

1. CYCLE - I (HTML)

1.1 Create and test an HTML document for:

- a) Yourself, including your name, address, and electronic mail address. If you are a student, you must include your major and your grade level. If you work, you must include your employer, your employer's address, and your job title.
- b) Add pictures of yourself and at least one other image (of your friend, spouse, or pet) to the document created.
- c) Add a second document to the document created that describes part of your background, using background as the link content. This document should have a few paragraphs of your personal or professional history.

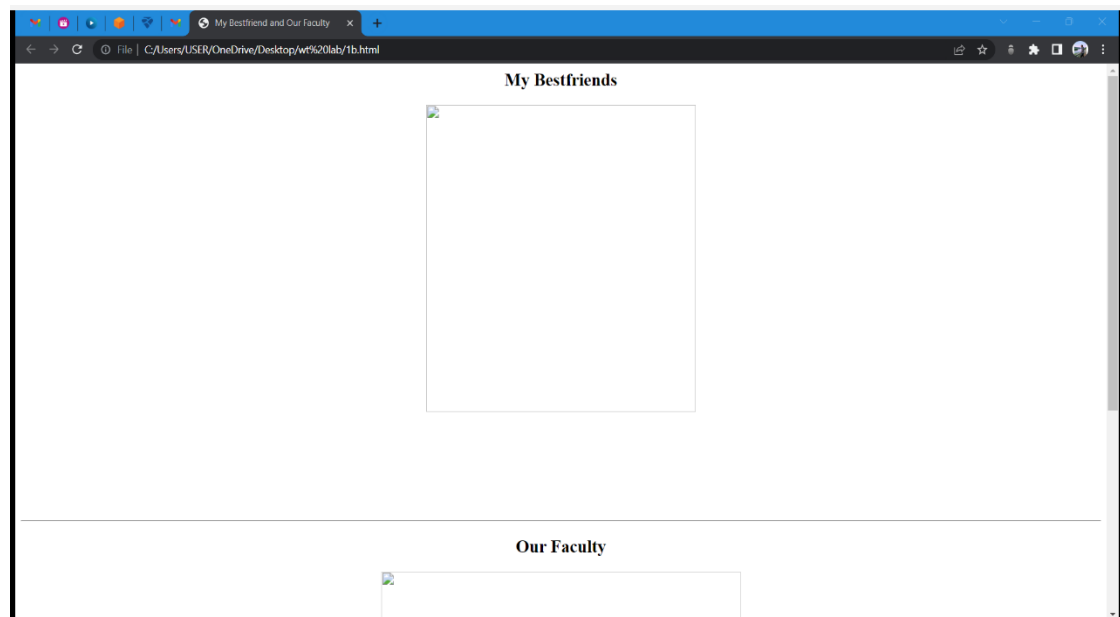
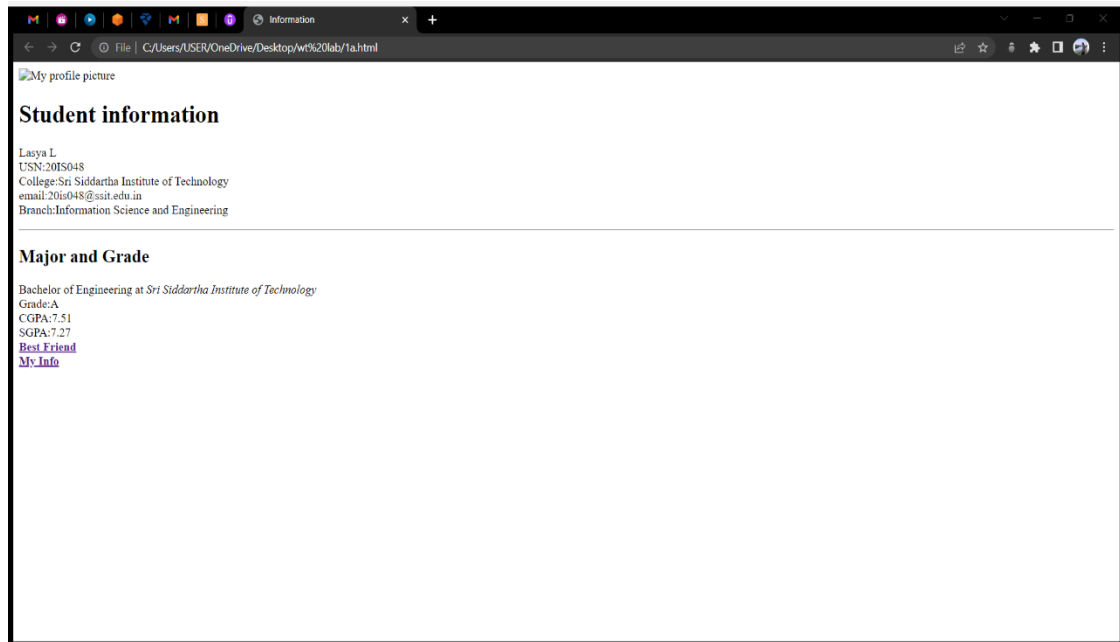
Note:- This document must use several headings and ``, ``, `<hr />`, `<p>`, and `
` tags.

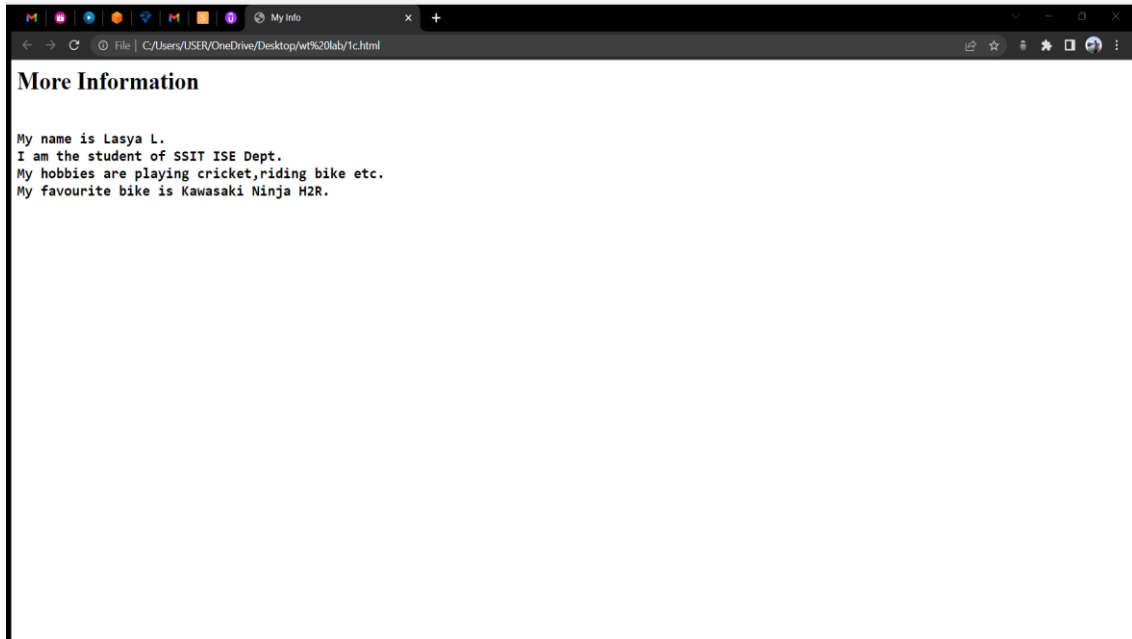
```
<!DOCTYPE html>
<!--1a.html-->
<html lang="en">
  <head>
    <title>Information</title>
    <meta charset = "utf-8" />
  </head>
  <body>
    
    <h1>Student information</h1>
    <p>
      Lasya L<br />
      USN:20IS048<br />
      College:Sri Siddartha Institute of Technology <br />
      email:20is048@ssit.edu.in <br />
      Branch:Information Science and Engineering <br />
    </p>
    <hr />
    <h2>Major and Grade</h2>
    <p> Bachelor of Engineering at
    <em>Sri Siddartha Institute of Technology</em>
    <br />
    Grade:A<br />
    CGPA:7.51 <br />
    SGPA:7.27 <br />
    <strong> <a href="C:\Users\USER\OneDrive\Desktop\wt
    lab\1b.html">Best Friend </a>
    </strong><br />
```

```
        <strong><a href="C:\Users\USER\OneDrive\Desktop\wt
        lab\1c.html">My Info</a></strong>
    </p>
</body>
</html>
```

```
<DOCTYPE html>
<!--1b.html-->
<html lang="en">
    <head>
        <title>My Bestfriend and Our Faculty</title>
        <meta charset="utf-8" />
    </head>
    <body>
        <center>
            <h2>My Bestfriends</h2>
            
            <hr />
            <h2>Our Faculty</h2>
            
        </center>
    </body>
</html>
```

```
<DOCTYPE html>
<!--1c.html-->
<html lang="en">
    <head>
        <title>My Info</title>
        <meta charset="utf-8" />
    </head>
    <body>
        <h1>More Information</h1>
        <pre>
        <h2>
        My name is Lasya L.
        I am the student of SSIT ISE Dept.
        My hobbies are playing cricket,riding bike etc.
        My favourite bike is Kawasaki Ninja H2R.
        </h2>
        </pre>
    </body>
</html>
```

Output:



1.2 Develop static pages (using only HTML) of an online Book store. The page should resemble: www.amazon.com and the website should contain the following pages. Home page, Registration and User Login, User Profile page, Books Catalog, Shopping Cart, Payment By Credit Card, Order Confirmation.

//Main.html

```
<html>
  <head>
    <title>Amazon</title>
  </head>
  <body bgcolor="lightblue"> <center>
    <marquee><strong><h1>Welcome to AMAZON</h1></strong></marquee>
    <form method="post" action="login.html" target=_blank >
    <h1>For books</h1>
    <br> <br>
    <input type="submit" value="Click here" width="300px"
    height="100px">
    </form>
  </body>
</html>
```

//Login.html

```
<html>
  <head>
    <title>login page</title>
  </head>
  <body bgcolor="lightblue"> <center>
    <marquee><strong><h1> AMAZON </h1></strong></marquee>
    <table align="center">
      <tr>
        <td><h4>Username</td>
        <td><input type="text" /></td>
        <td></td>
      </tr>
      <tr>
        <td><h4>Password</td>
        <td><input type="password" /></td>
        <td></td>
      </tr>
      <tr>
        <td>
          <form method="post" action="catalog.html" >
            <input type="submit" value="Go" >
          </form>
        </td>
        <td>
          <form method="post" action="userpro.html" >

```

```

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

```

//Ctalog.html

```

<html>
    <head>
        <title>books catalog</title>
    </head>
    <body bgcolor="lightblue">
        <marquee><h1>AMAZON BOOKS CATALOG</h1></marquee>
        <form method="post" action="shopping.html">
            <center>
                <table>
                    <tr>
                        <td><b><h1>Frontend books</h1></td>
                        <td></td></tr>
                    <tr>
                        <td><h4>C&Ds</td>
                        <td></td></tr>
                    <tr>
                        <td><h4>Ads</td>
                        <td></td></tr>
                    <tr>
                        <td><h4>JAVA
                        </td></tr>
                    <tr>
                        <td><b><h1>Backend books</h1></td>
                        <td></td>
                    </tr>
                    <tr>
                        <left>
                        <td><h4>Oracle</td>
                        </tr>
                    <tr>
                        <td><h4>Ms SQL Server
                        </td></tr>
                    <tr>
                        <td><h4>MySql </td>
                        </left>
                    </tr>
                </table>
            </h4>
            <center>
                <h2><b>Click here to buy one of these books</b></h2>
                <br/></br>
            </b><input type="submit" value="Submit">

```

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

//Shopping.html

```
<html>
    <head>
        <title>shopping cart</title>
    </head>
    <body bgcolor="lightblue">
        <marquee><h1>
            Shopping Cart</h1></marquee>
        <br/><br/>
        <table align="center">
            <tr>
                <td>Text Books</td>
                <td>
                    <select >
                        <optgroup label="select the book">
                            <option value="C&Ds">C & DS
                            <option value="Ads">Ads
                            <option value="Java">Java
                            <option value="Oracle">Oracle
                            <option value="Ms SQL Server">Ms SQL Server
                            <option value="MySql">MySql
                        </optgroup>
                    </select>
                </td></tr>
            <tr>
                <td>
                    Quantity</td>
                <td>
                    <input type="text" id="q">
                </td></tr>
            <tr>
                <td></td>
                <td>
                    <form method=post action="payment.html">
                        <input type="submit" value="Ok" />
                    </form>
                </td></tr>
        </table>
        <center>
            <h2><pre>Cost of one book is:"500" + shipping:"100"</pre></h2>
        </center>
    </body>
</html>
```

