Program 1

Aim: To create a webpage layout with frames and tables.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and create html page named as frame.html.

Step 3: Using frameset tag to divide the page into number of positions.

Step 4: Create a html file named as list1.html,list2.html and tabledts.html in notepad.

Step 5: Display the above created file in various color options in each position of the web page.

Step 6: save the file.

Step 7: stop the process.

frame.html

```
<html>
<head>
<title>Web Page Layout Using Frames and Tables</title>
</head>
<frameset cols=50%,50%>
<frameset rows=40%,60%>
<frame  src=list1.html>
<frame  src=list2.html>
</frameset>
<frame  src=tabledts.html>
</frameset>
</html>
```

list1.html

```
<Html>
<Body bgcolor="green"><H3> LIST OF VEGETABLES </H3> </Body>
 <OL>
 <LI> TOMATO </LI>
 <LI> BEET ROOT </LI>
 <LI> CABBAGE </LI>
 <LI> BROCCOLI</LI>
 <LI> BRINGAL </LI>
</OL>
</Html>
```

list2.html

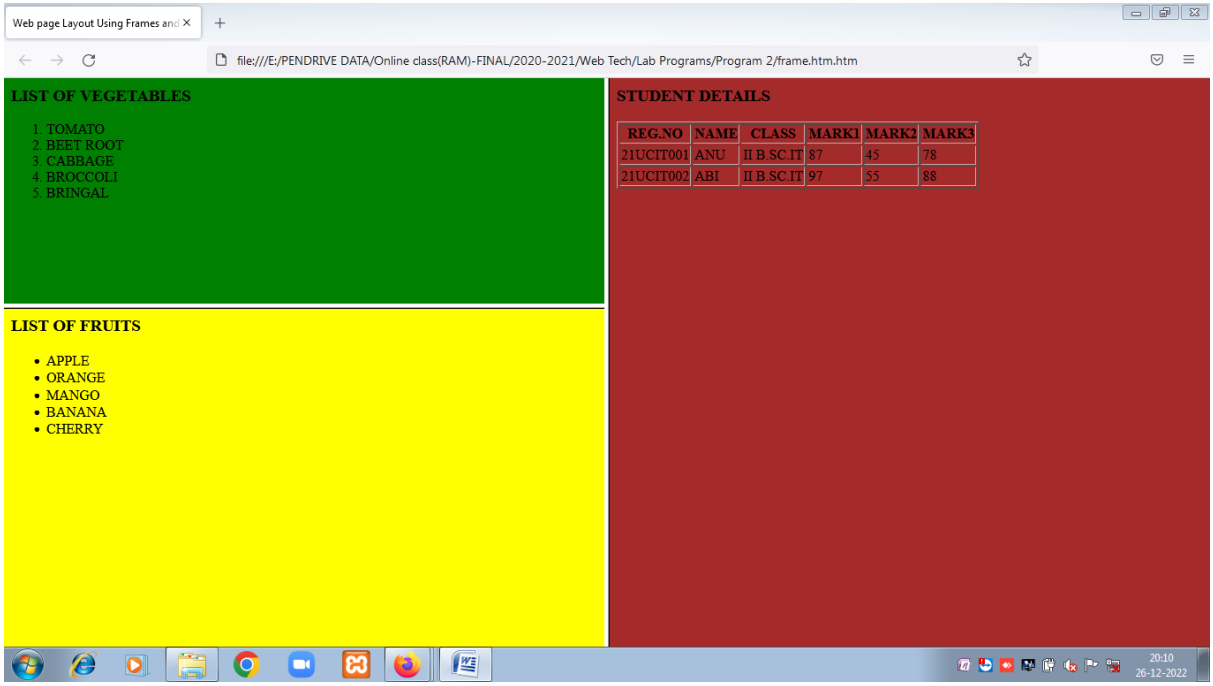
```
<Html>
<Body bgcolor="yellow"><H3>LIST OF FRUITS </H3> </Body>
<UL>
<LI> APPLE </LI>
<LI> ORANGE </LI>
<LI> MANGO </LI>
<LI> BANANA </LI>
<Li> CHERRY </LI>
</UL>
```

tabledts.html

```
<html>
<Body bgcolor="brown"><H3>STUDENT DETAILS </H3> </Body>
<table border=1>
<tbody>
<tr>
<th>REG.NO</th>
<th>NAME</th>
<th>CLASS</th>
<th>MARK1</th>
<th> MARK2</th>
<th>MARK3</th>
</tr>
<tr>
<td>21UCIT001</td>
<td> ANU</td>
<td>II B.Sc.IT</td>
<td>87</td>
<td>45</td>
<td>78</td>
</tr>
<tr>
<td>21UCIT002</td>
<td> ABI</td>
<td>II B.Sc.IT</td>
<td>97</td>
<td>55</td>
<td>88</td>
</tr>
</tbody>
</table>
```

</html>

OUTPUT



Result

The above program for creating a webpage layout with frames and tables has been executed and verified successfully.

Program 2

Aim: To create a html file by applying different styles using inline, external and internal stylesheet.

Algorithm:

Step 1: Start the process.

Step2: Open notepad and create html filenamed as stylesheet.html.

Step 3:

a) include the external style sheet with necessary tag.

b) include the internal style sheet for body tags and also class, so that the style can

be applied for all tags.

c) include a <p> tag with inline stylesheet.

Step4: Create external CSS stylesheet named as stylesheet.css in notepad and provide some styles for p, h2, a and hr tags.

