHTML=txt;
</script>
  </body>
</html>
```

Output:

Conclusion:

Hence, we have successfully created to create a form using JavaScript.

Objective: Write a script to create a form to input Username, Password and Age.

Software Used: Visual Studio Code

```
1. index.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>Validation</title>
 </head>
 <body>
  <form>
   <label>Username: </label><input type="text" id="name" /><br />
   <label>Password: </label><input type="text" id="password" /><br/>
   <label>Age: </label><input type="text" id="age" /><br />
   <button id="btn">Submit</button>
  </form>
  <script src="index.js"></script>
 </body>
</html>
2. index.js
document.getElementById('btn').addEventListener('click', () => {
 let username = document.getElementById('name').value;
 if (username == ") {
  alert('The username cannot be empty');
 let password = document.getElementById('password').value;
 if (password.length < 6) {
  alert('The password should be alteast 6 characters long');
 let age = parseInt(document.getElementById('age').value);
 if (!(age >= 1 \&\& age <= 19)) {
  alert('Age should be between 1 and 19');
 }
});
```



Conclusion:

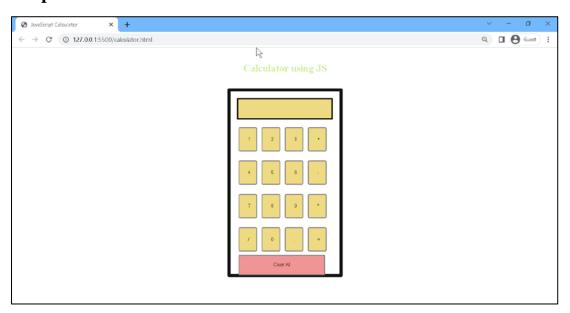
Hence, we have successfully created a form to input Username, Password and Age.

Objective: Create a Calculator using HTML, CSS and JavaScript.

Software Used: Visual Studio Code

```
<!-- Create a simple Program to build the Calculator in JavaScript using with HTML and
CSS web languages. -->
<!DOCTYPE html>
<html lang = "en">
<head>
<title> JavaScript Calculator </title>
<style>
h1 {
  text-align: center;
  padding: 23px;
  color: rgb(208, 238, 153);
#clear{
width: 270px;
border: 3px solid gray;
  border-radius: 3px;
  padding: 20px;
  background-color: rgb(240, 149, 149);
}
.formstyle
width: 300px;
height: 530px;
margin: auto;
border: 10px solid rgb(20, 22, 20);
border-radius: 5px;
padding: 20px;
input
width: 20px;
background-color: rgb(238, 218, 130);
color: rgb(2, 2, 2);
border: 3px solid gray;
  border-radius: 5px;
```

```
padding: 26px;
  margin: 5px;
  font-size: 15px;
}
#calc{
width: 250px;
border: 5px solid black;
  border-radius: 3px;
  padding: 20px;
  margin: auto;
}
</style>
</head>
<body>
<h1> Calculator using JS </h1>
<div class= "formstyle">
<form name = "form1">
  <!-- This input box shows the button pressed by the user in calculator. -->
 <input id = "calc" type ="text" name = "answer"> <br> <br>>
 <!-- Display the calculator button on the screen. -->
 <!-- onclick() function display the number prsses by the user. -->
 <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>> <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>> <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>> <br>>
 <input type = "button" value = "/" onclick = "form1.answer.value += '/' ">
 <input type = "button" value = "0" onclick = "form1.answer.value += '0' ">
  <input type = "button" value = "." onclick = "form1.answer.value += '.' ">
  <!-- When we click on the '=' button, the onclick() shows the sum results on the calculator
screen. -->
```



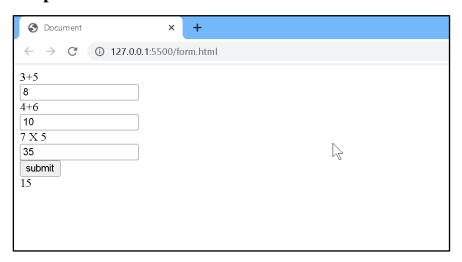
Conclusion:

Hence, we have successfully created a Calculator using HTML, CSS, and JavaScript.

Objective: Write a script to create a quiz using HTML forms and JavaScript.

Software Used: Visual Studio 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>
<body>
  <!-- <form action="/"> -->
    <label for="input1">3+5</label><br>
    <input id="first" type="text" name="input1"><br>
    <label for="input2">4+6</label><br>
    <input id="second" type="text" name="input2"><br>
    <label for="input3">7 X 5</label><br>
    <input id="third" type="text" name="input3"><br>
    <button onclick="check()" type="submit" value="Submit">submit</button>
    <div id="ans"></div>
  <!-- </form> -->
  <script>
    function check(){
      var first=document.getElementById("first").value;
      var second=document.getElementById("second").value;
      var third=document.getElementById("third").value;
      var score=0;
      if(first==8)
         score=score+5;
      if(second==10)
         score=score+5;
```



Conclusion:

Hence, we have successfully created a script to create a quiz using HTML forms and JavaScript

Objective: Write a JSP script to show the use of JSP implicit objects.