//Payment.html

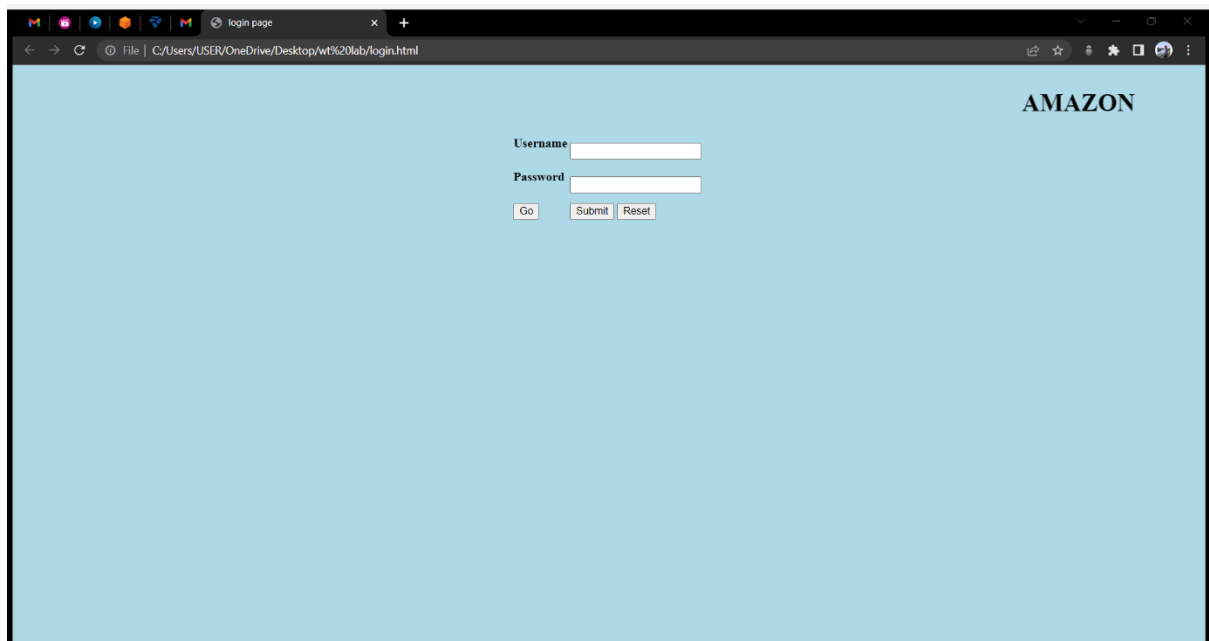
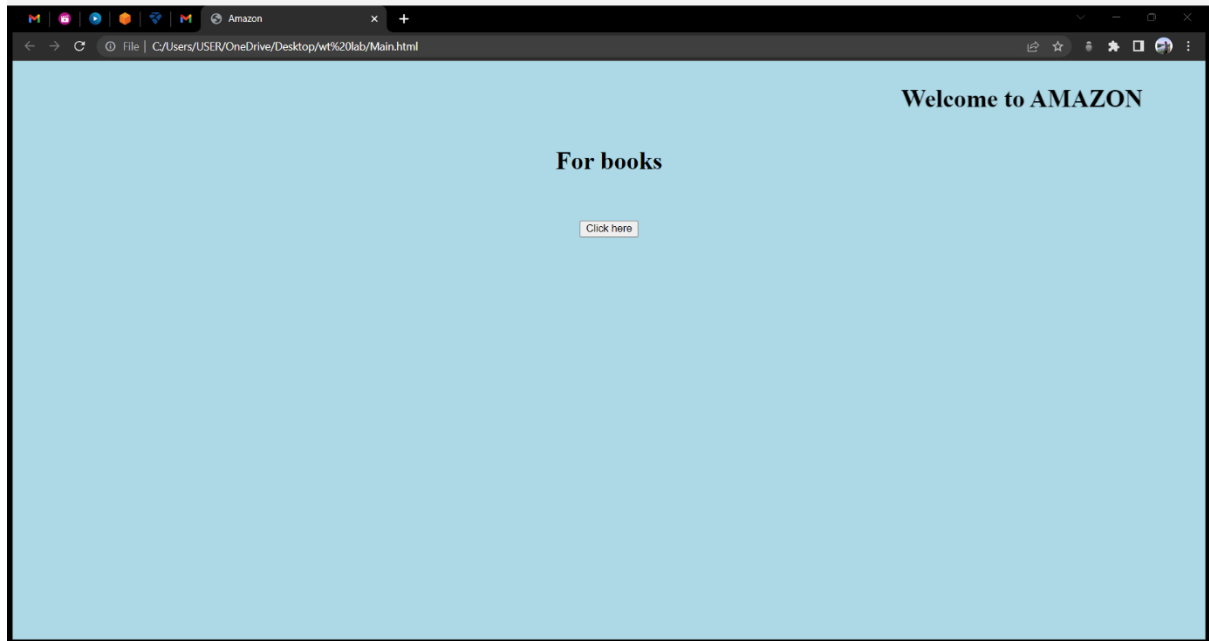
```
<html>
  <head>
    <title>payment</title>
  </head>
  <body bgcolor="lightblue">
    <center><h1>Payment By Credit Card</h1></center>
    <form method=post action="ordconform.html">
      <br/><br/><br/>
      <table align="center">
        <tr>
          <td>
            <h4>Total Amount</h4></td>
          <td><input type="text">
          </td>
        </tr>
        <tr>
          <td><h4>Credit Card Number</td>
          <td><input type="text"></td>
        </tr>
        <tr>
          <td>
          </td>
          <td><input type="submit" value=OK>
          </td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

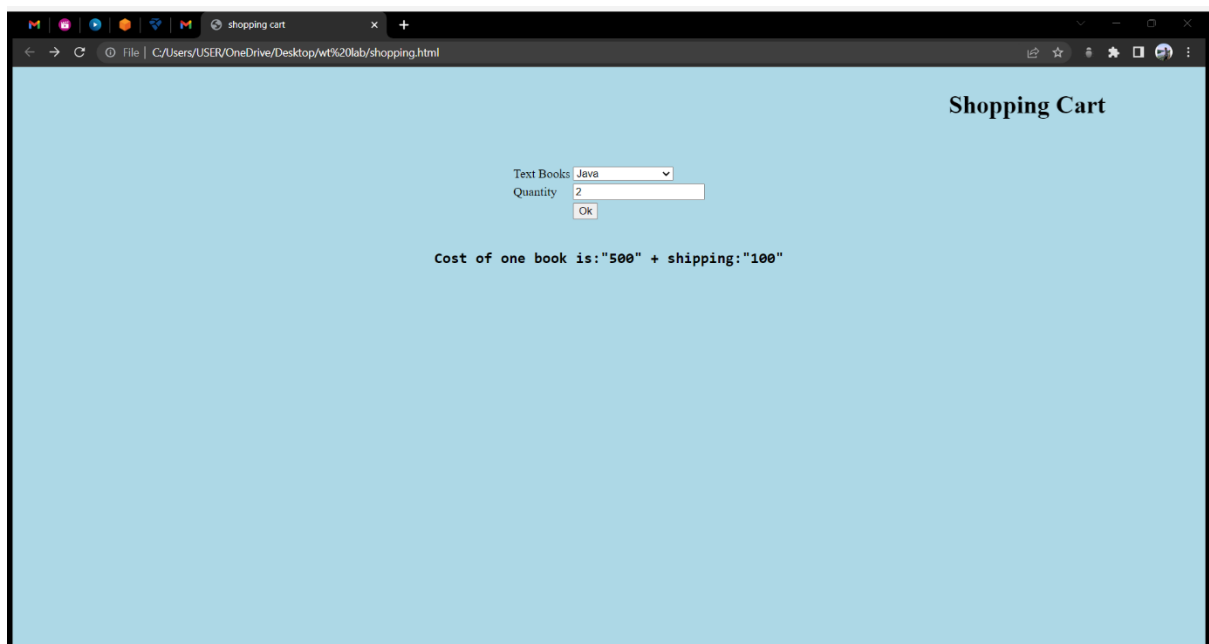
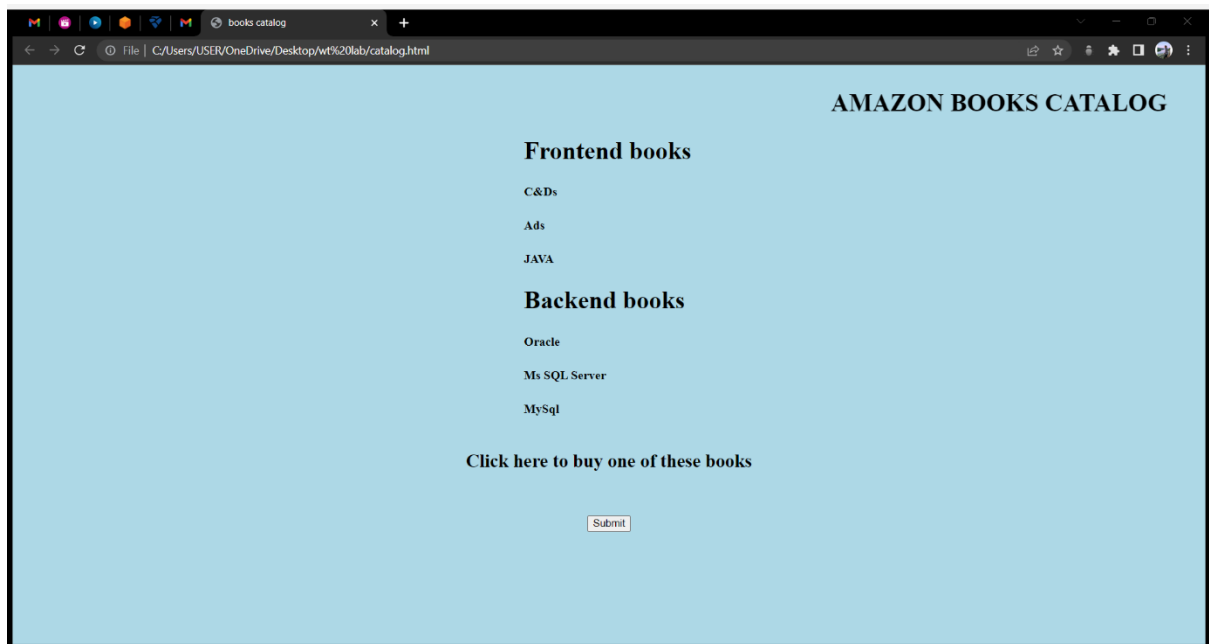
//OrderConfirm.html

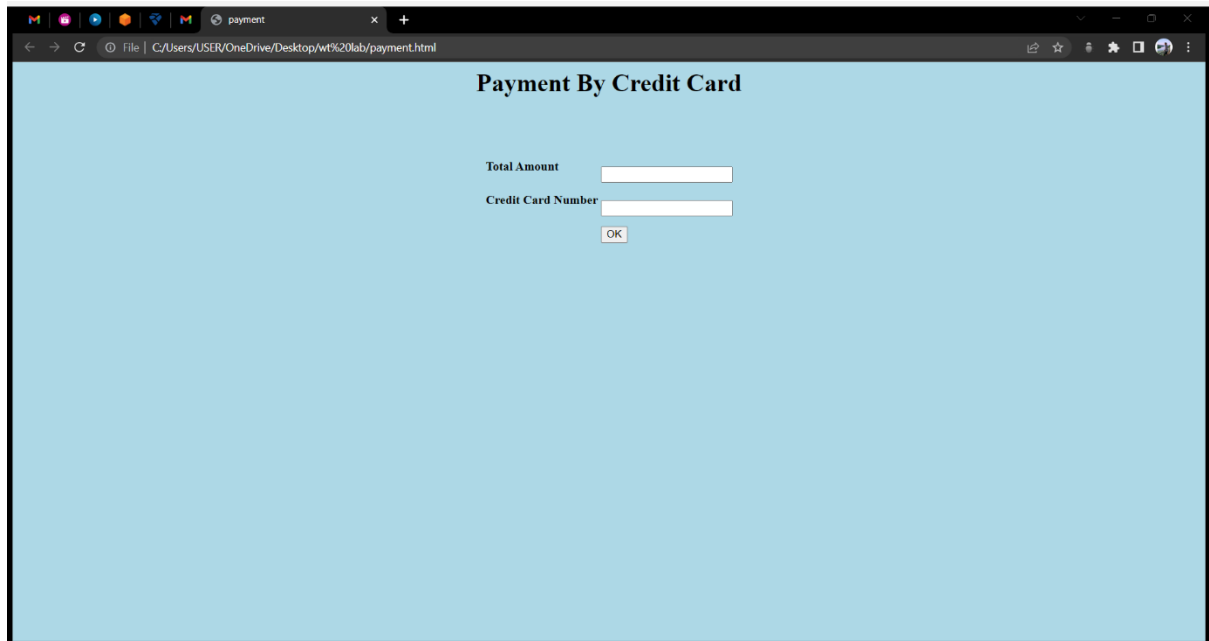
```
<html>
  <head>
    <title>order conformation</title>
  </head>
  <body bgcolor="lightblue">
    <center>
      <h1><b>BOOK SHOPPING</b></h1>
      <pre><strong>
        <h2>Your order Is Confirmed</h2>
      </strong></pre>
      <h2><b>THANK YOU FOR SHOPPING WITH US</b></h2>
    </center>
  </body>
</html>
```


//Userpro.html

```
<html>
  <head>
    <title>login page</title>
  </head>
  <body bgcolor="lightblue">
    <center><strong><h1> AMAZON SIGNUP</h1></strong></center>
    <form method="post" action="catalog.html" >
      <table align="left">
        <tr>
          <td><h4>Username</td>
          <td><input type="text" ></td>
        <tr>
          <td><h4>Password</td>
          <td><input type="password"></td>
        </tr>
        <tr>
          <td><h4>Confirm password</td>
          <td><input type="password"></td>
        </tr>
        <tr>
          <td><h4>Male
          <input type="radio" name="sex" id="Male" /></td>
          <td><h4>Female
          <input type="radio" name="sex" id="Female" /></td>
        </tr>
        <tr>
          <td><h4>Address</td>
          <td><textarea name="address" rows=5 cols=19>
          </textarea>
          </td>
        <tr>
          <td><input type="submit" value="Submit" ></td>
          <td><input type="reset" value="Reset"></td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

Output:





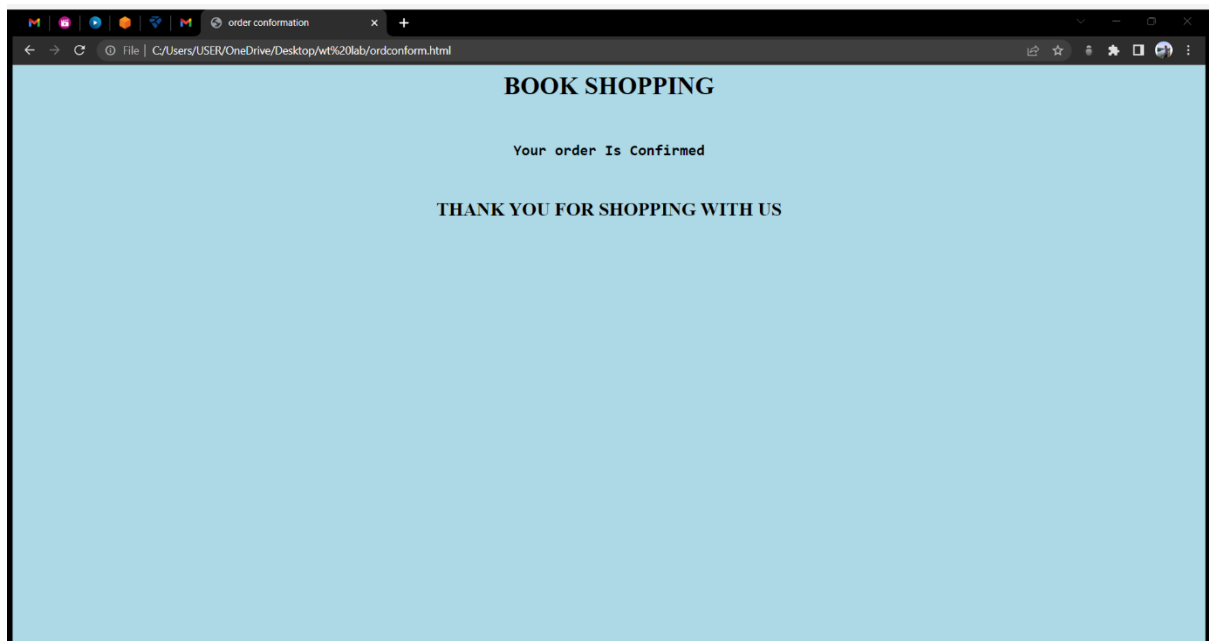
The screenshot shows a web browser window with a single tab titled 'payment'. The address bar displays the file path 'C:/Users/USER/OneDrive/Desktop/wt%20lab/payment.html'. The page has a light blue background and a title 'Payment By Credit Card' centered at the top. Below the title, there are two input fields: 'Total Amount' and 'Credit Card Number'. An 'OK' button is positioned below the 'Credit Card Number' field.

Payment By Credit Card

Total Amount

Credit Card Number

OK

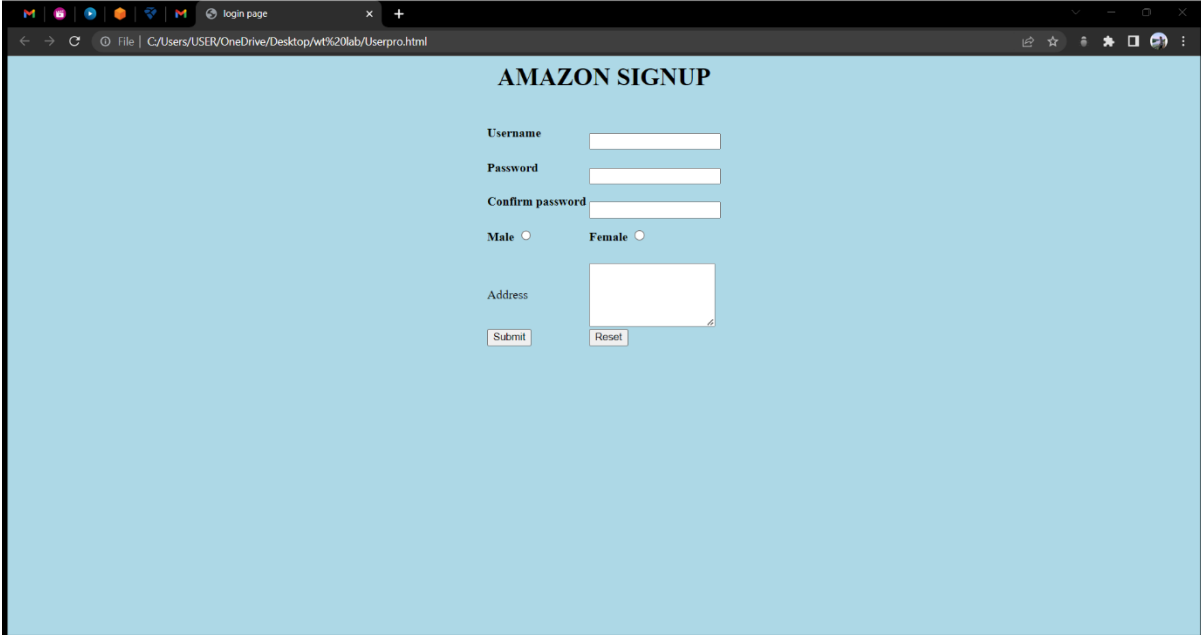


The screenshot shows a web browser window with a single tab titled 'order conformation'. The address bar displays the file path 'C:/Users/USER/OneDrive/Desktop/wt%20lab/ordconform.html'. The page has a light blue background and a title 'BOOK SHOPPING' centered at the top. Below the title, the text 'Your order Is Confirmed' is displayed. At the bottom of the page, the text 'THANK YOU FOR SHOPPING WITH US' is displayed.

BOOK SHOPPING

Your order Is Confirmed

THANK YOU FOR SHOPPING WITH US



The image shows a web browser window with a single tab titled 'login page'. The address bar displays the file path 'C:/Users/USER/OneDrive/Desktop/wt%20lab/Userpro.html'. The main content area has a light blue background and is titled 'AMAZON SIGNUP' in bold black text. Below the title, there is a registration form with the following elements:

- Username:** A text input field.
- Password:** A text input field.
- Confirm password:** A text input field.
- Gender:** Two radio buttons labeled 'Male' and 'Female'.
- Address:** A larger text input field.
- Buttons:** Two buttons at the bottom, 'Submit' and 'Reset'.