Step5: View the file in any of the browser.

Step6: Stop the process.

stylesheet.css

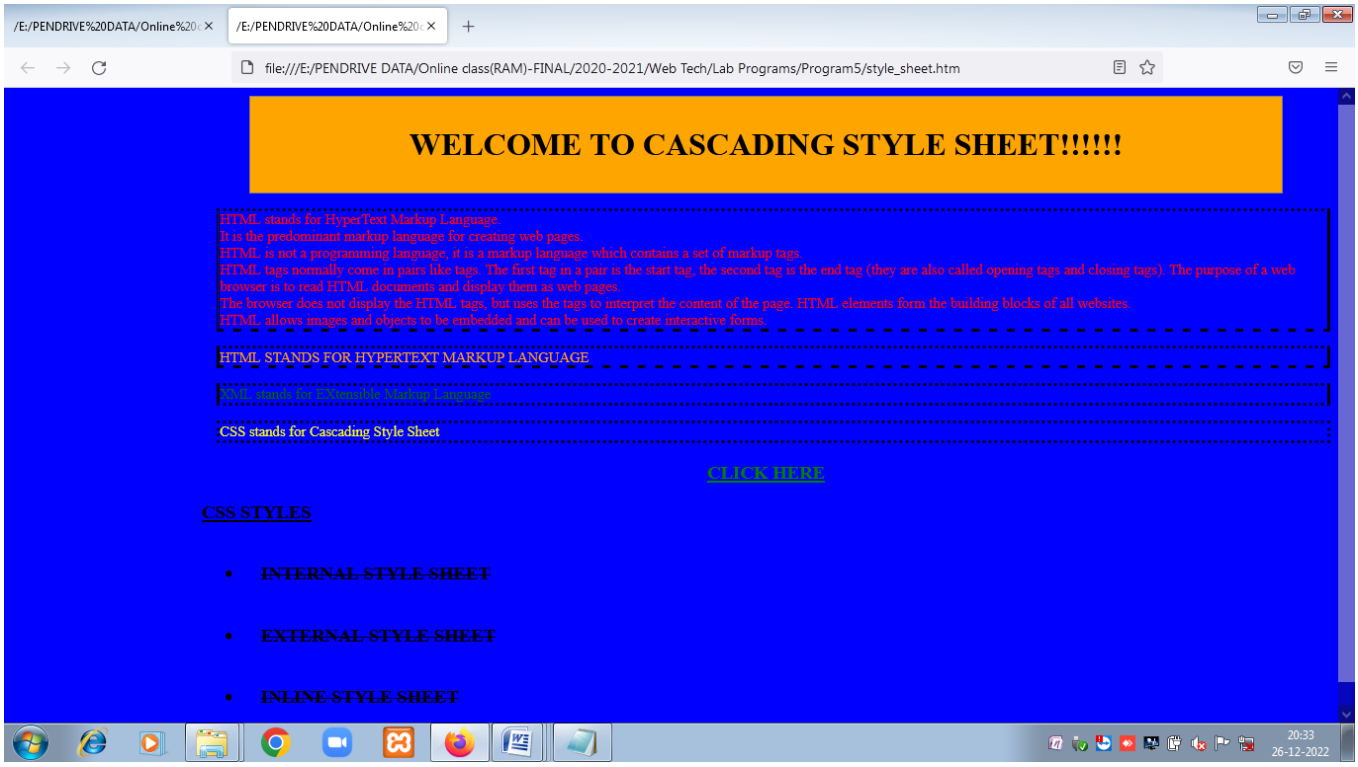
```
<style>
h2 {color:maroon; font-size:20pt}
hr {color:navy}
p {font-size:11pt; margin-left: 15px}
a:link {color:green}
a:visited {color:yellow}
a:hover {color:black}
a:active {color:blue}
</style>
```

stylesheet.htm (file name)

```
<head>
<link rel="stylesheet" type="text/css" href="stylesheet.css" />
<style type="text/css">
body
{
margin-left:200px;
background:blue
}
.container
{
text-align:center;
}
.center_div
{
border:1px solid gray;
margin-left:auto;
margin-right:auto;
width:90%;
background-color:orange;
text-align:center;
padding:8px;
}
li
{
```

```
text-decoration:line-through;
padding:20px;
}
</style>
</head>
<body>
<div class="container">
<div class="center_div">
<h1>WELCOME TO CASCADING STYLE SHEET!!!!!!</h1>
</div>
</div>
<p style="border-style:dotted solid dashed double"><font color="red">HTML stands for HyperText Markup Language.<br>It is the predominant markup language for creating web pages.<br>
HTML is not a programming language, it is a markup language which contains a set of markup tags.<br>HTML tags normally come in pairs like tags. The first tag in a pair is the start tag, the second tag is the end tag (they are also called opening tags and closing tags).
The purpose of a web browser is to read HTML documents and display them as web pages.<br> The browser does not display the HTML tags, but uses the tags to interpret the content of the page.
HTML elements form the building blocks of all websites.<br>HTML allows images and objects to be embedded and can be used to create interactive forms. <br>
</p> </font>
<p style="border-style:dotted solid dashed"><font color="orange">HTML STANDS FOR HYPERTEXT MARKUP LANGUAGE.</font></p>
<p style="border-style:dotted solid"><font color="darkgreen">XML stands for Extensible Markup Language</font></p>
<p style="border-style:dotted"><font color="yellow">CSS stands for Cascading Style Sheet</font></p>
<p><H3><center><a href="cd_catalog.xml" target="_blank">CLICK HERE</a></H3></center></p>
<H3><U>CSS STYLES</U></H>
<UL>
<Li> INTERNAL STYLE SHEET </Li>
<Li> EXTERNAL STYLE SHEET</Li>
<Li>INLINE STYLE SHEET </Li>
</UL>
</body>
</html>
```

OUTPUT



Result

Thus the above program forcreating a html file by applying different styles using inline, external and internal stylesheet has been executed and verified successfully.