Software Used: Visual Studio Code

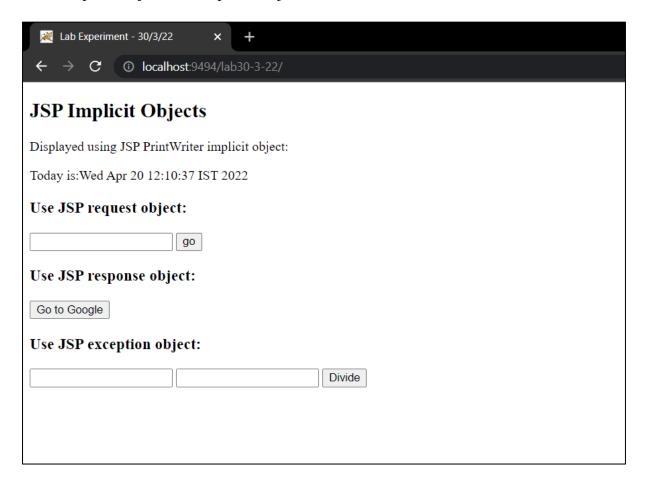
```
1. index.jsp
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
  <head>
    <title>Lab Experiment - 30/3/22</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <h2>JSP Implicit Objects</h2>
    Displayed using JSP PrintWriter implicit object:
    <% out.print("Today is:"+java.util.Calendar.getInstance().getTime()); %>
    <h3>Use JSP request object:</h3>
    <form action="request.jsp">
      <input type="text" name="username">
      <input type="submit" value="go"><br/>
    </form>
    <h3>Use JSP response object:</h3>
    <form action="response.jsp">
      <input type="submit" value="Go to Google">
    </form>
    <h3>Use JSP exception object:</h3>
    <form action="divide.jsp">
      <input type="number" name="num1">
      <input type="number" name="num2">
      <input type="submit" value="Divide"><br/>
    </form>
  </body>
</html>
```

```
2. divide.jsp
<%--
  Document : divide.jsp
  Created on: 30 Mar, 2022, 10:25:14 AM
  Author : Gaurav
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Exception Demo</title>
  </head>
  <body>
    <%
      float ans;
      try{
         int num1 = Integer.parseInt(request.getParameter("num1"));
         int num2 = Integer.parseInt(request.getParameter("num2"));
         ans = num1/num2;
         out.println("Result =" + ans);
      catch (Exception e) {
        out.println("An exception occurred: " + e.getMessage());
      }
    %>
  </body>
</html>
3. exception.jsp
<%--
  Document : exception
  Created on: 30 Mar, 2022, 10:27:26 AM
  Author : Gaurav
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@page isErrorPage="true"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <link rel="stylesheet" href="./style.css">
    <title>JSP Exception Page</title>
  </head>
```

```
<body>
    <div class="divide-page">
      <h1>Error Occurred!</h1>
      <%out.print(exception);%>
    </div>
  </body>
</html>
4. pageContext.jsp
<%--
  Document : pagecontext.jsp
  Created on: 30 Mar, 2022, 10:20:27 AM
  Author : Gaurav
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Page Context Demo</title>
  </head>
  <body>
    <%
    String name=(String)pageContext.getAttribute("user",PageContext.SESSION_SCOPE);
    out.print("Hello "+name);
    %>
  </body>
</html>
5. request.jsp
<%--
  Document : request
  Created on: 30 Mar, 2022, 9:51:09 AM
  Author : Gaurav
--%>
<%@page import="java.util.Set"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@page errorPage="exception.jsp"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Request Object Demo</title>
  </head>
```

```
<body>
    <h2>Displayed using Request Object</h2>
      String name=request.getParameter("username");
      out.print("Hello, "+name);
      session.setAttribute("user", name);
      pageContext.setAttribute("user", name, PageContext.SESSION\_SCOPE);
    %>
    <br/><br/>
    <a href="session.jsp">Use Session Object</a>
    <br/><br/>
    <a href="pagecontext.jsp">Use Page Context Object</a>
    <br/><br/>
    <a href="index.jsp">Back to Home</a>
  </body>
</html>
6. response.jsp
<%--
  Document : google
  Created on: 30 Mar, 2022, 10:02:56 AM
  Author : Gaurav
--%>
< @ page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Response Demo</title>
  </head>
  <body>
    <% response.sendRedirect("http://www.google.com"); %>
  </body>
</html>
7. session.jsp
<%--
  Document : session.jsp
  Created on: 30 Mar, 2022, 10:07:58 AM
  Author : Gaurav
--%>
```