2. CYCLE - II (CSS, XML, HTML and bootstrap)

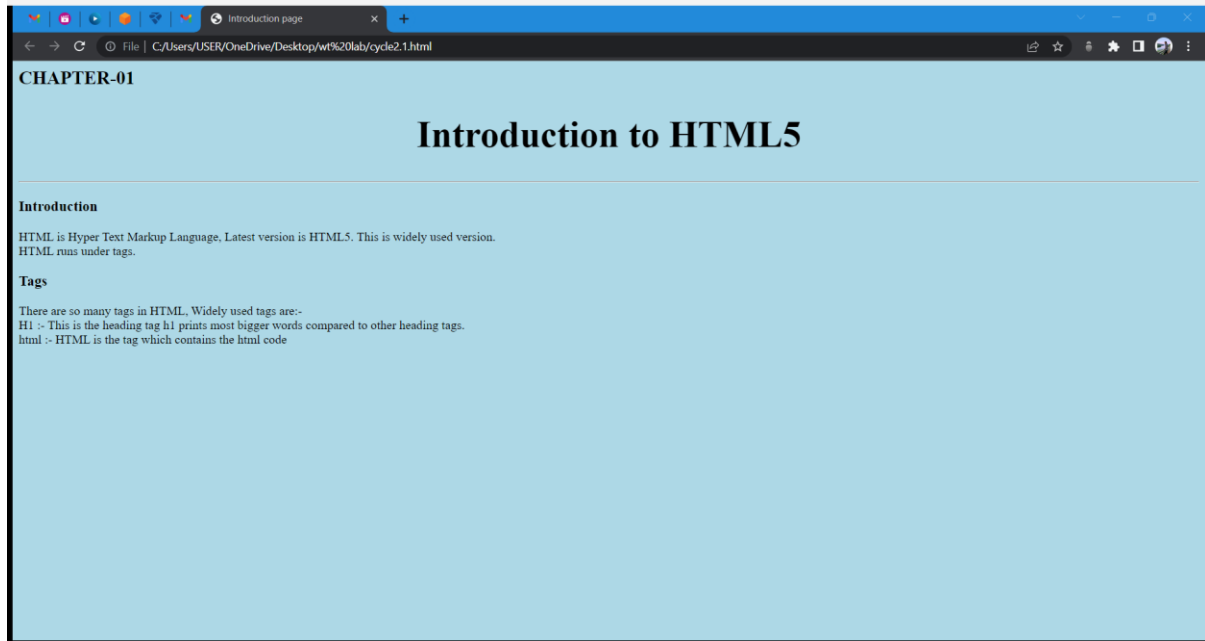
2.1 Design an XHTML that uses CSS to test External Style Sheets for the chapters of the text book.

```
<!DOCTYPE>
<html>
  <head>
    <meta charset="UTF-8" >
    <title>Introduction page</title>
    <link rel="stylesheet" href="1.css">
  </head>
  <body>
    <h2> CHAPTER-01</h2>
    <center>
      <h1>Introduction to HTML5</h1>
    </center>
    <hr>
    <h3>Introduction</h3>
    <p> HTML is Hyper Text Markup Language, Latest version is
    HTML5. This is widely used version. <br>HTML runs under tags.
    </p>
    <h3> Tags</h3>
    <p> There are so many tags in HTML, Widely used tags are:-
    <br/> H1 :- This is the heading tag h1 prints most bigger words
    compared to other heading tags.
    <br/> html  :- HTML is the tag which contains the html code
  </body>
</html>

//1.css

h1{
font:bold 2em Helvetica 'Times New Roman'
}
h2{
font:bold 1.8em Helvetica 'Times New Roman'
}
h3{
font:bold 1.2em Helvetica 'Times New Roman'
}
p{
font:1em 'Times New Roman'
}
body{background-color:lightblue}
```

Output:



2.2 Create and test an HTML document that describes nested ordered lists of cars. The outer list must have three entries: compact, midsize, and sports. Inside each of these three lists there must be two sublists of body styles. The compact- and midsize-car sublists are two door and four door; the sports-car sublists are coupe and convertible. Each body-style sublist must have at least three entries, each of which is the make and model of a particular car that fits the category. The outer list must use uppercase Roman numerals, the middle lists must use uppercase letters, and the inner lists must use Arabic numerals. The background color for the compact-car list must be pink; for the midsize-car list, it must be blue; for the sports-car list, it must be red. All the styles must be in a document style sheet.

```
<!DOCTYPE html>
<!--e36.html-->
<html lang = "en">
  <head>
    <title> Exercise 3.6 </title>
    <style type = "text/css">
      ol{list-style-type: upper-roman;}
      ol ol{list-style-type: upper-alpha;}
      ol ol ol{list-style-type: decimal;}
      li.pink{color:black}
      li.blue{color:blue}
      li.red{color:red}
    </style>
    <meta charset = "utf-8" />
  </head>
  <body bgcolor="skyblue">
    <ol>
      <li class = "black"> Compact Cars
      <ol>
        <li> Two door
        <ol>
          <li> Hyundai Accent </li>
          <li> Chevrolet Cobalt </li>
          <li> Honda Civic </li>
        </ol>
        </li>
        <li> Four door
        <ol>
          <li> Hyundai Accent </li>
          <li> Chevrolet Cobalt </li>
          <li> Honda Civic </li>
        </ol>
        </li>
      </ol>
      <li class = "blue"> Midsize Cars
      <ol>
        <li> Two door
        <ol>
          <li> Honda Accord </li>
```

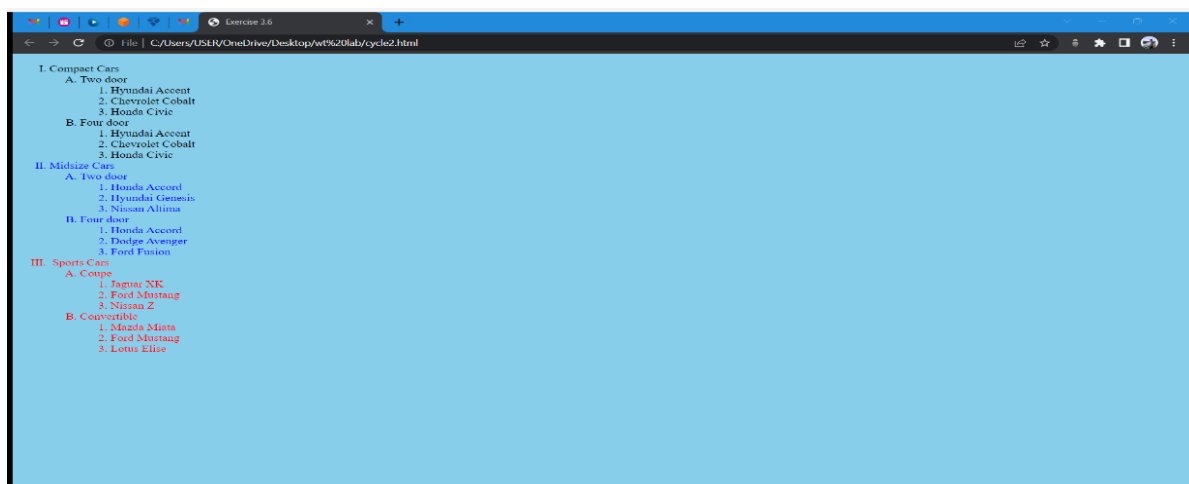


```

        <li> Hyundai Genesis </li>
        <li> Nissan Altima </li>
    </ol>
</li>
<li> Four door
<ol>
<li> Honda Accord </li>
<li> Dodge Avenger </li>
<li> Ford Fusion </li>
</ol>
</li>
</ol>
</li>
<li class = "red"> Sports Cars
<ol>
<li> Coupe
<ol>
<li> Jaguar XK </li>
<li> Ford Mustang </li>
<li> Nissan Z </li>
</ol>
</li>
<li> Convertible
<ol>
<li> Mazda Miata </li>
<li> Ford Mustang </li>
<li> Lotus Elise </li>
</ol>
</li>
</ol>
</li>
</ol>
</body>
</html>

```

Output:



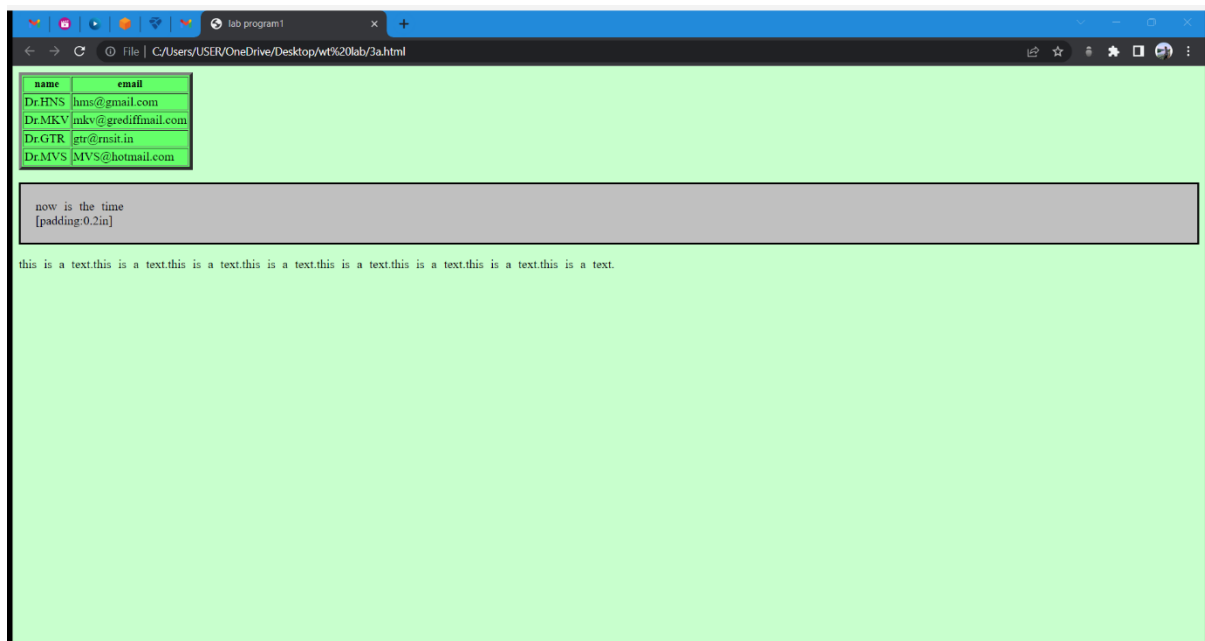
2.3 Design an XHTML that uses CSS to illustrate usage of table, borders, margin and padding.

```
<?XML version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head> <!--lab1.html-->
    <link rel="stylesheet" type="text/css"href="mystyle.css"/>
    <title> lab program1 </title>
  </head>
  <body>
    <table border="4" wifith="5%"><!--table with name and email-->
      <tr>
        <th>name</th>
        <th>email</th>
      </tr>
      <tr>
        <td>Dr.HNS</td>
        <td>hms@gmail.com</td>
      </tr>
      <tr>
        <td>Dr.MKV</td>
        <td>mkv@grediffmail.com</td>
      </tr>
      <tr>
        <td>Dr.GTR</td>
        <td>gtr@rnsit.in</td>
      </tr>
      <tr>
        <td>Dr.MVS</td>
        <td>MVS@hotmail.com</td>
      </tr>
    </table>
    <p class="one">
      now is the time<br>[padding:0.2in]
    </p>
    <p>
      <span>this is a text.</span>this is a text.this is a text.this
      is a text.this is a text.this is a text.this is a text.this is
      a text.</span>
    </p>
  </body>
</html>
```

```
//mystyle.css

p,table,li,
{
    font-family:"lucida calligary",arial,"sans serif";
    margin-left:10pt;
}
p{ word-spacing:5px;}
body{background-color:rgb(200,255,205);}
p,li,td{font-size:75p%;}
#td{padding:0.5cm;}
th
{
    text-align:center;
    font-size:85%;
}
h1,h2,h3,hr{color:#483d8b;}
table
{
    border-style:outset;
    background-color:rgb(100,255,105);
}
p.one{
padding:0.2in;
background-color:#C0C0C0;
border-style:solid;
}
```

Output:



2.4 Design an XML document to store information about a student in an engineering college SSIT. The information must include USN, Name, and Name of the College, Branch, Year of Joining, and email id. Make up sample data for 3 students and produce a display of the raw XML document. Also create a CSS style sheet for the XML document and use it to create a display that document.

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" href="styles.css" />
  </head>
  <body>
    <students>
      <student>
        <USN>USN:001</USN>
        <name>NAME:SANTOSH</name>
        <college>COLLEGE:SSIT</college>
        <year>YEAR:2015</year>
        <branch>BRANCH:Computer Science and Engineering</branch>
        <e-mail>E-Mail:santosh@gmail.com</e-mail>
      </student>
      <student>
        <USN>USN:002</USN>
        <name>NAME:MANORANJAN</name>
        <college>COLLEGE:SSIT</college>
        <branch>BRANCH:Information Science and Engineering</branch>
        <e-mail>E-Mail:manoranjana@gmail.com</e-mail>
        <year>YEAR: 2015</year>
      </student>
      <student>
        <USN>USN:101</USN>
        <name>NAME:CHETHAN</name>
        <college>COLLEGE SSIT</college>
        <branch>BRANCH:Electronics and Communication Engineering
        </branch>
        <year>YEAR:2015</year>
        <e-mail>E-Mail:chethan@gmail.com</e-mail>
      </student>
    </students>
  </body>
</html>

//styles.css
student {display: block; margin-top: 10px; color: Navy;}
USN{display:block; margin-left: 10px; font-size: 14pt; color: Red;}
name{display:block; margin-left:20px; font-size: 14pt; color:Blue; }
college{display:block; margin-left:20px; font-size:12pt; color:Maroon; }
branch{display:block; margin-left:20px; font-size:12pt; color: Purple; }
year{display:block; margin-left: 20px; font-size: 14pt; color: Green;}
e-mail{display:block; margin-left:20px; font-size:12pt; color:Blue;}
```

Output:

```
<html>
  <head>
    <link rel="stylesheet" href="styles.css"/>
  </head>
  <body>
    <students>
      <student>
        <USN>USN:001</USN>
        <name>NAME:SANTOSH</name>
        <college>COLLEGE:SSIT</college>
        <year>YEAR:2015</year>
        <branch>BRANCH:Computer Science and Engineering</branch>
        <e-mail>E-Mail:santosh@gmail.com</e-mail>
      </student>
      <student>
        <USN>USN:002</USN>
        <name>NAME:MANORANJAN</name>
        <college>COLLEGE:SSIT</college>
        <branch>BRANCH:Information Science and Engineering</branch>
        <e-mail>E-Mail:manoranjan@gmail.com</e-mail>
        <year>YEAR:2015</year>
      </student>
      <student>
        <USN>USN:101</USN>
        <name>NAME:CHETHAN</name>
        <college>COLLEGE:SSIT</college>
        <branch>BRANCH:Electronics and Communication Engineering</branch>
        <year>YEAR:2015</year>
        <e-mail>E-Mail:chethan@gmail.com</e-mail>
      </student>
    </students>
  </body>
</html>
```

2.5 Write a program to design webpage using frameworks.

How to install and run first bootstrap program.

- YouTube Link: <https://www.youtube.com/watch?v=UolbtLgWlcg>.
- Official Website: <https://getbootstrap.com>
- For documentation: <https://getbootstrap.com/docs/5.3/getting-started/introduction/>
- For examples: <https://getbootstrap.com/docs/5.3/examples/>
- For download: <https://getbootstrap.com/docs/5.3/getting-started/download/>
- Download Visual Studio Code (IDE): <https://code.visualstudio.com> for windows environment.
- Get started by including Bootstrap's production-ready CSS and JavaScript via CDN without the need for any build steps.

1. **Create a new index.html file in your project root.** Include the `<meta name="viewport">` tag as well for proper responsive behavior in mobile device.

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width,
      initial-scale=1">
    <title>Bootstrap demo</title>
  </head>
  <body>
    <h1> Hello, world! </h1>
  </body>
</html>
```

2. **Include Bootstrap's CSS and JS.** Place the `<link>` tag in the `<head>` for our CSS, and the `<script>` tag for our JavaScript bundle (including Popper for positioning dropdowns, poppers, and tooltips) before the closing `</body>`.

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width,
      initial-scale=1">
```

```

<title>Bootstrap demo</title>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/
dist/css/bootstrap.min.css" rel="stylesheet" integrity="sh
a384-9ndCyUaIbzAi2FUVXJi0CjmCapSmO7SnpJef0486qhLnuZ2cdeRh
002iuK6FUUVM" crossorigin="anonymous">
</head>
<body>
  <h1>Hello, world!</h1>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0
/dist/js/bootstrap.bundle.min.js" integrity="sha384geWF76R
CwLtnZ8qwWowPQNguL3RmwHVBC9FhGdlKrxdiJJigb/j/68SIy3Te4Bkz
" crossorigin="anonymous"></script>
</body>
</html>

```

You can also include Popper and our JS separately. If you don't plan to use dropdowns, popovers, or tooltips, save some kilobytes by not including Popper.