Program 3

Aim: To write a javascript program to define a function for sorting the values in an array.

Algorithm:

Step 1: Start the process.

Step2: Open notepad and create html file named as sorting.html.

Step3: With the script tag (a) Define a function called as array-size() to get the size of array.

(b) Define a function called get-number () to get number from user.

(c) Define a function called Sorting() to sort the numbers.

Step4: With the body tag, display the message to click the button and display a button to call the array-size() method. The array-size() method calls get-number() method which in turn calls Sorting() methods.

Step 5: Display the file in any browser.

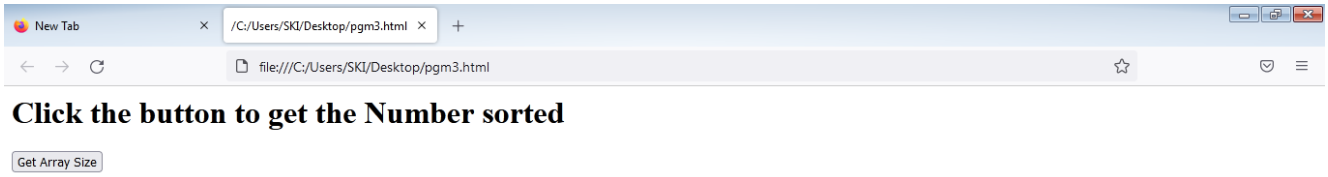
Step6: Stop the process.