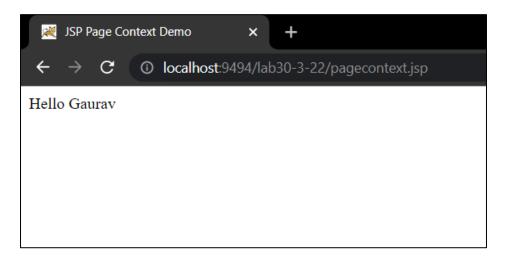
1. Out Implicit Object and Response Object:



2. Request Implicit Object:



3. PageContext Implicit Object:



4. Exception Object:



Conclusion:

Hence, we have successfully created a JSP script to demonstrate the use of JSP implicit objects.

Objective: Write a PHP script to:

1) Print Sum of Digits

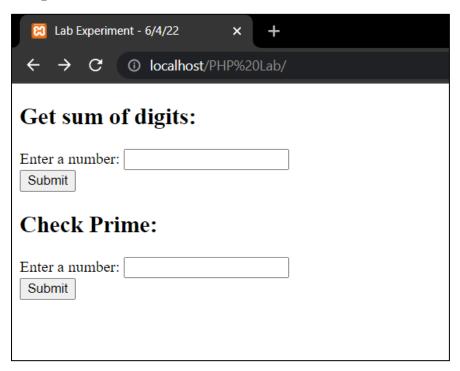
2) Number is Prime or Non-prime.

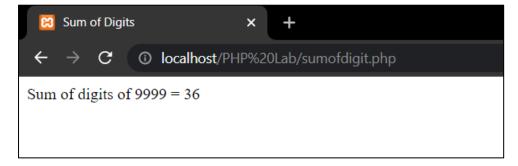
Software Used: Visual Studio Code

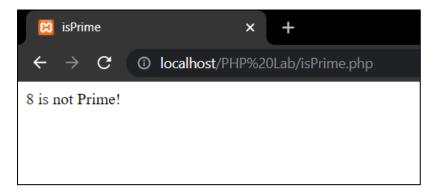
```
1. index.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Lab Experiment - 6/4/22</title>
</head>
<body>
  <h2>Get sum of digits: </h2>
  <form action="sumofdigit.php" method="POST">
    <label for="number">Enter a number: </label>
    <input type="number" name="number" id="number">
    <br/>br>
    <input type="submit">
  </form>
  <h2>Check Prime: </h2>
  <form action="isPrime.php" method="POST">
    <label for="number">Enter a number: </label>
    <input type="number" name="number" id="number">
    <br>
    <input type="submit">
  </form>
</body>
</html>
2. sumOfDigit.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>Sum of Digits</title>
</head>
<body>
  <?php
    $num = $_POST["number"];
    echo "Sum of digits of $num = ";
    sum = 0;
    while($num!=0){
       $digit = $num% 10;
       $sum += $digit;
       num = num/10;
    }
    echo $sum;
  ?>
</body>
</html>
3. isPrime.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>isPrime</title>
</head>
<body>
  <?php
    $num = $_POST["number"];
    flag = TRUE;
    for($i=2; $i<$num; $i++){
      if(\text{snum } \% \text{ } \text{si} == 0)
         $flag = FALSE;
         break;
       }
    }
    if($flag){
      echo "$num is Prime";
    }
    else{
       echo "$num is not Prime!";
  ?>
```

```
</body>
```







Conclusion:

Hence, we have successfully created a PHP script to print sum of digits and check whether a number is prime or not.

Objective: Create an eCommerce site using PHP and MySQL.