```

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.8/dist/umd
/popper.min.js" integrity="sha384I7E8VVD/ismYTF4hNIPjVp/Zjvgyol6VFvRkX/v
R+Vc4jQkC+hVqc2pM8ODewa9r" crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootst
rap.min.js" integrity="sha384-fbbOQedDUMZ5KreZpsbe1LCZPVmfTnH7ois6mU1QK
+m14rQ112bGBq41eYeM/fS" crossorigin="anonymous"></script>

```

3. Hello, world! Open the page in your browser of choice to see your Bootstrapped page.

- Program can be executed either on the standalone environment or on the web server like live server.

2.6 Write an XML file which will display the book information which includes the following.

a. Title of the book

b. Author Name

c. ISBN number

d. Edition

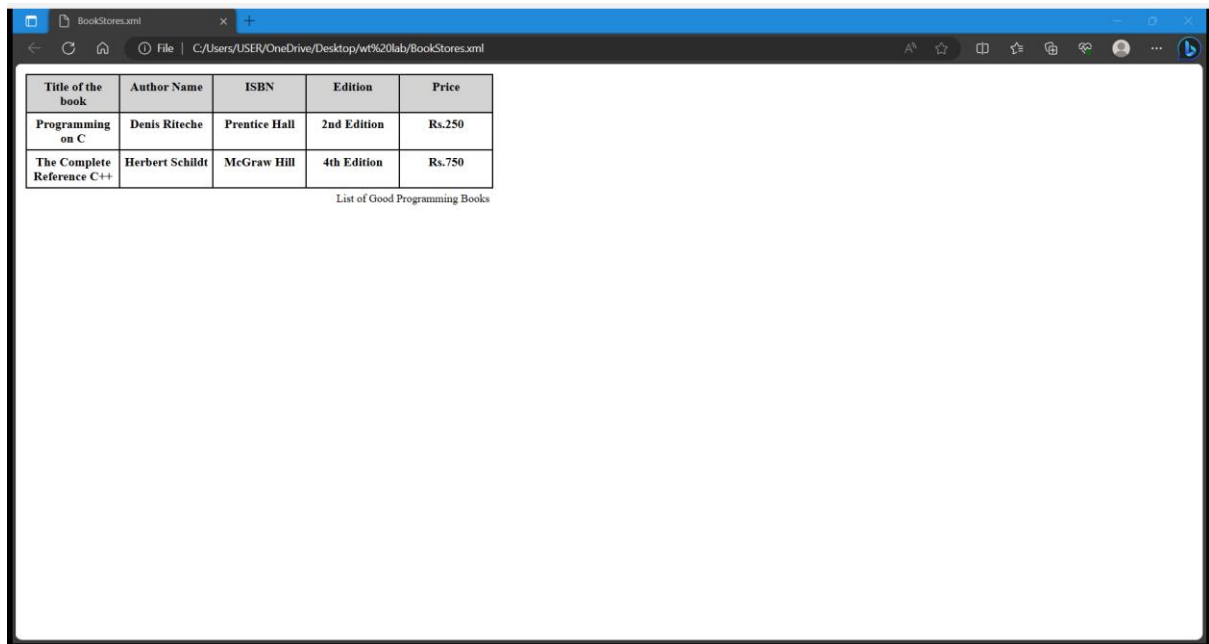
e. Price Display the XML file as follows: The content should be displayed in table. The header of the table should be in color GREY and the author name column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use CSS for the above purpose.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<?xml-stylesheet type="text/css" href="exercisel7-1.css"?>
<body>
  <table>
    <caption>
      List of Good Programming Books
    </caption>
    <thead>
      <tr>
        <th>Title of the book</th>
        <th>Author Name</th>
        <th>ISBN</th>
        <th>Edition</th>
        <th>Price</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Programming on C</td>
        <td>Denis Riteche</td>
        <td>Prentice Hall</td>
        <td>2nd Edition</td>
        <td>Rs.250</td>
      </tr>
      <tr>
        <td>The Complete Reference C++</td>
        <td>Herbert Schildt</td>
        <td>McGraw Hill</td>
        <td>4th Edition</td>
        <td>Rs.750</td>
      </tr>
    </tbody>
  </table>
</body>
```


//exercise17-1.css

```
body {
    display: block;
    margin: 13px;
}
table {
    display: table;
    width: 600px;
    caption-side: bottom;
    border: thin solid black;
    table-layout: fixed;
    border-spacing: 0;
}
col {
    display: table-column;
}
thead {
    display: table-header-group;
}
tbody {
    display: table-row-group;
}
tr {
    display: table-row;
}

th, td {
    display: table-cell;
    border: thin solid black;
    text-align: center;
    font-weight: bold;
    overflow: hidden;
}
th {
    background: lightgrey;
}
td {
    vertical-align: top;
}
caption {
    display: table-caption;
    font-size: 90%;
    text-align: right;
}
td, th, caption {
    padding: 5px;
}
```

Output:

Title of the book	Author Name	ISBN	Edition	Price
Programming on C	Denis Riteche	Prentice Hall	2nd Edition	Rs.250
The Complete Reference C++	Herbert Schildt	McGraw Hill	4th Edition	Rs.750

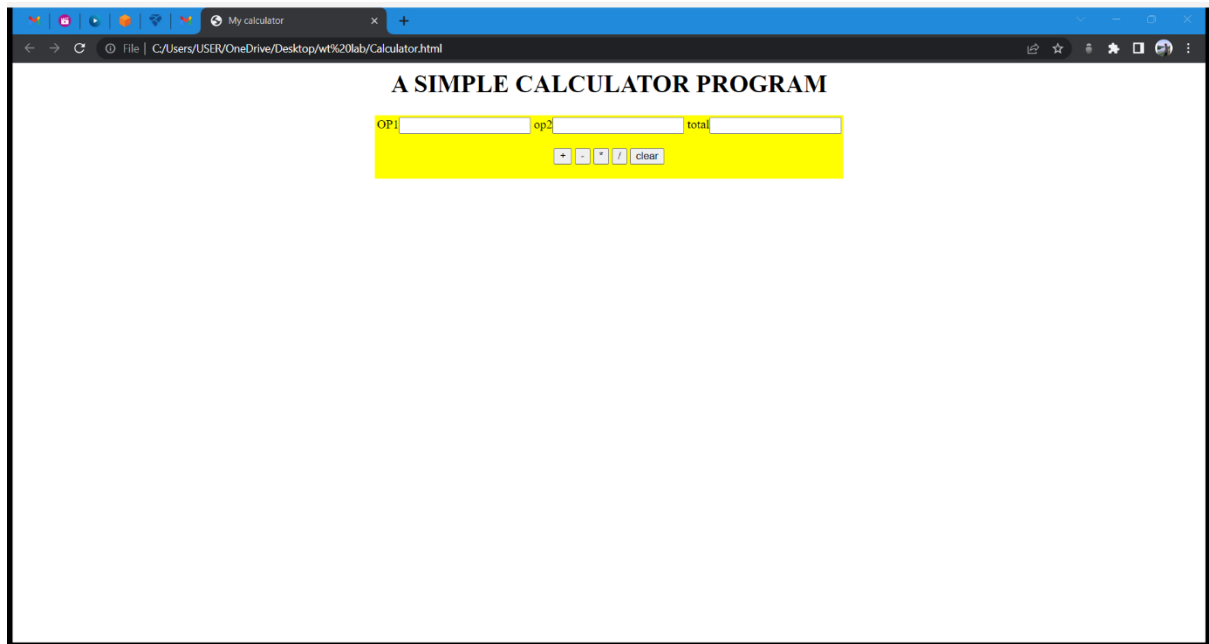
List of Good Programming Books

3. CYCLE - III (JavaScript)

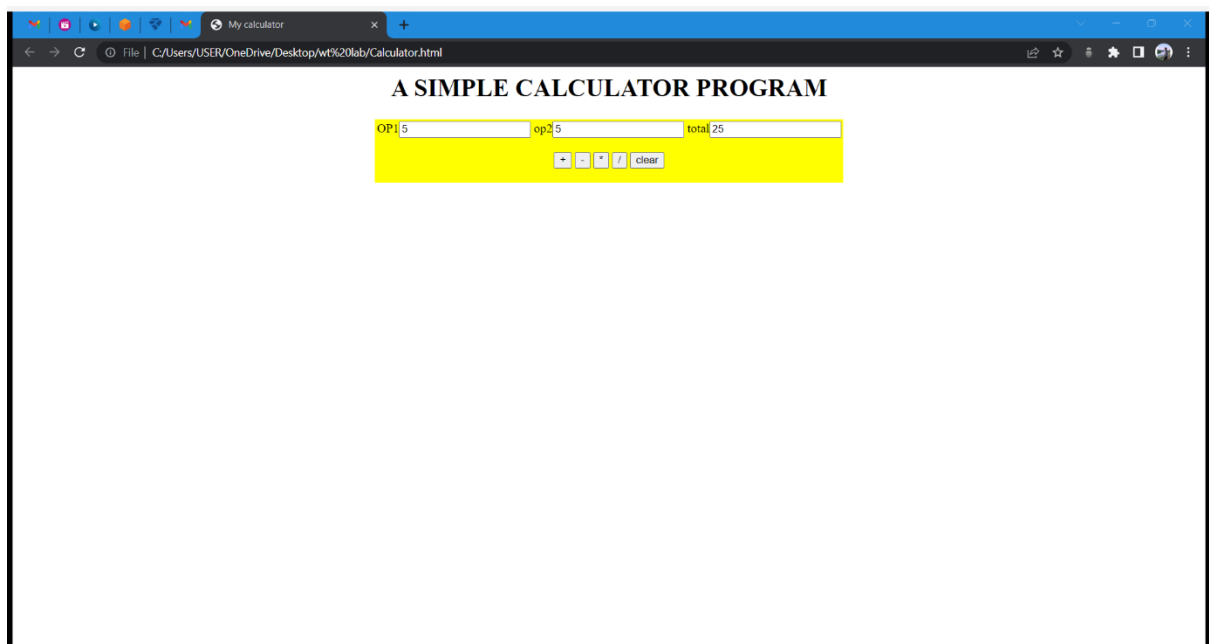
3.1 Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.

```
<html>
  <head>
    <title>My calculator</title>
    <script type="text/javascript">
      function call(click_id) {
        var v1=parseFloat(document.getElementById("ip1").value);
        var v2=parseFloat(document.getElementById("ip2").value);
        if(isNaN(v1) || isNaN(v2))
          alert("enter a valid number");
        else if(click_id=="add")
          document.getElementById("output").value=v1+v2;
        else if(click_id=="sub")
          document.getElementById("output").value=v1-v2;
        else if(click_id=="mul")
          document.getElementById("output").value=v1*v2;
        else if(click_id=="div")
          document.getElementById("output").value=v1/v2;
      }
    </script>
  </head>
  <body>
    <center>
      <h1> A SIMPLE CALCULATOR PROGRAM</h1>
      <table style="background-color:yellow" align=="center">
        <tr>
          <td>
            <form method="get" action="">
              <div width=50% align="center">
                <label>OP1<input type="text" id="ip1"/></label>
                <label>op2<input type="text" id="ip2"/></label>
                <label>total<input type="text" id="output"/></label>
              </div>
              <br>
              <div width=50% align="center">
                <input type="button" value="+" id="add" onclick=
                  "call(this.id)"/>
                <input type="button" value="-" id="sub" onclick=
                  "call(this.id)"/>
                <input type="button" value="*" id="mul" onclick=
                  "call(this.id)"/>
                <input type="button" value="/" id="div" onclick=
                  "call(this.id)"/>
                <input type="reset" value="clear"/>
              </div>
            </form>
          </td>
        </tr>
      </table>
    </center>
  </body>
</html>
```

Output:



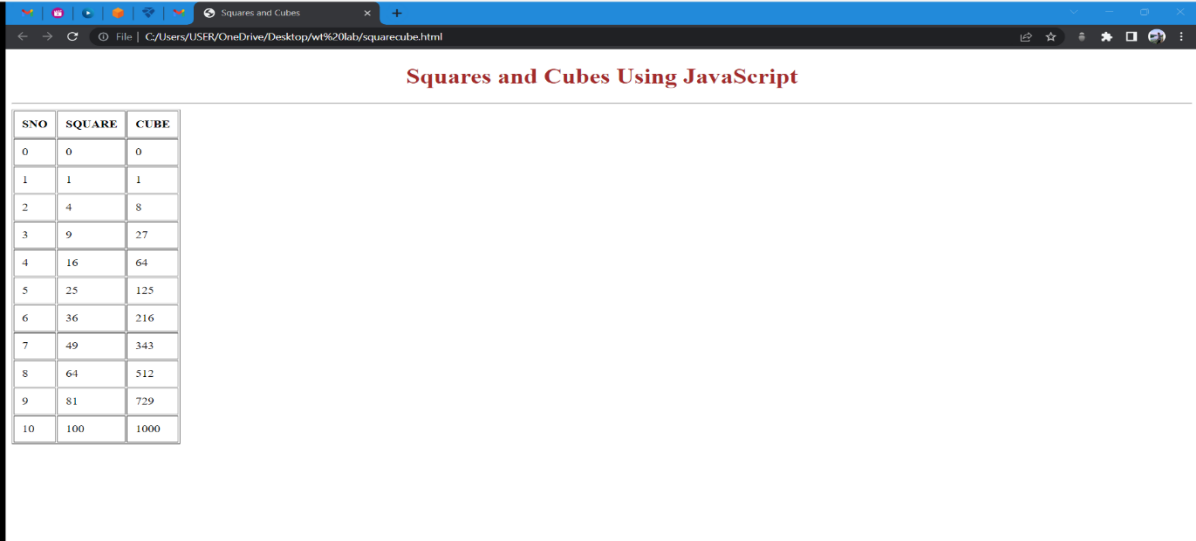
//Multiplication



3.2 Write a JavaScript that calculates the squares and cubes of the numbers from 0 to 10 and outputs XHTML text that displays the resulting values in an XHTML table format.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Squares and Cubes</title>
  </head>
  <body onload="sqrub();" >
    <h1 style="text-align: center;color: brown;">Squares and Cubes
    Using JavaScript</h1>
    <hr>
    <div id="tab">
    </div>
    <script>
      function sqrub()
      {
        var result = "<table border='1'
cellpadding='10'><tr><th>SNO</th><th>SQUARE</th><th>CUBE</th></tr>";
        var i,sqr=0,cube=0;
        for(i=0;i<=10;i++)
        {
          sqr = i*i;
          cube = Math.pow(i,3);
          result +=
            "<tr><td>"+i+"</td><td>"+sqr+"</td><td>"+cube+"</td></tr>";
        }
        result += "</table>";
        document.getElementById("tab").innerHTML = result;
      }
    </script>
  </body>
</html>
```

Output:



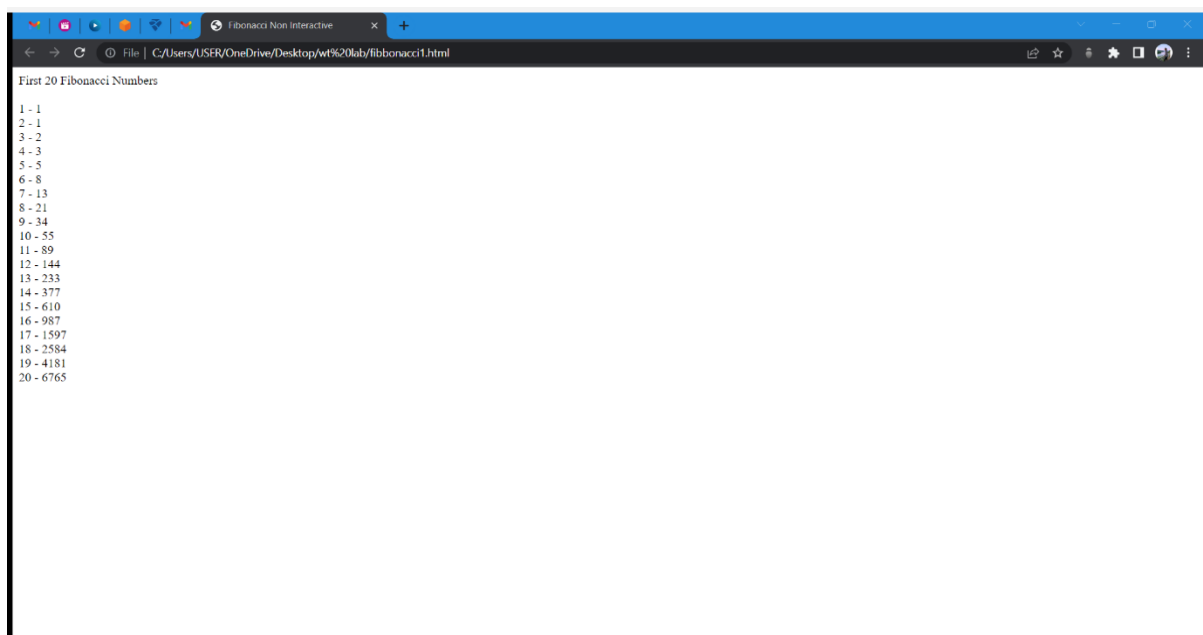
SNO	SQUARE	CUBE
0	0	0
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729
10	100	1000

3.3 Develop and demonstrate a XHTML file that includes JavaScript script for the following problems:

a. **Output:** The first 20 Fibonacci numbers, which are defined as in the sequence 1, 1, 2, 3, where each number in the sequence after the second is the sum of the two previous numbers.

```
<!DOCTYPE html>
<html lang = "en">
  <head>
    <title> Fibonacci Non Interactive </title>
    <meta charset = "utf-8" />
  </head>
  <body>
    <script type = "text/javascript">
      <!--
      var first = 1, second = 1, next, count;
      document.write("First 20 Fibonacci Numbers <br/><br/>");
      document.write("1 - 1 <br/> 2 - 1 <br/>");
      for (count = 3; count <= 20; count++)
      {
        next = first + second;
        document.write(count + " - " + next + "<br/>");
        first = second;
        second = next;
      }
      // -->
    </script>
  </body>
</html>
```

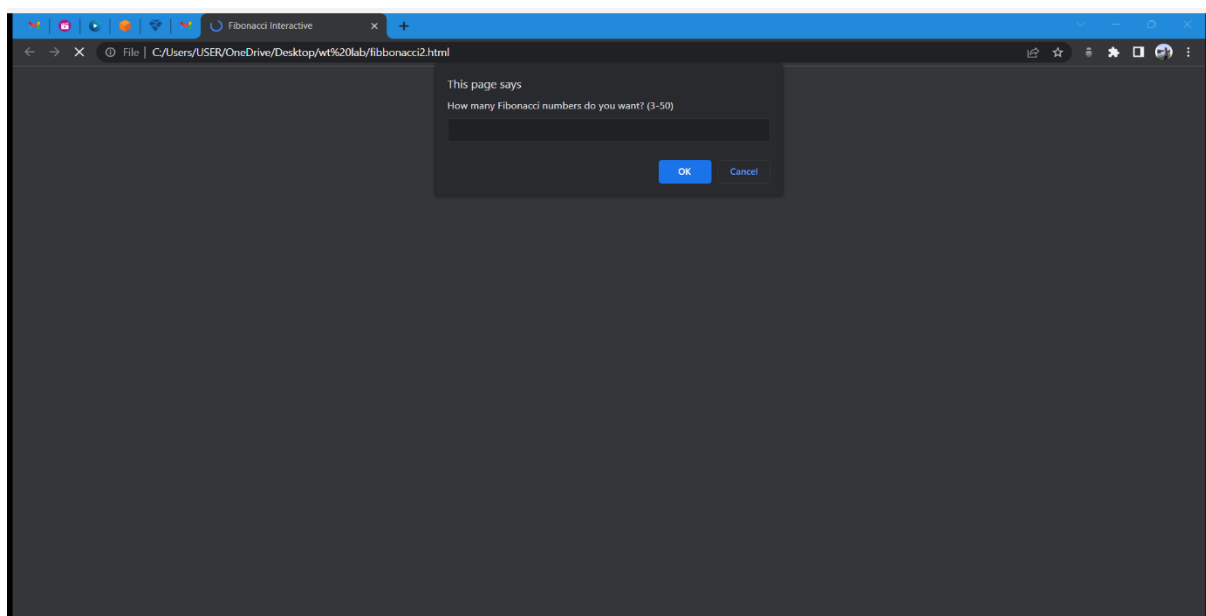
Output:

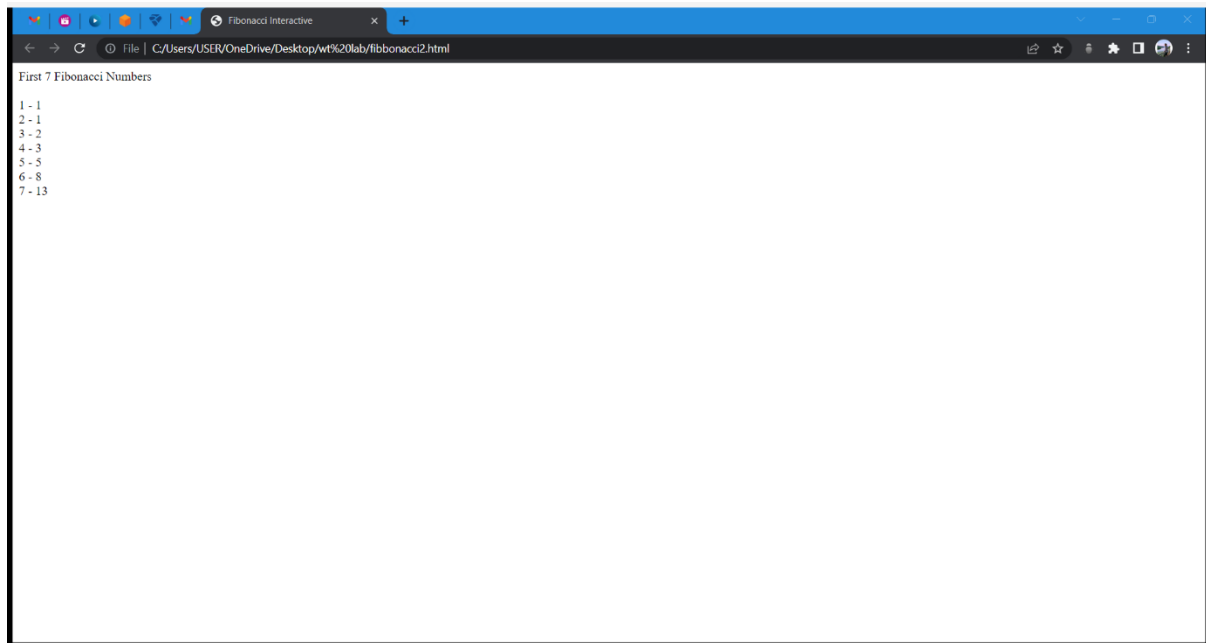


b. Modify the script to use prompt to input a number n that is the number of the Fibonacci number required as output.