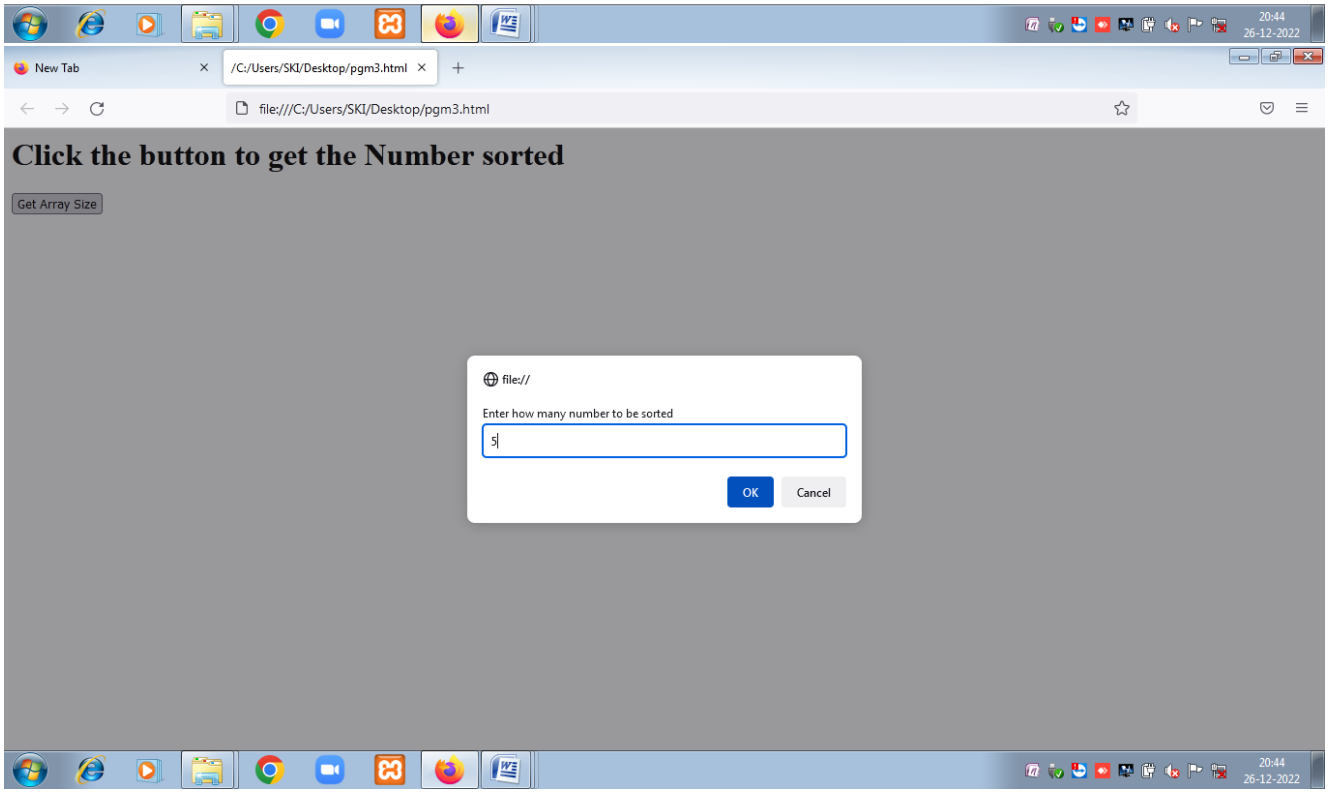
sorting.html

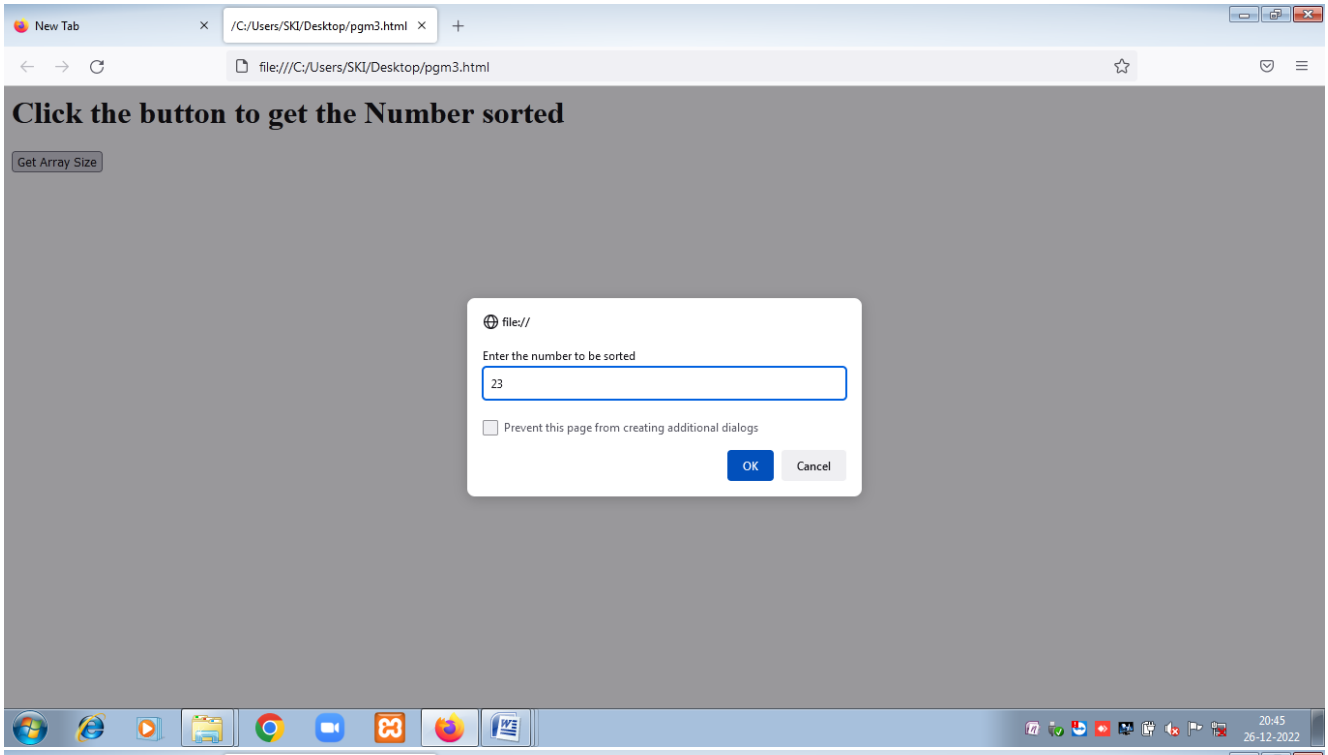
```
<html>
<head>
<script type="text/javascript">
var num=0;
number=0;
var numarray=new Array();
function array_size()
{
num=prompt("Enter how many number to be sorted","000");
number=parseInt(num);
get_numbers();
}
function get_numbers()
{
if (number!=null && number!="")
{
for( i=0;i<number;i++)
{
n=prompt("Enter the number to be sorted","1");
numarray[i]=parseInt(n);
}
}
sorting()
}
function sorting()
{
document.writeln("<h1>Sorted Array is <h1>");
document.writeln(numarray.sort(sortNumber));
}
function sortNumber(a,b )
{
return a - b;
}
</script>
</head>
<body>
<h1> Click the button to get the Number sorted</h1>
<input type="button" onclick="array_size()" value="Get Array Size" />
</body>
```

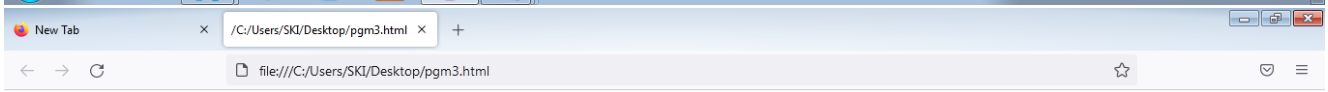
</html>

OUTPUT


New Tab
/C:/Users/SKI/Desktop/pgm3.html
file:///C:/Users/SKI/Desktop/pgm3.html
Click the button to get the Number sorted
Get Array Size


20:44
26-12-2022
New Tab
/C:/Users/SKI/Desktop/pgm3.html
file:///C:/Users/SKI/Desktop/pgm3.html
Click the button to get the Number sorted
Get Array Size
file://
Enter how many number to be sorted
5
OK
Cancel
20:44
26-12-2022





Sorted Array is

3,23,56,78,90

Result

Thus the above javascript program to define a function for sorting the values in an array has been executed and verified successfully.

Program 4

Aim: To create a password strength checker using jquery.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and save the file with .php extension.

Step 3: With the script tag, define a function called as CheckPasswordStrength () To check the strength status of the password.

Step 4: With the body tag, display the message password, design an input to get password from user and call the checkPasswordStrength() method .

Step 5: Provide various color options according to the strength status of the password.

Step 6: Display the html page in any browser.