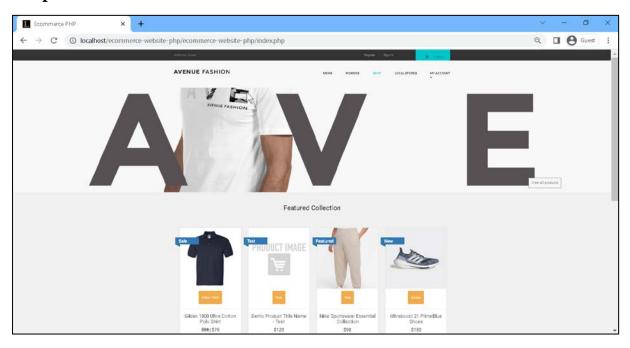
Software Used: Visual Studio Code

```
1. index.php
<?php
session_start();
include("includes/db.php");
include("includes/header.php");
include("functions/functions.php");
include("includes/main.php");
?>
 <!-- Cover -->
 <main>
  <div class="hero">
   <a href="shop.php" class="btn1">View all products
</a>
  </div>
  <!-- Main -->
  <div class="wrapper">
       <h1>Featured Collection<h1>
   </div>
  <div id="content" class="container"><!-- container Starts -->
  <div class="row"><!-- row Starts -->
  <?php
  getPro();
  ?>
  </div><!-- row Ends -->
  </div><!-- container Ends -->
  <!-- FOOTER -->
  <footer class="page-footer">
   <div class="footer-nav">
    <div class="container clearfix">
      <div class="footer-nav__col footer-nav__col--info">
```

```
<div class="footer-nav_heading">Information</div>
cli class="footer-nav item">
  <a href="#" class="footer-nav__link">The brand</a>
 <a href="#" class="footer-nav__link">Local stores</a>
 <a href="#" class="footer-nav__link">Customer service</a>
 cli class="footer-nav item">
  <a href="#" class="footer-nav__link">Privacy & amp; cookies</a>
 cli class="footer-nav item">
  <a href="#" class="footer-nav link">Site map</a>
 </div>
<div class="footer-nav__col footer-nav__col--whybuy">
<div class="footer-nav_heading">Why buy from us</div>
<a href="#" class="footer-nav__link">Shipping & amp; returns</a>
 cli class="footer-nav item">
  <a href="#" class="footer-nav__link">Secure shipping</a>
 cli class="footer-nav item">
  <a href="#" class="footer-nav__link">Testimonials</a>
 <a href="#" class="footer-nav__link">Award winning</a>
 <a href="#" class="footer-nav__link">Ethical trading</a>
 </div>
<div class="footer-nav col footer-nav col--account">
<div class="footer-nav_heading">Your account</div>
cli class="footer-nav item">
  <a href="#" class="footer-nav__link">Sign in</a>
 cli class="footer-nav item">
  <a href="#" class="footer-nav__link">Register</a>
```

```
cli class="footer-nav item">
        <a href="#" class="footer-nav__link">View cart</a>
       <a href="#" class="footer-nav__link">View your lookbook</a>
       <a href="#" class="footer-nav__link">Track an order</a>
       <a href="#" class="footer-nav__link">Update information</a>
       </div>
     <div class="footer-nav col footer-nav col--contacts">
      <div class="footer-nav_heading">Contact details</div>
      <address class="address">
      Head Office: Avenue Fashion.<br>
      180-182 Regent Street, London.
     </address>
      <div class="phone">
       Telephone:
       <a class="phone__number" href="tel:0123456789">0123-456-789</a>
      </div>
      <div class="email">
       Email:
       <a href="mailto:support@amistore.com" class="email addr">support@
amistore.com</a>
      </div>
     </div>
    </div>
   </div>
   <!-- <div class="banners">
    <div class="container clearfix">
     <div class="banner-award">
      <span>Award winner/span><br/><br/>Fashion awards 2016
     </div>
     <div class="banner-social">
      <a href="#" class="banner-social link">
      <i class="icon-facebook"></i>
      <a href="#" class="banner-social__link">
      <i class="icon-twitter"></i>
      <a href="#" class="banner-social__link">
      <i class="icon-instagram"></i>
     </a>
```

```
<a href="#" class="banner-social__link">
       <i class="icon-pinterest-circled"></i>
     </a>
     </div>
    </div>
   </div> -->
   <div class="page-footer__subline">
    <div class="container clearfix">
     <div class="copyright">
      © <?php echo date("Y");?> Ecommerce Website-PHP&trade;
     </div>
    </div>
   </div>
  </footer>
</body>
</html>
```



Conclusion:

Hence, we have successfully created an eCommerce using PHP and MySQL.