```
<!DOCTYPE html>
<html lang = "en">
  <head>
    <title> Fibonacci Interactive </title>
    <meta charset = "utf-8" />
  </head>
  <body>
    <script type = "text/javascript">
      <!--
      var first = 1, second = 1, next, count; number = prompt("How
      many Fibonacci numbers do you want? (3-50)", "");
      if (number >= 3 && number <= 50)
      {
        document.write("First " + number + " Fibonacci Numbers
        <br /><br />");
        document.write("1 - 1 <br/> 2 - 1 <br />");
        for (count = 3; count <= number; count++)
        {
          next = first + second;
          document.write(count + " - " + next + "<br />");
          first = second;
          second = next;
        }
      }
      else
        document.write("Error - number not in the range 3-50");
      //-->
    </script>
  </body>
</html>
```

Output:

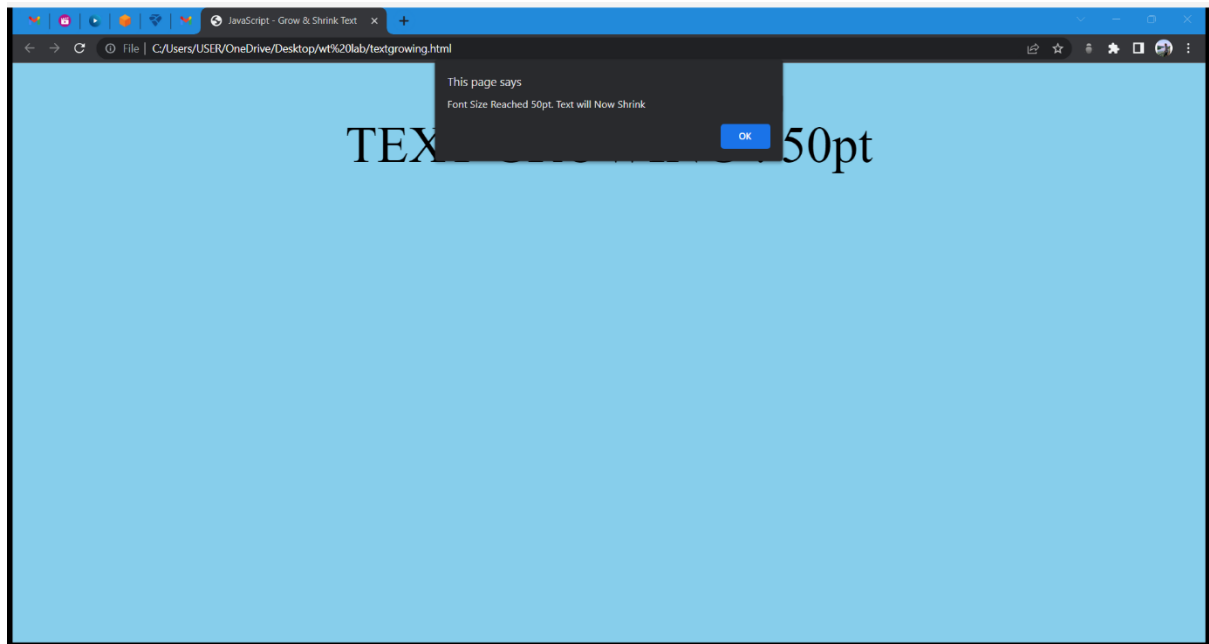




3.4 Write a JavaScript code that displays text “TEXT-GROWING” with increasing font size in the interval of 100ms in RED COLOR, when the font size reaches 50pt it displays “TEXT-SHRINKING” in BLUE color. Then the font size decreases to 5pt.

```
<!DOCTYPE html>
<html>
  <head>
    <title>JavaScript - Grow & Shrink Text</title>
    <center>
      <script language = "JavaScript">
        var c = 0, t1;
        function start()
        {
          t1 = window.setInterval("incr()", 100);
        }
        function incr() {
          c = c + 1;
          t.innerHTML = "TEXT-GROWING : " + c + "pt";
          t.style.fontSize = c + "pt";
          window.status = c;
          if (c > 50) {
            window.clearTimeout(t1);
            alert("Font Size Reached 50pt. Text will Now Shrink");
            t1 = window.setInterval("decr()", 100);
          }
          t.style.color = "black";
        }
        function decr() {
          c = c - 1;
          t.innerHTML = "TEXT-SHRINKING: " + c + "pt";
          t.style.fontSize = c + "pt";
          window.status = c;
          if (c == 5) {
            window.clearTimeout(t1);
          }
          t.style.color = "blue";
        }
      </script>
    <center>
  </head>
  <body bgcolor="skyblue" onload="start()">
    <center>
      <p id="t"></p>
    </center>
  </body>
</html>
```

Output:



//Text shrinking



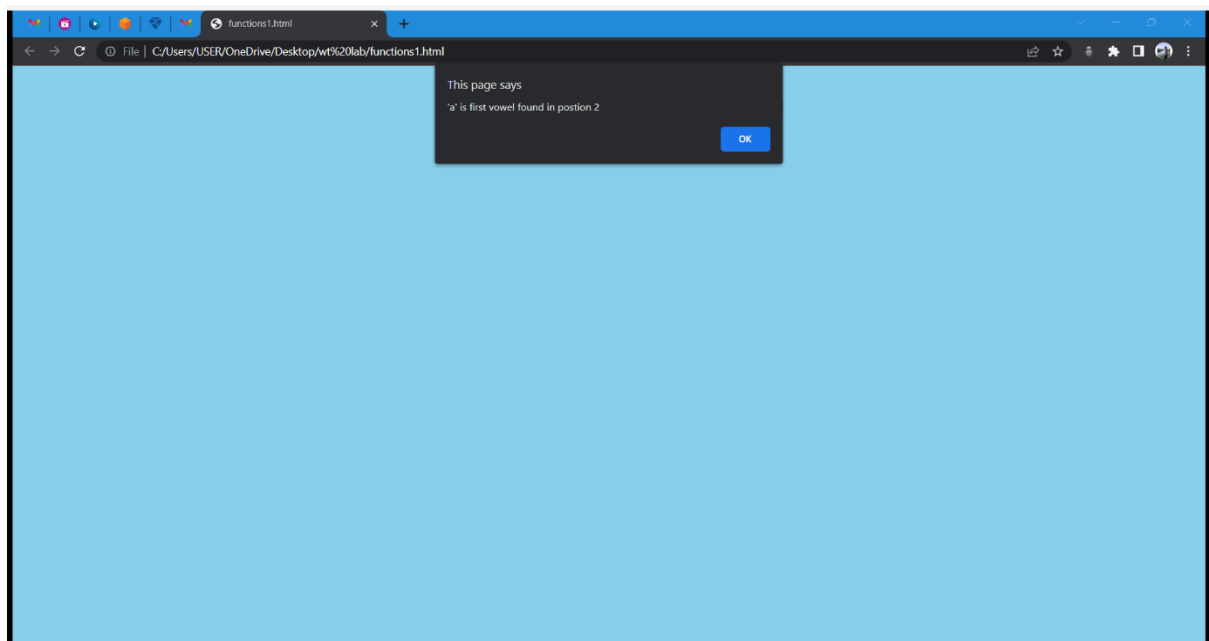
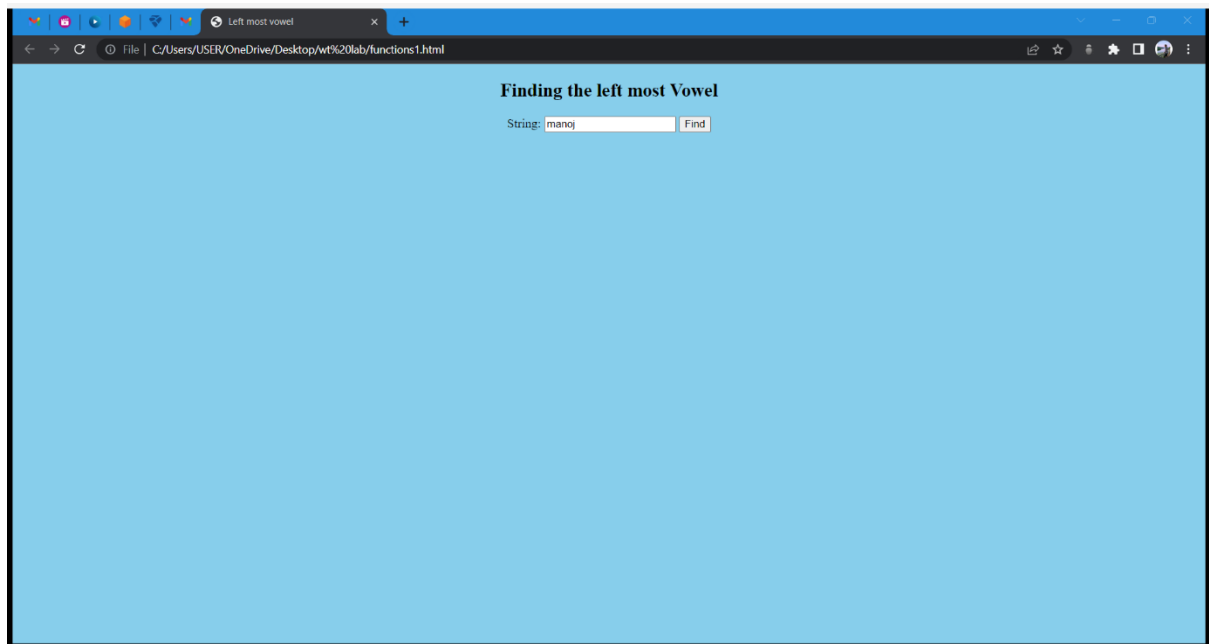
3.5 Develop and demonstrate a XHTML file that includes JavaScript script that uses functions for the following problems:

a. Parameter: A string Output: The position in the string of the leftmost vowel.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title> Left most vowel </title>
  </head>
  <body bgcolor="skyblue">
    <script type="text/javascript">
      function disp(str) {
        var reg=/^[a-zA-Z]+$/;
        if(!str.value.match(reg)) {
          alert("Enter alphabets only!")
          return false
        }
        var i,b
        b=str.value
        document.write ( str , str.value )
        for(i=0;i<str.value.length;i++) {
          switch(b[i]) {
            case "a":
            case "A":
            case "e":
            case "E":
            case "i":
            case "I":
            case "o":
            case "O":
            case "u":
            case "U":
              alert( "\""+b[i]+"\" is
                first vowel found in
                postion "+(i+1));
              exit(0);
            default:
              break;
          }
        }
        if(i>=str.value.length)
          alert("No vowels found. :(")
      }
    </script>
    <form action="">
      <center>
        <h2> Finding the left most Vowel </h2>
        <p>
          String: <input type="text" name="str" />
          <input type="button" value="Find"
            onclick="disp(str)" />
        </p>
      </center>
    </form>
  </body>
```

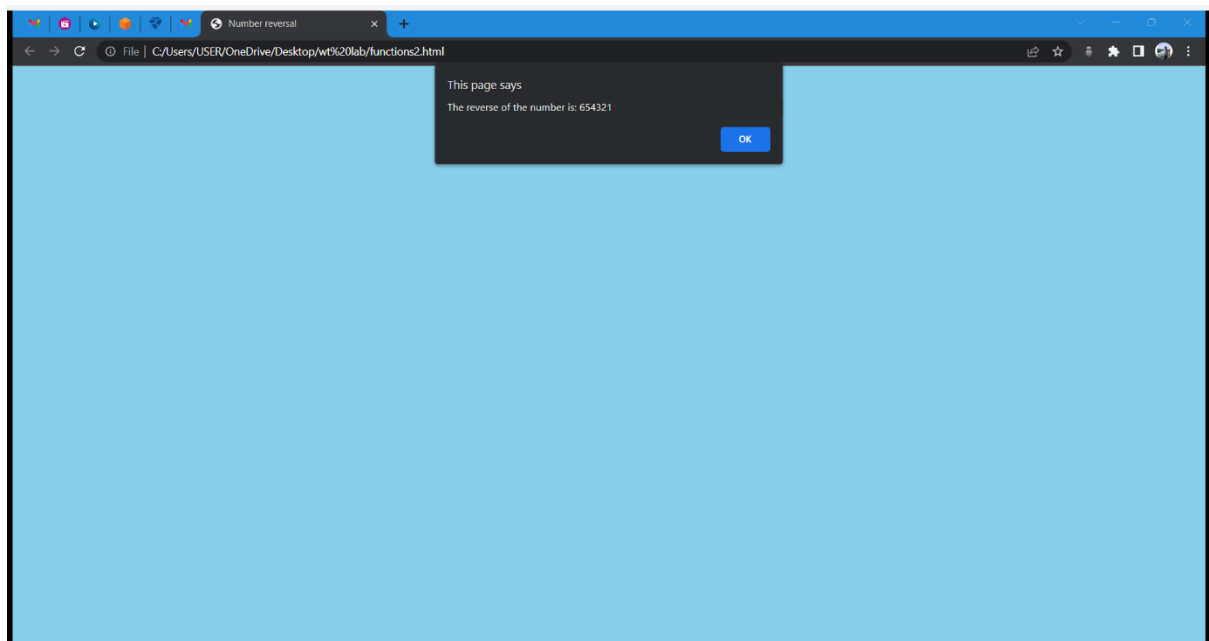
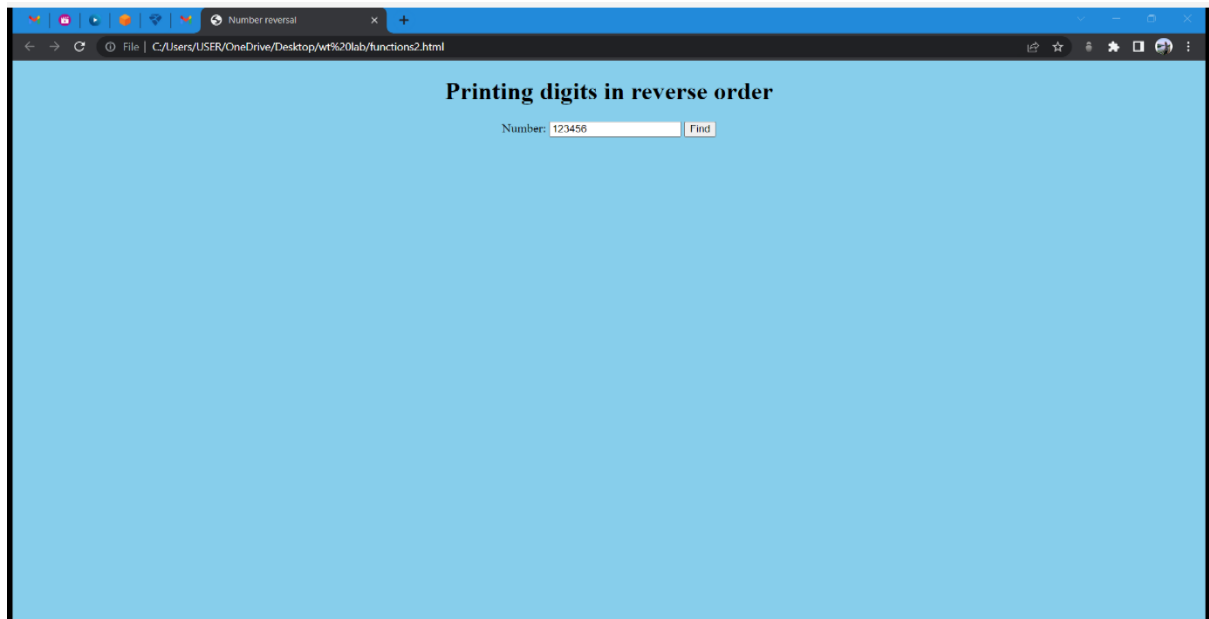
```
</html>
```

Output:



b. Parameter: A number Output: The number with its digits in the reverse order.