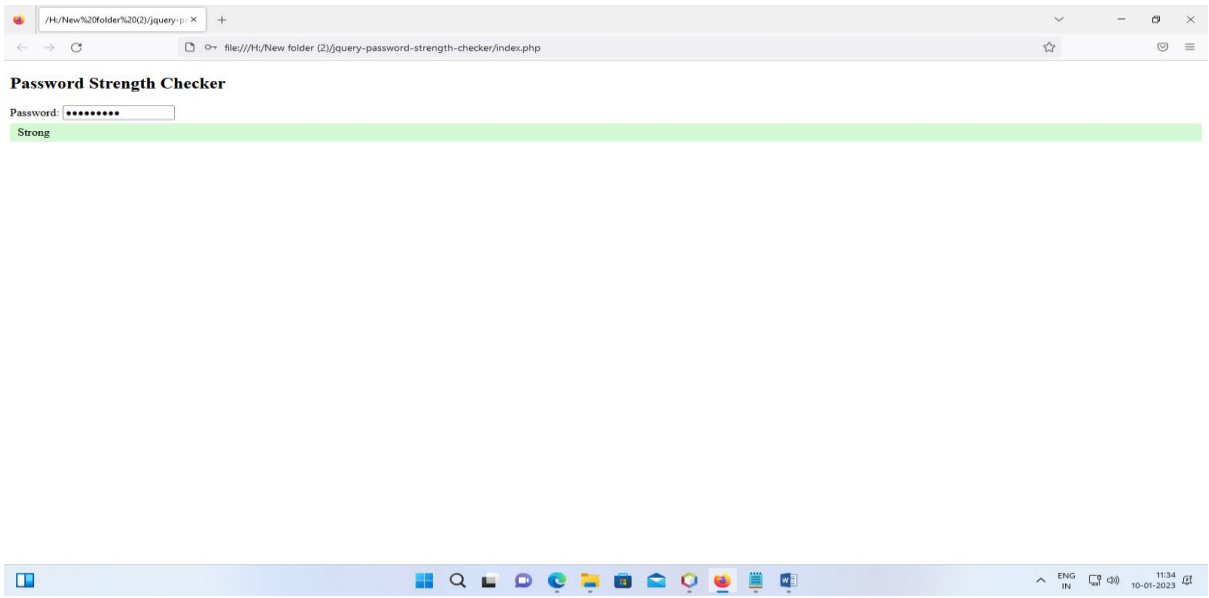
Step 7: Stop the process.

Program

```
<html>
<head>
<style>
#password-strength-status {
   padding: 5px 10px;
   border-radius: 4px;
   margin-top: 5px;
}

.medium-password {
   background-color: #fd0;
}

.weak-password {
   background-color: #FBE1E1;
}

.strong-password {
   background-color: #D5F9D5;
}
</style>
<script src="https://code.jquery.com/jquery-2.1.1.min.js"
   type="text/javascript"></script>
<script type="text/javascript">
function checkPasswordStrength() {
```

```
    var number = /([0-9])/;
    var alphabets = /([a-zA-Z])/;
    var special_characters = /([~,!,@,#,$,%,^,&,*,-,_,+,=,?,>,<])/;
    var password = $('#password').val().trim();
    if(password.length<6) {
        $('#password-strength-status').removeClass();
        $('#password-strength-status').addClass('weak-password');
        $('#password-strength-status').html("Weak (should be atleast 6 characters.)");
    } else {
        if(password.match(number) && password.match(alphabets) &&
password.match(special_characters)) {
            $('#password-strength-status').removeClass();
            $('#password-strength-status').addClass('strong-password');
            $('#password-strength-status').html("Strong");
        }
        else {
            $('#password-strength-status').removeClass();
            $('#password-strength-status').addClass('medium-password');
            $('#password-strength-status').html("Medium (should include alphabets,
numbers and special characters.)");
        }
    }
}
</script>

</head>
<body>
    <div class="phppot-container tile-container">
        <h2 class="text-center">Password Strength Checker</h2>
        <form>
            <div class="row">
                <label>Password:</label> <input type="password"
                    name="password" id="password" class="full-width"
                    onkeyup="checkPasswordStrength();" />
            </div>
            <div id="password-strength-status"></div>
        </form>
    </div>
</body>
</html>
```

Output:



Result

Thus the above program for creating a password strength checker using jquery has been executed and verified successfully.

Program 5

Aim: To create a servlet program to retrieve the values entered in the html file.

Algorithm:

Step 1: Start the process.

Step 2: Open Netbeans editor and create a HTML file named as index.html.

Step 3: Start the apache and tomcat server in xampp control panel

Step 4: With the form tag, get student's details like register number, name, mark1, mark2, mark3 and display a button to submit the form.

Step 5: Create a Servlet file and design to display the student mark statement in table.

Step 6: Save the file as S2.java.

Step 7: Execute the file and view the result.

Step 8: Stop the process.

Program

Index.html

```
<html>
   <head>
      <title> Retrieving the values entered in the html file </title>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
   </head>
   <body>
      <form name="loginForm" method="post" action="S2">
Register Number: <input type="text" name="r1" /><br><br>
Name: <input type="text" name="n1"/><br><br>
Mark1 : <input type="text" name="m1"/><br><br>
Mark2 : <input type="text" name="m2"/><br><br>
Mark3 : <input type="text" name="m3"/><br><br>
<input type="submit" value="SUBMIT" />
</form>
   </body>
</html>
```

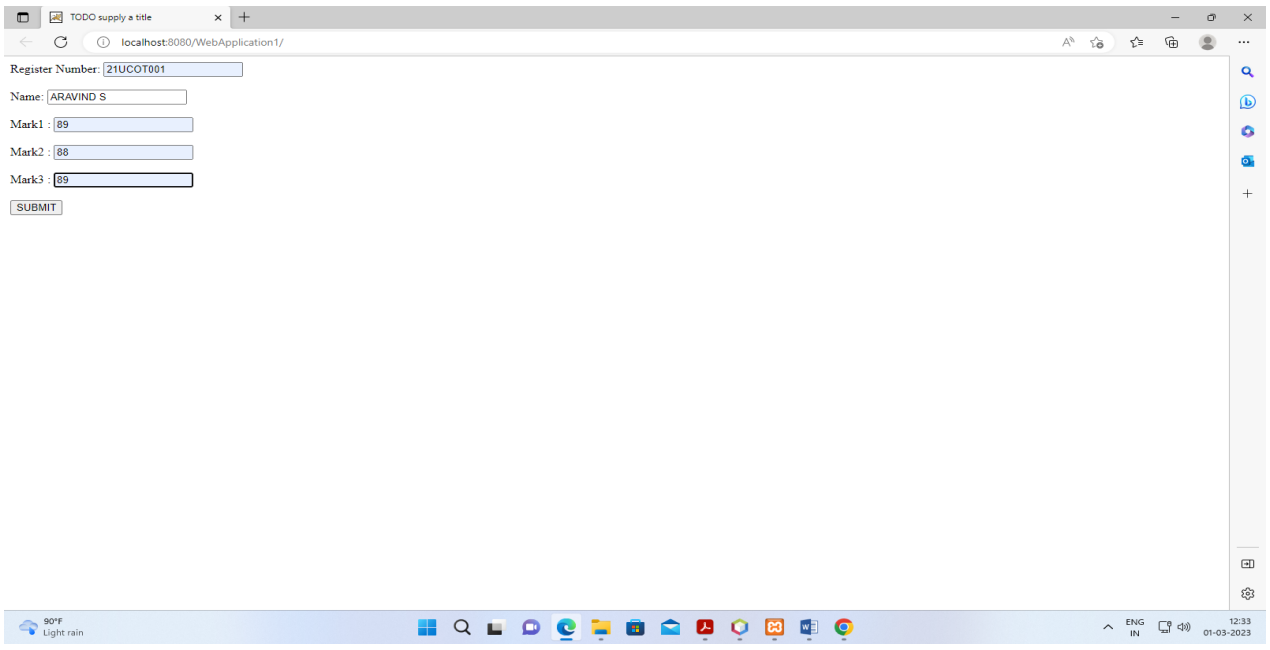
Servlet file (S2.java)

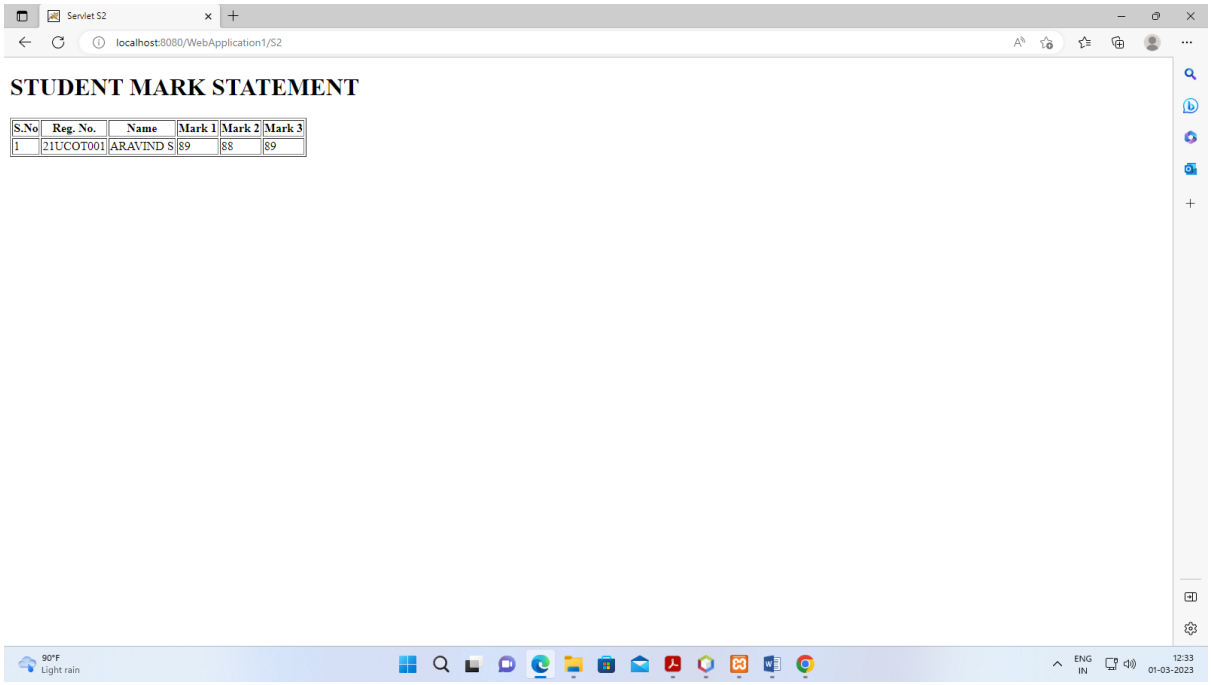
```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet(urlPatterns = {"/S2"})
public class S2 extends HttpServlet {
```

```
  public void init(ServletConfig config) throws ServletException {
super.init(config);
  }
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try ( PrintWriter out = response.getWriter()) {
            String r,n,m1,m2,m3;
            /* TODO output your page here. You may use following sample code. */
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Servlet S2</title>");
            out.println("</head>");
            out.println("<body>");

            out.println("<h1>STUDENT MARK STATEMENT</h1>");
out.println("<table border=1><th>S.No</th><th>Reg. No.</th><th>Name</th><th>Mark 1</th><th>Mark 2</th><th>Mark 3</th>");
r=request.getParameter("r1");
n=request.getParameter("n1");
m1=request.getParameter("m1");
m2=request.getParameter("m2");
m3=request.getParameter("m3");
out.println("<tr><td>1</td><td>"+r+"</td><td>"+n+"</td><td>"+m1+"</td><td>"+m2+"</td><td>"+m3+"</td></tr>");
out.println("</table>");
            out.println("</body>");
            out.println("</html>");
```

```
            out.close();
        }
    }
      @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        processRequest(request, response);
    }
     @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        processRequest(request, response);
    }
    @Override
    public String getServletInfo() {
        return "Short description";
    }
}
```