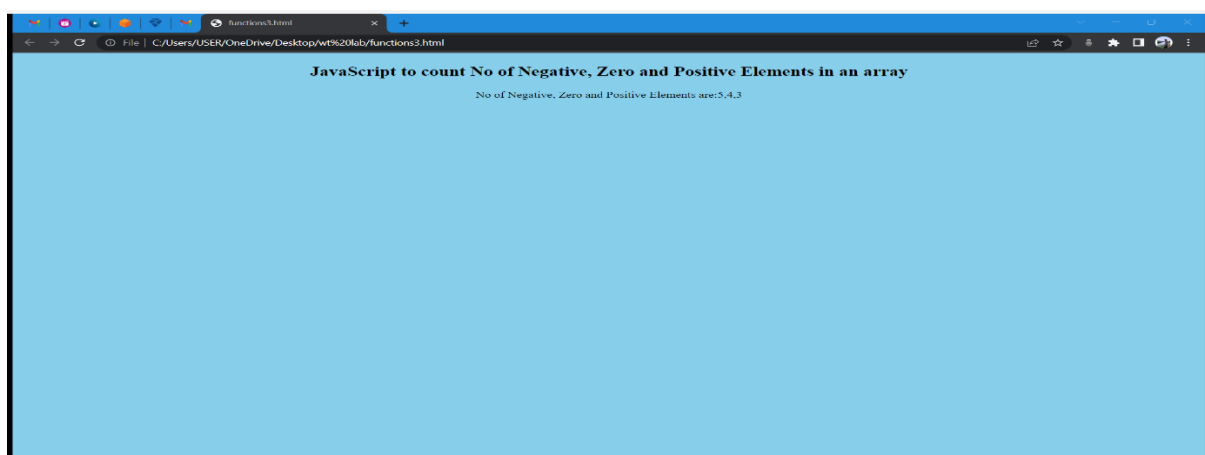
```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>Number reversal</title>
  </head>
  <body bgcolor="skyblue">
    <center>
      <h1>Printing digits in reverse order</h1>
      <script type="text/javascript">
        function disp(str) {
          var n=0,r=0,res=0
          n=str.value
          if( n>0 || n==0 ){
            while(n!=0){
              r=n%10
              n=Math.floor(n/10)
              res=res*10+r
            }
            alert("The reverse of the number is: "+res)
          }
          else
            alert("Enter a valid number")
        }
      </script>
      <form>
        <p>
          Number: <input type="text" name="str" />
          <input type="button" value="Find" onclick="disp(str)" />
        </p>
      </form>
    </center>
  </body>
</html>
```

Output:

c. Parameter: An array of numbers. Output: The numbers of negative elements, zeros and values greater than zero in the given array

```
<!DOCTYPE html>
<html>
  <body bgcolor="skyblue">
    <center>
      <h2>
        JavaScript to count No of Negative, Zero and Positive
        Elements in an array
      </h2>
      <script>
        function counter(ar){
          var num,array1=[0,0,0];
          for (i=0;i<ar.length;i++) {
            switch (ar[i]<0) {
              case true :
                array1[0]++;
                break;
              case false :
                if (ar[i]==0)
                  array1[1]++;
                else
                  array1[2]++;
                break;
              default :
                break;
            }
          }
          return(array1);
        }
        var ar1=[];
        var ar=[-1,-2,-3,0,0,5,12,0,-10, 0 , 5 , -20];
        ar1=counter(ar);
        document.write ("No of Negative, Zero and Positive
        Elements are:" + ar1);
      </script>
    </center>
  </body>
</html>
```

Output:



4. Cycle - IV (HTML & JAVA SCRIPT)

Write an HTML document to provide a form that collects Customer's name and phone number.

a. The phone number must be in the form ddd-ddd-dddd.

b. The name should be in the form is last-name, first-name, middle-initial, where the first and last names must begin with upper case letters and have at least one lower case letter. Both must be followed immediately by a comma and possibly, one space. The middle initial must be uppercase and may or may not be followed by a period. There can be no characters before or after the whole name. Write a JavaScript that checks the submitted Telephone number and Name to be sure that it conforms to the required formats and then return a response indicating whether the number and name was correct.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Illustrate form validation</title>
    <meta charset="utf-8" />
    <script type="text/javascript" src="validator.js"></script>
  </head>
  <body>
    <h3>Customer Information</h3>
    <form action="">
      <p>
        <label><input type="text" id="custName" />Name(last name,first
        name,middle initial)
      </label>
      <br /><br />
      <label><input type="text" id="phone" />Phone Number(ddd-ddd-
      dddd)</label>
      <br /><br />
      <input type="reset" id="Reset" />
      <input type="submit" id="Submit" />
    </p>
    </form>
    <script type="text/javascript" src="validatorr.js"></script>
  </body>
</html>
```

//validator.js

```
function chkName() {
  var myName=document.getElementById("custName");
  var pos=myName.value.search(/^[A-Z][a-z]+,[?][A-Z][a-z]+,[?][A-Z]\.?$)/);
  if(pos!=0)
  {
    alert("The name you entered("+myName.value+")is not in the
    correct form.\n"+"The correct form is:"+last-name,first-name,middle-
    initial\n"+"Please go back annd fix your name");
    return false;
  }else
    return true;
}

function chkPhone() {
  var myPhone=document.getElementById("phone");
```

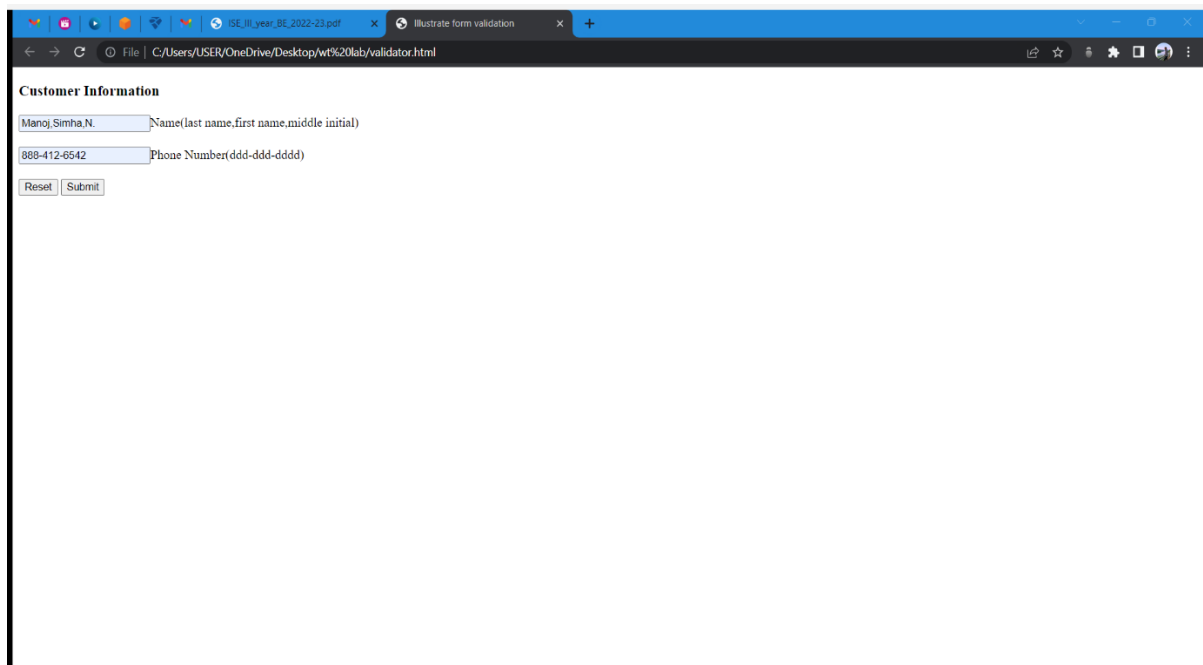


```
var pos=myPhone.value.search(/^d{3}-d{3}-d{4}$/);
if(pos!=0)
{
    alert("The phone number you entered("+myPhone.value+")is not in
the correct form.\n"+"The correct form is:ddd-ddd-dddd\n"+"Please go back
annd fix your phone number");
return false;
}else
    return true;
}
```

//validator.js

```
document.getElementById("custName").onchange=chkName;
document.getElementById("phone").onchange=chkPhone;
```

Output:



The screenshot shows a web browser window with the address bar displaying 'C:/Users/USER/OneDrive/Desktop/wt%20lab/validator.html'. The page content is titled 'Customer Information' and contains a form with two input fields. The first field is labeled 'Name(last name,first name,middle initial)' and contains the text 'Manoj_Simha,N.'. The second field is labeled 'Phone Number(ddd-ddd-dddd)' and contains the text '888-412-6542'. Below these fields are two buttons: 'Reset' and 'Submit'.

The screenshot shows a web browser window with the address bar displaying "C:/Users/USER/OneDrive/Desktop/wt%20lab/validator.html?". The page title is "Illustrate form validation". The form is titled "Customer Information" and contains two input fields: "Name(last name,first name,middle initial)" and "Phone Number(ddd-ddd-dddd)". The "Name" field contains "Manoj,Simha,N" and the "Phone Number" field contains "8884126542". Below the fields are "Reset" and "Submit" buttons. A dark modal box is displayed over the form, containing the following text: "This page says", "The phone number you entered(8884126542)is not in the correct form.", "The correct form is:ddd-ddd-dddd", "Please go back andnd fix your phone number", and an "OK" button.

The screenshot shows the same web browser window as above, but with the "Name" field containing "manoj" and the "Phone Number" field empty. The "Reset" and "Submit" buttons are still present. A dark modal box is displayed over the form, containing the following text: "This page says", "The name you entered(manoj)is not in the correct form.", "The correct form is:last-name,first-name,middle-initial", "Please go back andnd fix your name", and an "OK" button.

4.2 Develop and test an HTML document that has checkboxes for apple (59 cents each), orange (49 cents each), and banana (39 cents each), along with a Submit button. Each of the checkboxes should have its own onclick event handler. These handlers must add the cost of their fruit to a total cost. An event handler for the Submit button must produce an alert window with the message your total cost is\$xxx, where xxx is the total cost of the chosen fruit, including 5 percent sales tax. This handler must return false (to avoid actual submission of the form data).

```
<!DOCTYPE html>
<html lang = "en">
  <head>
    <title> Orders </title>
    <script type = "text/javascript" src= "EventHandler.js"
    ></script>
    <meta charset = "utf-8" />
  </head>
  <body>
    <h3> Order Form </h3>
    <form name = "orderForm" onSubmit = "finish()">
      <p>
        <label>
          <input type = "text" name = "apples" size = "3" onChange =
            "appleHandler()" /> Apples</label>
        </p>
        <p>
          <label>
            <input type = "text" name = "oranges" size = "3" onChange
              ="orangeHandler()" /> Oranges</label>
          </p>
          <p>
            <label>
              <input type = "text" name = "bananas" size = "3" onChange =
                "bananaHandler()" /> Bananas</label>
            </p>

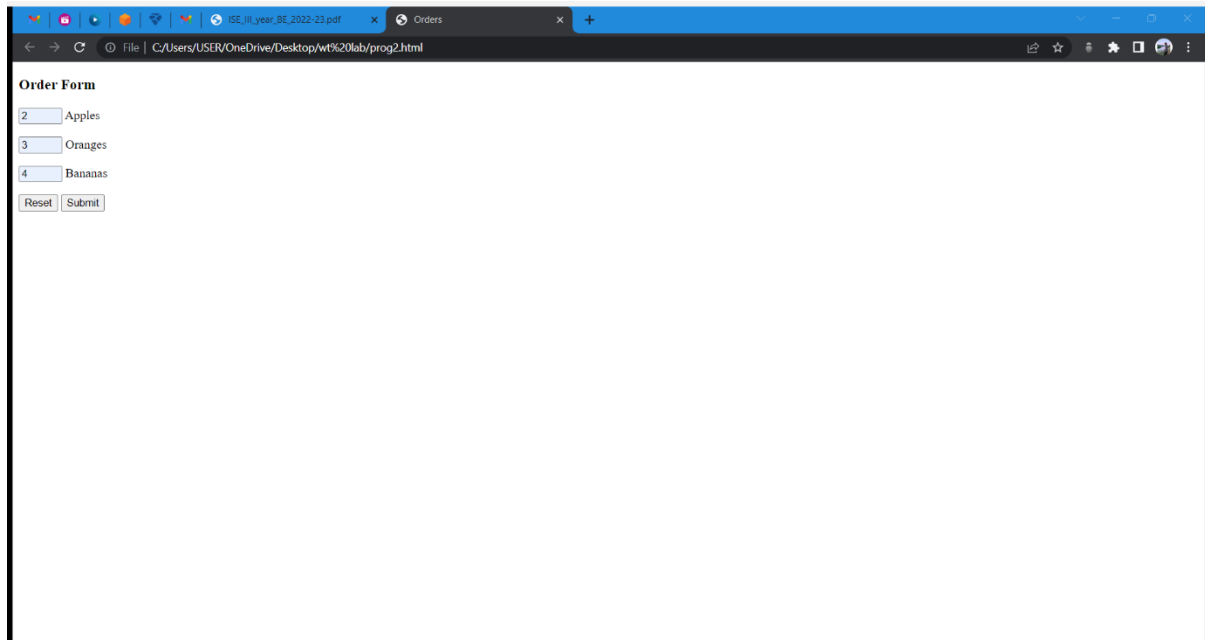
            <p>
              <input type = "reset" name = "reset" />
              <input type = "submit" name = "submit" />
            </p>
          </form>
        </body>
      </html>
```

//EventHandler.js

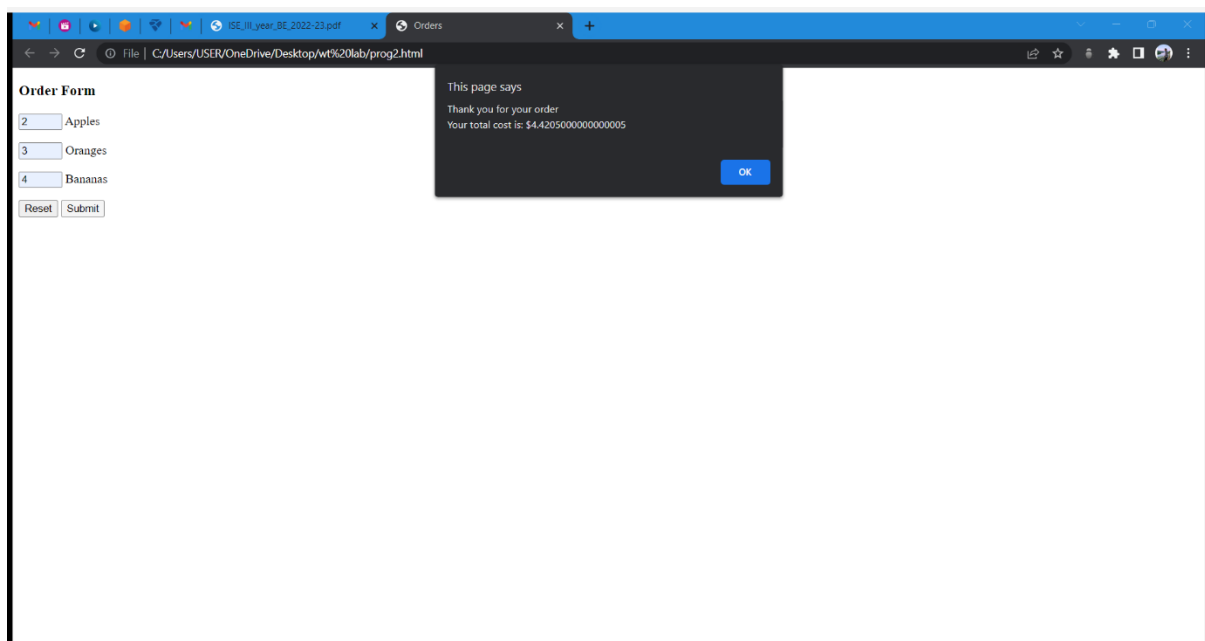
```
var total = 0;
function appleHandler() {
  var number = document.orderForm.apples.value;
  total = total + number * 0.59;
}
function orangeHandler() {
  var number = document.orderForm.oranges.value;
  total = total + number * 0.49;
}
```