Output:





Result

Thus the above program for creating a servlet program to retrieve the values entered in the html filehas been executed and verified successfully.

Program 6

Aim: To develop online applications using java server pages.

Algorithm:

Step 1: Start the process.

Step 2: Open Netbeans editor and create a HTML file named as Index.html.

Step 3: Start the apache and tomcat server in xampp control panel.

Step 4: Using form tag, get the registration details such as first name, last name, email id, gender and date of birth.

Step 5: Create a JSP file named as display.jsp.

Step 6: Design user details to be displayed in table.

Step 7: Execute the file and view the result.

Step 8: Stop the process.

Program

index.jsp

```
<%@page contentType="text/html"%>
<html>
<head><title>Online Application</title></head>
<body>
<h1>ONLINE APPLICATION</H1>
<form name="myform" action="display.jsp" method="POST">
<table border="0">
<tr>
<td>First Name:</td>
<td><input type="text" name="first" value="" size="50">
</td>
</tr>
<tr>
<td>Last Name:</td>
<td><input type="text" name="last" value="" size="50">
</td>
</tr>
<tr>
<td>Email Address:</td>
<td><input type="text" name="email" value="" size="50">
</td>
</tr>
<tr>
<td>Gender:</td>
<td><select name="gender">
<option>Male</option>
<option> Female<option>
</select>
</td>
</tr>
<tr>
<td>Date of Birth:</td>
<td><input type="text" name="dob" value="dd/mm/yyyy" size="50">
</td>
</tr>
<tr>
<td>
<input type="reset" value="Clear" name="clear">
<input type="submit" value="Submit" name="submit">
```

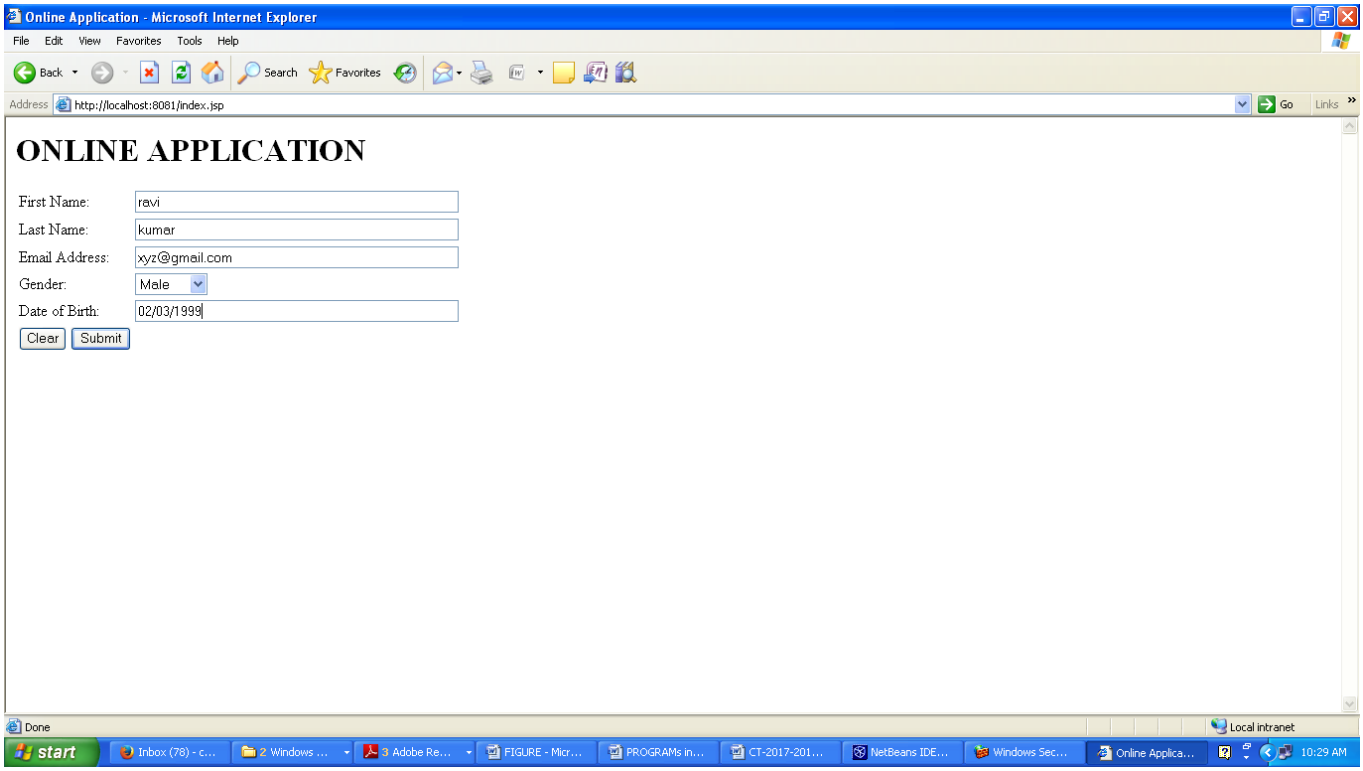
```
</td>
</tr>
</table>
</form>
</body>
</html>
```