```
function bananaHandler() {  
var number = document.orderForm.bananas.value;  
total = total + number * 0.39;  
}  
function finish() {  
total = total * 1.05;  
alert("Thank you for your order \n" + "Your total cost is: $" + total +  
"\n");  
}
```

Output:



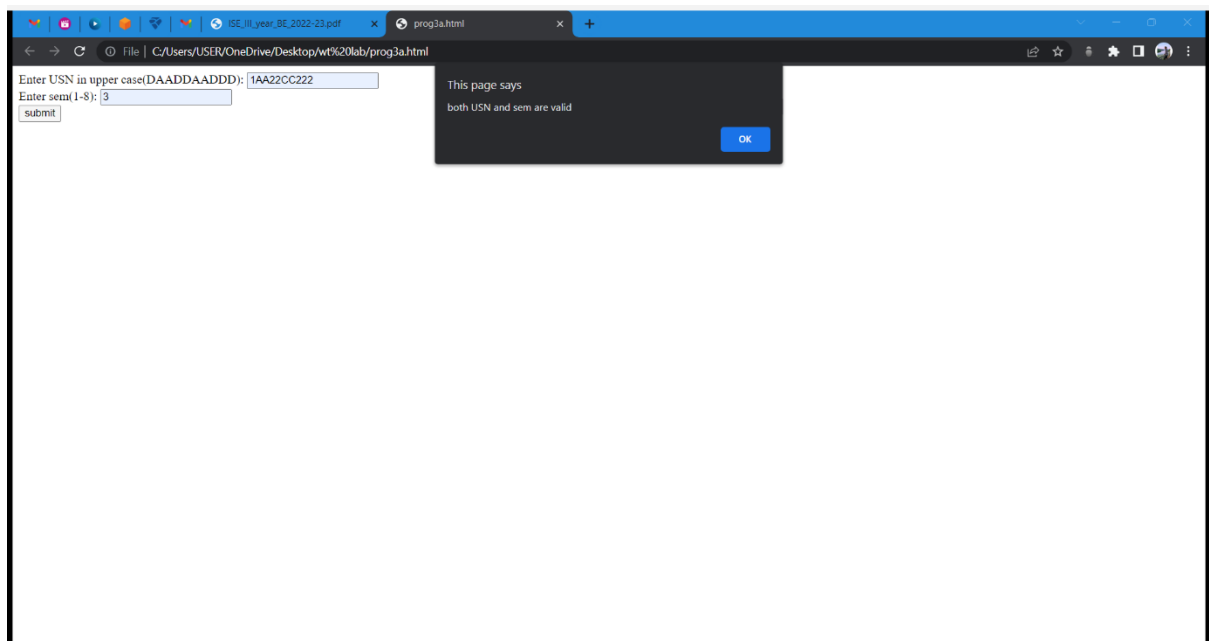
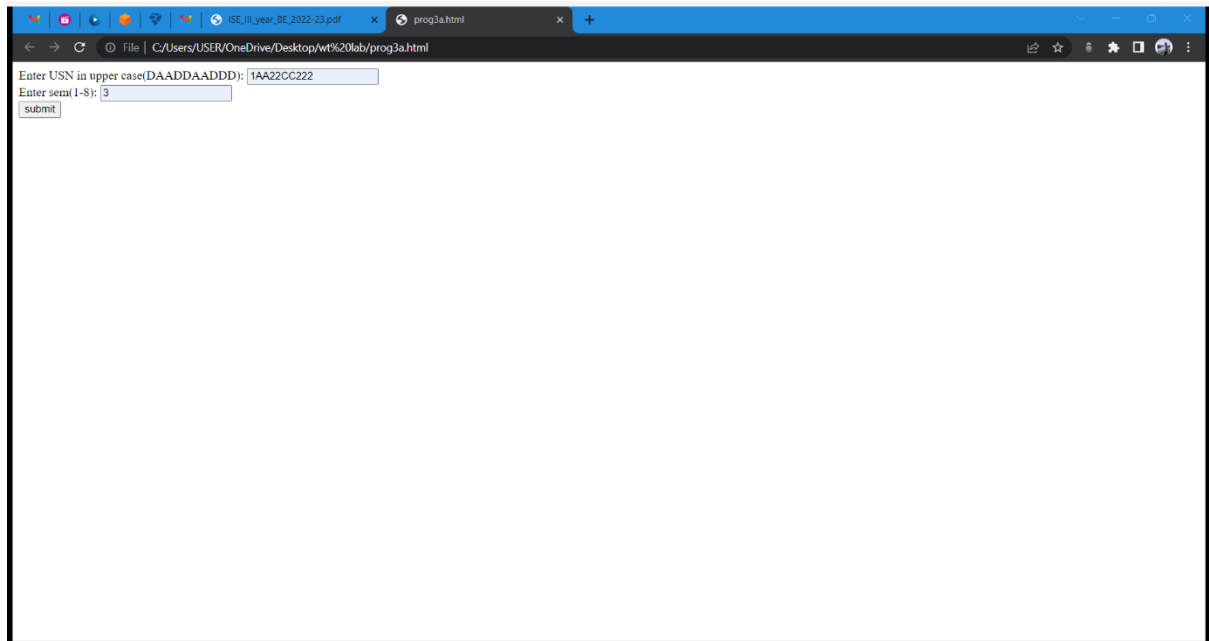
The screenshot shows a web browser window with a single tab titled 'Orders'. The address bar shows the file path 'C:/Users/USER/OneDrive/Desktop/wt%20lab/prog2.html'. The page content is titled 'Order Form' and contains three input fields with labels 'Apples', 'Oranges', and 'Bananas'. The values in the fields are 2, 3, and 4 respectively. Below the input fields are two buttons: 'Reset' and 'Submit'.

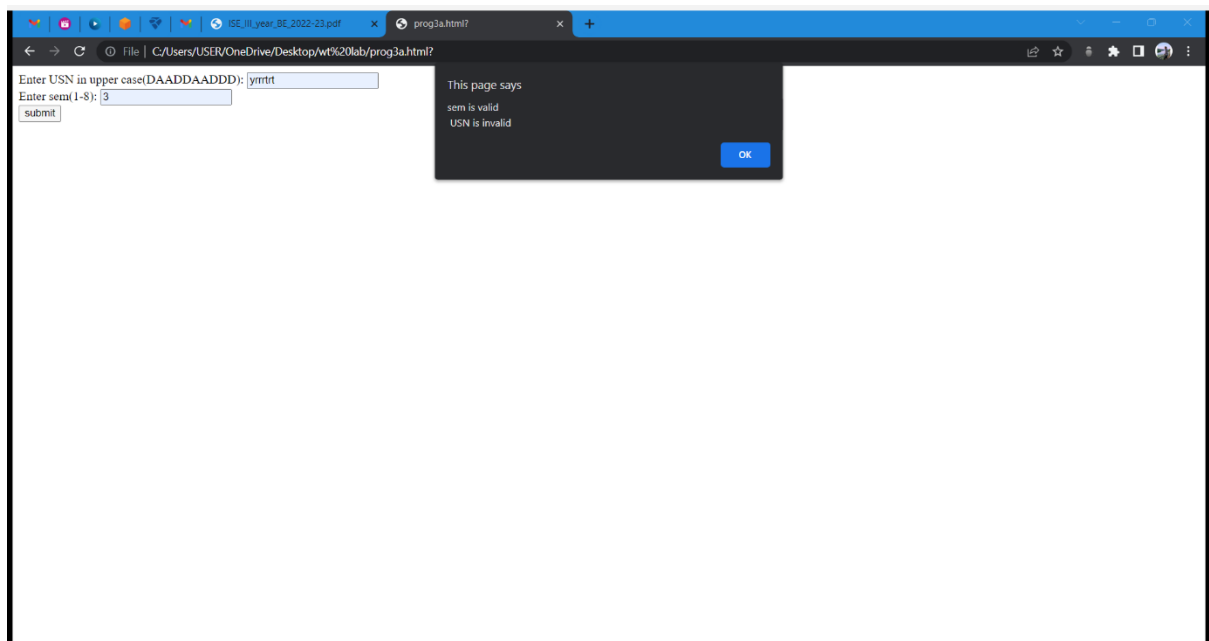
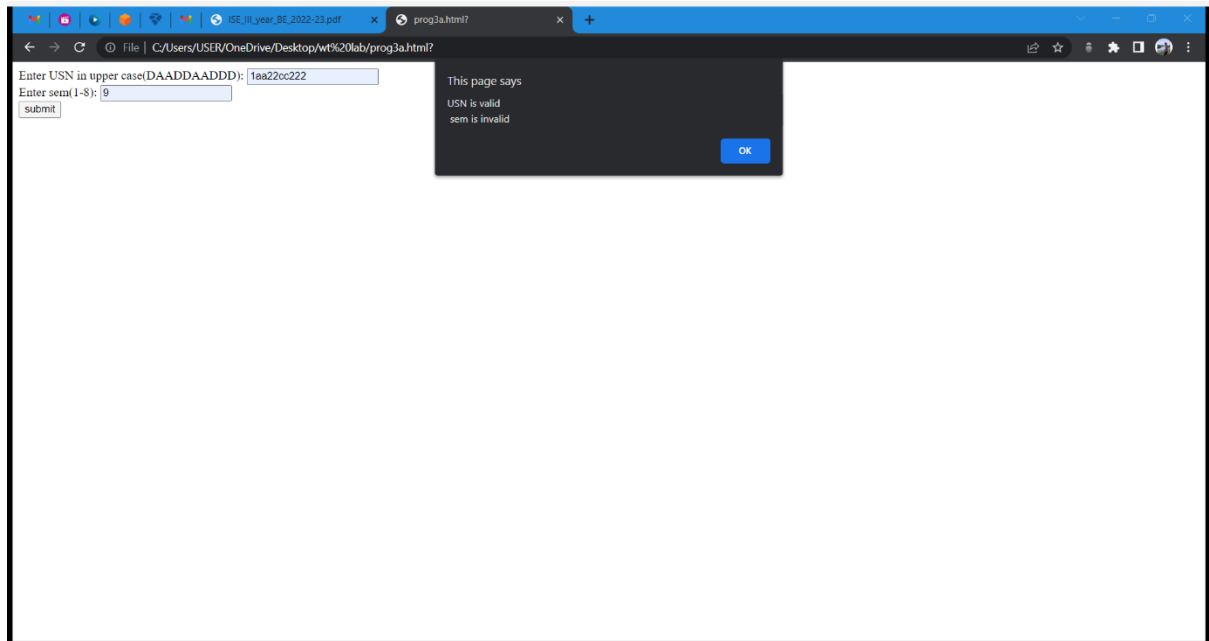


The screenshot shows the same web browser window as before, but with an alert dialog box displayed in the center. The dialog box has a dark background and contains the text: 'This page says', 'Thank you for your order', and 'Your total cost is: \$4.4205000000000005'. There is an 'OK' button in the bottom right corner of the dialog box.

4.3 Develop and demonstrate, using JavaScript script, a XHTML document that collects the USN (The valid format is: A digit from 1 to 4 followed by two Uppercase characters followed by two digits followed by two uppercase characters followed by three digits; no embedded spaces allowed) of the user. Event handler must be included for the form element that collects this information to validate the input. Messages in the alert windows must be produced when errors are detected. Modify the above program to get the current semester also (restricted to be a number from 1 to 8).

```
<html>
  <body>
    <script type="text/javascript">
      finder=function()
      {
        var a=document.getElementById('usn').value;
        var s=document.getElementById('sem').value;
        if(a.length==0 || s.length==0)
        {
          alert("one of the field is empty");
          return;
        }
        var usn_flag=0;
        var sem_flag=0;
        var b=a.toLowerCase();
        var str=b.search(/^[1-4][a-z][a-z][0-9][0-9][a-z][a-z][0-9][0-9][0-9]/);
        if(str==0)
          usn_flag=1;
        str=s.search(/^[1-8]$/);
        if(str==0)
          sem_flag=1;
        if(!sem_flag && !usn_flag)
          alert("both usn & sem are invalid");
        else if(sem_flag && !usn_flag)
          alert("sem is valid\n USN is invalid");
        else if(!sem_flag && usn_flag)
          alert("USN is valid\n sem is invalid");
        else
          alert("both USN and sem are valid");
      }
    </script>
    <form onsubmit=finder()>
      Enter USN in upper case(DAADDAAADDD): <input type=text
      id=usn><br>
      Enter sem(1-8): <input type=text id=sem><br>
      <input type=submit value=submit>
    </form>
  </body>
</html>
```

Output:



5. Cycle - V (PHP & MySQL)

5.1 Write the PHP programs to do the following.

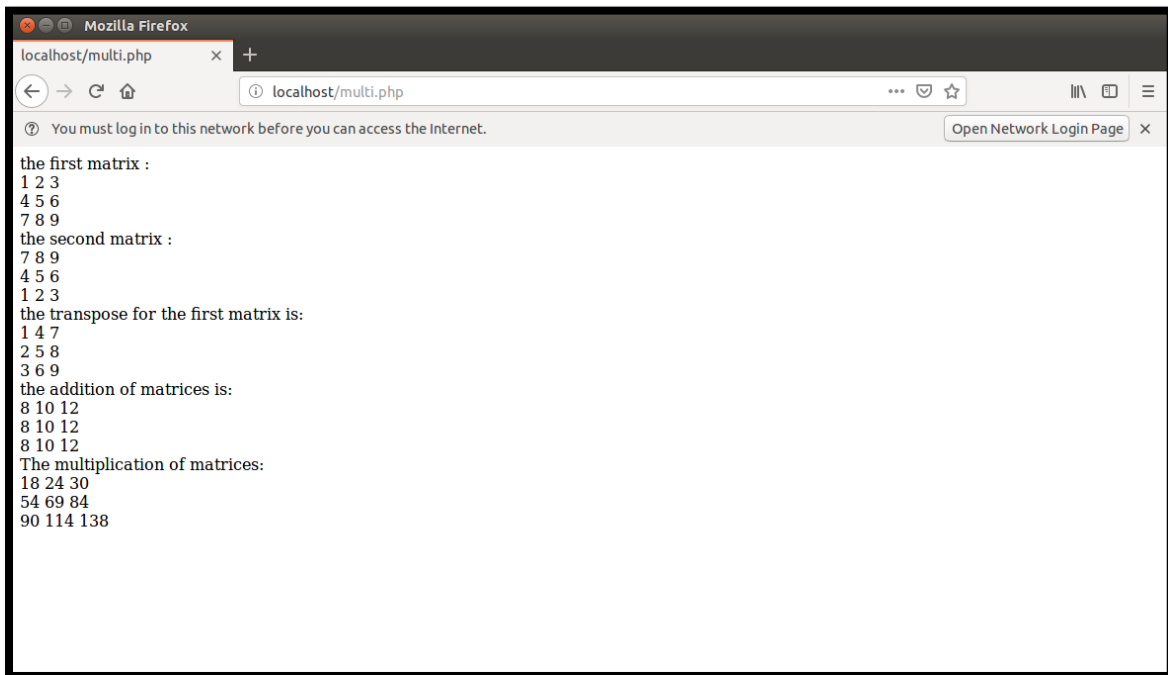
a. Find the transpose of a matrix.

b. Multiplication of two matrices.

c. Addition of two matrices.

Note: Students has to execute either a & c or b & c

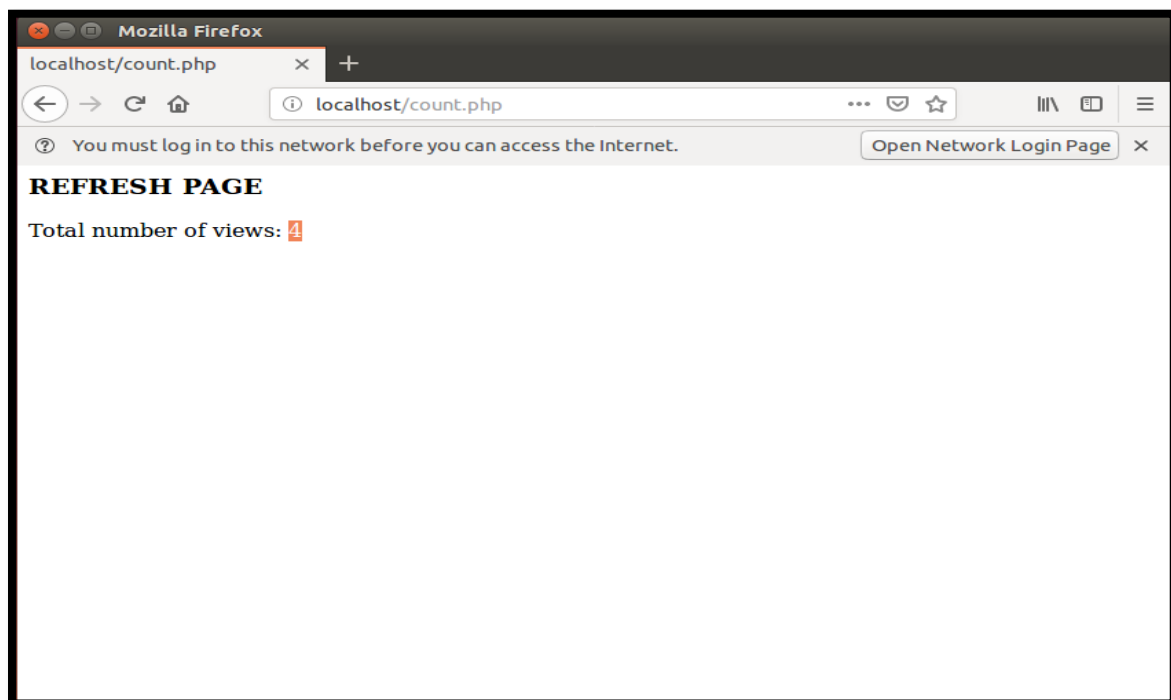
```
<?php
$a = array(array(1,2,3),array(4,5,6),array(7,8,9));
$b = array(array(7,8,9),array(4,5,6),array(1,2,3));
$m=count($a);
$n=count($a[2]);
$p=count($b);
$q=count($b[2]);
echo "the first matrix :", "<br/>";
for ($row = 0; $row < $m; $row++){
for ($col = 0; $col < $n; $col++)
echo " ".$a[$row][$col];
echo "<br/>";
}
echo "The second matrix :"."<br />";
for ($row = 0; $row < $p; $row++){
for ($col = 0; $col < $q; $col++)
echo " ".$b[$row][$col];
echo "<br/>";
}
echo "The Transpose for the first matrix is :"."<br />";
for ($row = 0; $row < $m; $row++) {
for ($col = 0; $col < $n; $col++)
echo " ".$a[$col][$row];
echo "<br/>";
}
if(($m==$p) and ($n==$q)) {
echo "The Addition of Matrices is:"."<br />";
for ($row = 0; $row < 3; $row++){
for ($col = 0; $col < 3; $col++)
echo " ".$a[$row][$col]+$b[$row][$col]." ";
echo "<br/>";
}}
if($n==$p){
echo "The Multiplication of Matrices : <br />";
$result=array();
for($i=0;$i< $m; $i++){
for($j=0;$j < $q; $j++){
$result[$i][$j] = 0;
for($k=0;$k < $n; $k++)
$result[$i][$j] += $a[$i][$k] * $b[$k][$j];
}}
for($row = 0;$row < $m; $row++){
for($col = 0;$col < $q; $col++)
echo " ".$result[$row][$col];
echo "<br/>";
}
}
?>
```


Output:

5.2 Write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors, with proper headings.

```
<?php
print "<h3>REFRESH PAGE</h3>";
$name= "counter.txt";
$file=fopen($name,"r");
$hits=fscanf($file,"%d");
fclose($file);
$hits[0]++;
$file=fopen($name,"w");
fprintf($file,"%d",$hits[0]);
fclose($file);
print "Total no of views:" .$hits[0];
?>
```

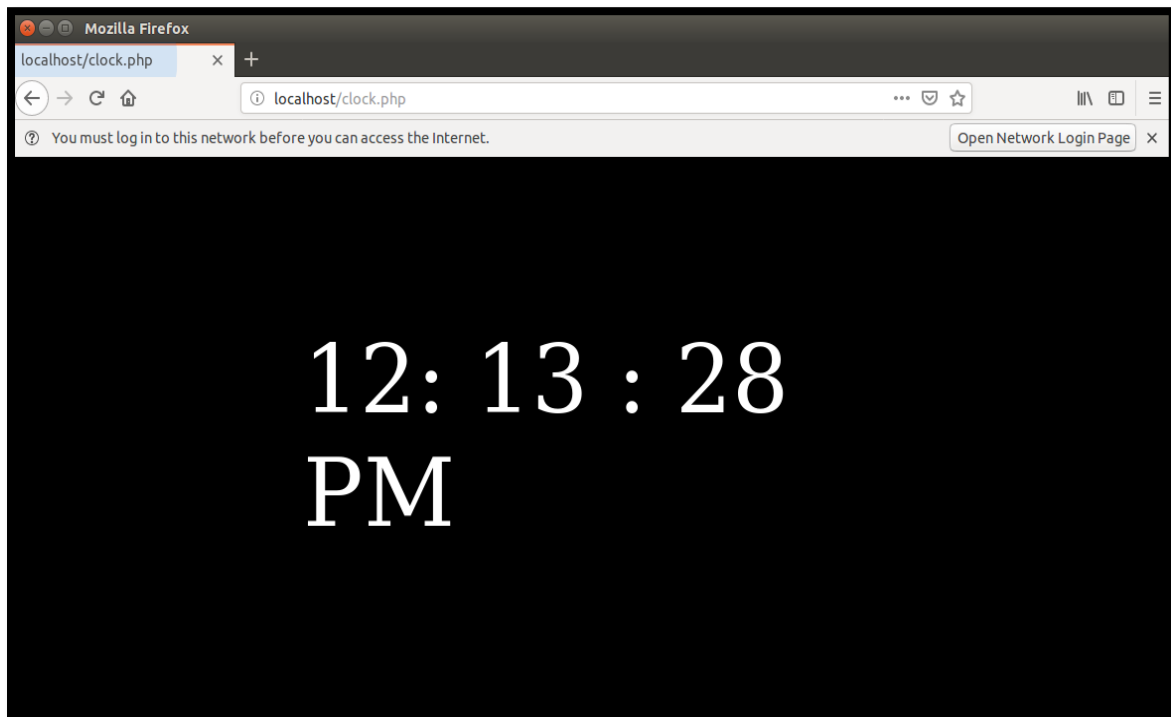
Output:



5.3 Write a PHP program to display a digital clock which displays the current time of the server.

```
<html>
<head>
<meta http-equiv="refresh" content="1"/>
<style>
p{
    colour:white;
    font size=90px;
    position:absolute;
    top:50%;
    left:50%;
transform:translate(-50%,-50%);
}
body{background_colour:black;}
</style>
<p><?php echo date("h :i :s A");?>
</p>
</head>
</html>
```

Output:



5.4 Create a XHTML form with Name, Address Line2 and E-mail text fields. On Submitting, store the values in MYSQL table. Retrieve and display the data based on Name.

```

<html>
    <h2>Insert Info</h2>
    <form action="insert.php">
        Name:<input type="text" name="name" /><br>
        Address Line 1:<input type="text" name="addr1"><br>
        Address Line 2:<input type="text" name="addr2"><br>
        Email-ID:<input type="text" name="email"><br>
        <input type="submit" value="insert" />
        <input type="reset" value="reset" />
    </form>
    <h2>Search Info</h2>
    <form action="search.php">
        Name:<input type="text" name="name" /><br>
        <input type="submit" value="search" />
        <input type="reset" value="reset" />
    </form>
</html>
//insert.php

<?php
    $name = $_REQUEST['name'];
    $addr1 = $_REQUEST['addr1'];
    $addr2 = $_REQUEST['addr2'];
    $email = $_REQUEST['email'];
    $con = mysql_connect("localhost") or die('Could not connect');
    mysql_select_db("test",$con);
    if(mysql_query("insert into student values('$name','$addr1',
        '$addr2','$email')")) {
        echo "Data inserted successfully!";
    }
    mysql_close($con);
?>
//search.php

<html>
    <h2>Search Result</h2>
    <table border=1>
        <tr>
            <th>Name</th><th>Address Line 1</th><th> Line2</th><th>Email-
            ID</th>
        </tr>
        <?php
            $name = $_REQUEST['name'];
            $con = mysql_connect("localhost") or die('Could not
            connect');
            mysql_select_db("test",$con);
            $result = mysql_query("select * from student where name
            like '%" . $name . "%'");
            while ($row = mysql_fetch_array($result)) {
                echo "<tr>";
                echo "<td>". $row['name'] . "</td>";
                echo "<td>". $row['addr1'] . "</td>";
                echo "<td>". $row['addr2'] . "</td>";
                echo "<td>". $row['email'] . "</td>";
                echo "</tr>";
            }
        </?php>
    </table>
</html>

```

```
        }  
        mysql_close($con);  
    ?>  
</table>  
</html>
```

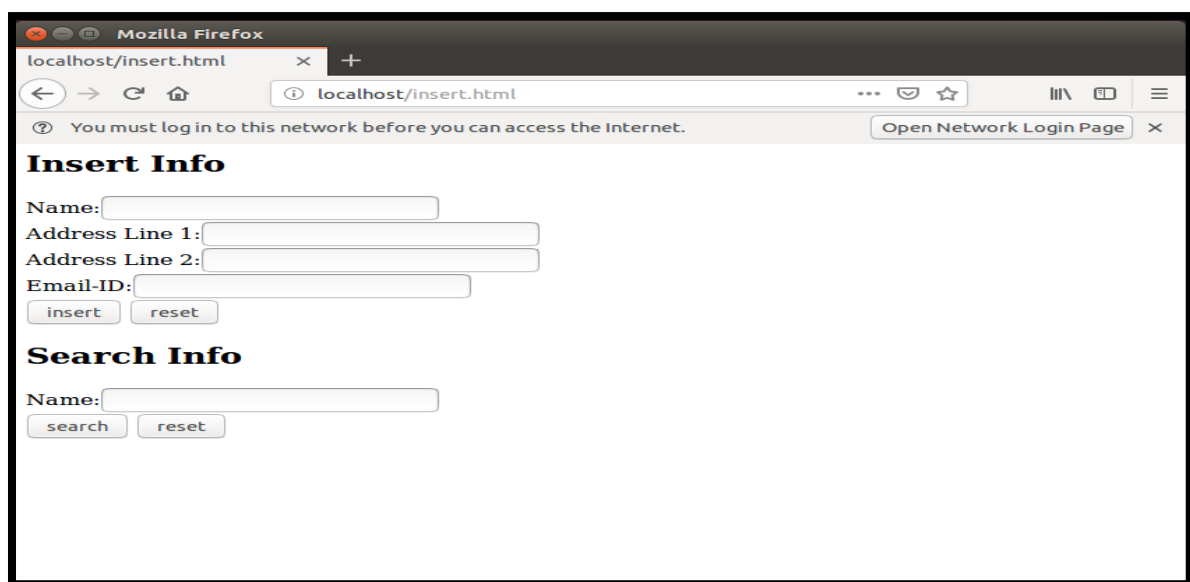
Setting up the database (MySQL):

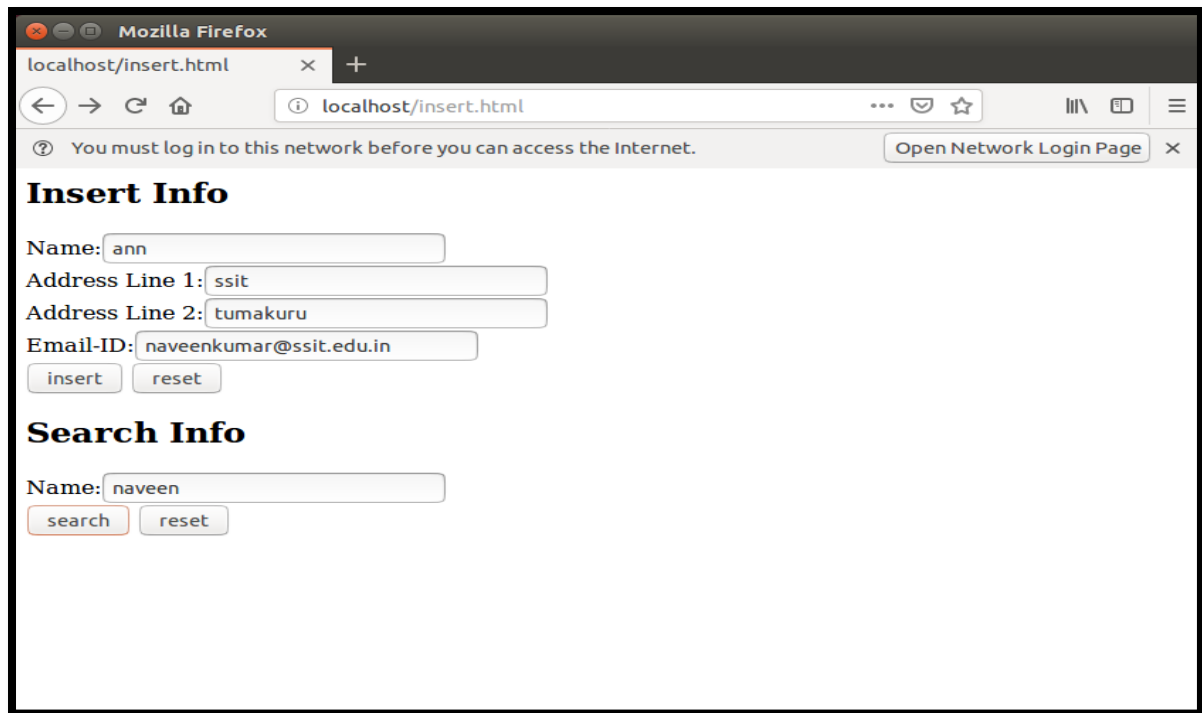
1. Open a terminal and run the command `mysql`
2. In the MySQL prompt run `show databases;`
3. Choose an existing database by running the command `use test;` where `test` is the name of an already existing database.
4. Now, create a new table by running the command `create table student (name varchar (20), addr1 varchar (20), addr2 varchar (20), email varchar (20));`
5. Run the command `exit` to exit from the MySQL prompt.

Steps for checking output:

1. Save the `.html` file in the folder `/var/www/html`
2. Save the `.php` files in the folder `/var/www/html`
3. Change the file permission of the `php` files by running the command `sudo chmod 777 insert.php search.php`
4. Make sure the database is set before executing the program.
5. Open a browser and in the address bar type `localhost/html/11.html`
6. Input the name, Address 1, Address 2 and email which are stored in the database.
7. The output is displayed on the browser by retrieving the values from the database.
8. To check if the value is stored correctly in the database,
9. Open a terminal and run `mysql`
10. Run the command `use test;`
11. Run the command `select * from student;` for fetching all the inputs stored in the database.

Output:





The screenshot shows a Mozilla Firefox browser window with the address bar displaying 'localhost/insert.html'. A network login notification is visible at the top, stating 'You must log in to this network before you can access the Internet.' with a button to 'Open Network Login Page'.

Insert Info

Name:

Address Line 1:

Address Line 2:

Email-ID:

Search Info

Name:

5.5 Write a PHP program to sort the student records based on USN which are stored in the database.

```
<html>
    <body>
        <style>
            table,td,th
            {
                border: 1px solid black;
                width: 33%;
                text-align: center;
                border-collapse: collapse;
                background-color: lightblue;
            }
            table {margin: auto; }
        </style>
        <?php
            $servername = "localhost";
            $username = "root";
            $password = "root";
            $dbname = "weblab";
            $a = [];
            $conn = mysqli_connect ($servername, $username, $password, $dbname);
            if ($conn->connect_error)
                die ("Connection failed:" . $conn->connect_error);
            $sql = "SELECT * FROM student";
            $result = $conn->query($sql);
            echo "<br>";
            echo "<center>BEFORE SORTING</center>";
            echo "<table border='1'>";
            echo "<tr>";
            echo "<th>USN</th><th>NAME</th><th>Address</th></tr>";
            if ($result->num_rows > 0)
                while ($row = $result->fetch_assoc()) {
                    echo "<tr>";
                    echo "<td>". $row["usn"]. "</td>";
                    echo "<td>". $row["name"]. "</td>";
                    echo "<td>". $row["add"]. "</td></tr>";
                    array_push ($a, $row["usn"]);
                }
            else
                echo "Table is Empty";
            echo "</table>";
            $b = $a;
            for ($i = 0; $i < (count($a)-1); $i++)
            {
                $pos = $i;
                for ($j = $i+1; $j < count($a); $j++) {
                    if ($a[$pos] > $a[$j])
                        $pos = $j;
                }
                if ($pos != $i) {
                    $temp = $a[$i];
                    $a[$i] = $a[$pos];
                    $a[$pos] = $temp;
                }
            }
            $c = [];
            $d = [];
```

```

        $result=$conn->query($sql);
        if ($result->num_rows> 0)
        {
            while ($row = $result->fetch_assoc()) {
                for ($i=0;$i<$n;$i++) {
                    if ($row["usn"]== $a[$i]) {
                        $c[$i]=$row["name"];
                        $d[$i]=$row["addr"];
                    }
                }
            }
            echo "<br>";
            echo "<center> AFTER SORTING <center>";
            echo "<table border='2'>";
            echo "<tr>";
            echo "<th>USN</th><th>NAME</th><th>Address</th></tr>";
            for ($i=0;$i<$n;$i++) {
                echo "<tr>";
                echo "<td>". $a[$i]."</td>";
                echo "<td>". $c[$i]."</td>";
                echo "<td>". $d[$i]."</td></tr>";
            }
            echo "</table>";
            $conn->close();
        }
    }
</body>
</html>

```

Output:

Procedure:

Open a terminal press key buttons - "Ctrl Alt t"

```
$ sudo mysql -u root -p
```

```
[sudo] password for isel6: iseddept
```

```
Enter password: iseddept
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

```
Your MySQL connection id is 10
```

```
Server version: 5.7.41-0ubuntu0.18.04.1 (Ubuntu)
```

```
Copyright (c) 2000, 2023, Oracle and/or its affiliates.
```

```
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
```

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input
statement.
```

```
mysql> use mysql ;
```

```
Reading table information for completion of table and column names
```

```
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
```

```
mysql> create database weblab;
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> use weblab ;
```

```
Database changed
```

```
mysql> create table student(usn varchar(10),name varchar(20),address
varchar(20));
```

```
Query OK, 0 rows affected (0.24 sec)
```

```
mysql> show databases ;
```

```
+-----+
```

```
| Database |
```

```
+-----+
```

```
| information_schema |
```

```
| mysql |
```

```
| performance_schema |
```

```
| sys |
```

```
| weblab |
```

```
+-----+
```

```
5 rows in set (0.00 sec)
```

```
mysql> show tables ;
```

```
+-----+
```

```
| Tables_in_weblab |
```

```
+-----+
```

```
| student |
```

```
+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> describe student ;
```

```
+-----+-----+-----+-----+-----+-----+
```

```
| Field | Type | Null | Key | Default | Extra |
```

```
+-----+-----+-----+-----+-----+-----+
```

```
| usn | varchar(10) | YES | | NULL | |
```

```
| name | varchar(20) | YES | | NULL | |
```

```
| address | varchar(20) | YES | | NULL | |
```

```
+-----+-----+-----+-----+-----+-----+
```

```
3 rows in set (0.00 sec)
```

```
mysql> select * from student ;
```

```
Empty set (0.01 sec)
```

```
mysql> insert into student values ( '20' , 'ANN' , 'Tumakuru' ) ;
```

```
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select * from student ;
```

```
+-----+-----+-----+
```

```
| usn | name | address |
```

```
+-----+-----+-----+
```

```
| 20 | ANN | Tumakuru |
```

```
+-----+-----+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> exit ;
```

```
Bye
```