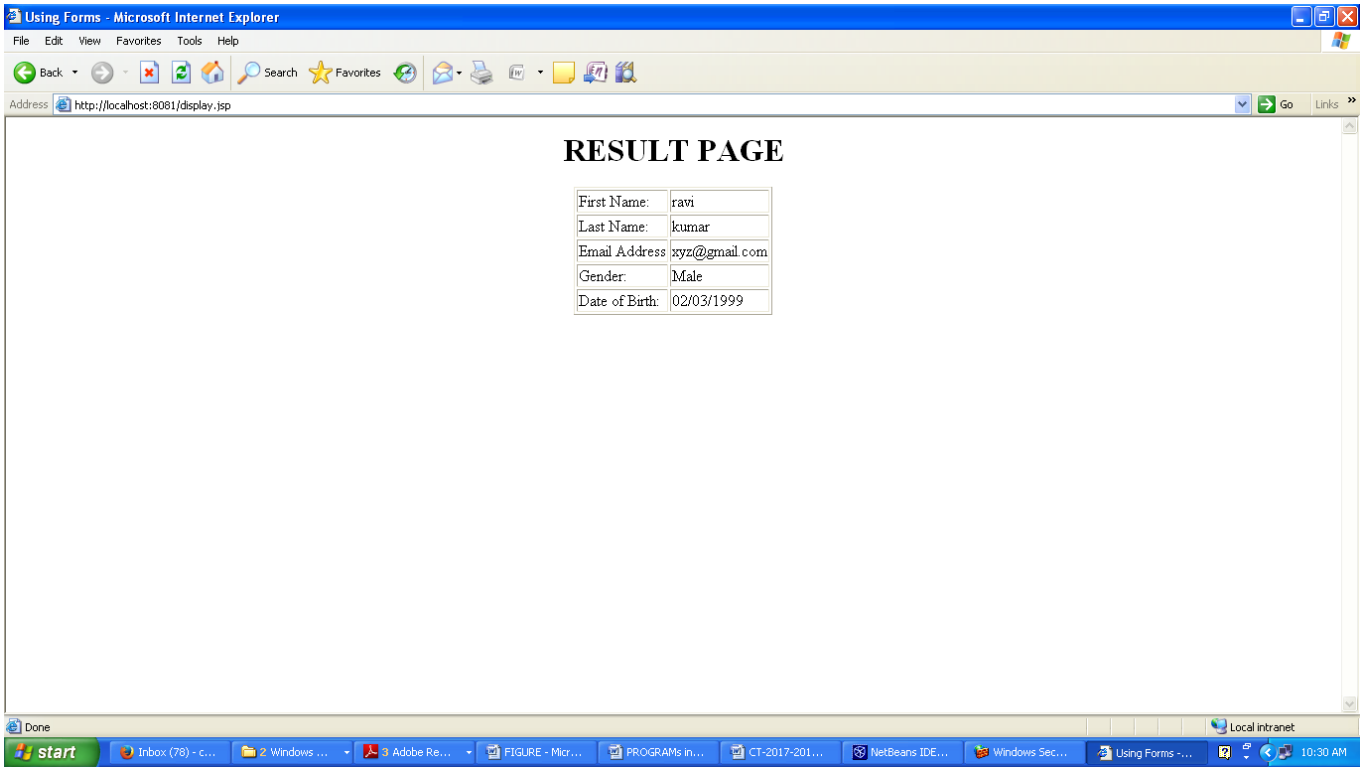
display.jsp

```
<%@page contentType="text/html"%>
<html>
<head><title>Using Forms</title></head>
<body>
<h1 align="center"> RESULT PAGE<h1>
<% String firstname=request.getParameter("first");
String lastname=request.getParameter("last");
String emailaddress=request.getParameter("email");
String gender=request.getParameter("gender");
String dob=request.getParameter("dob");
%>
<table border="1" align="center">
<tr>
<td> First Name:</td>
<td><%=firstname%></td>
</tr>
<tr>
<td> Last Name:</td>
<td><%=lastname%></td>
</tr>
<tr>
<td> Email Address</td>
<td><%=emailaddress%></td>
</tr>
<tr>
<td> Gender:</td>
<td><%=gender%></td>
</tr>
<tr>
<td> Date of Birth:</td>
<td><%=dob%></td>
</tr>
</table>
</body>
```

</html>

Output





Result

Thus the above program for developing online applications using java server pageshas been executed and verified successfully.

Program 7

Aim: To create a XML file using XSL stylesheet.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and create XML file named as Bookdts.xml.

Step 3: Define root element as catalog1 and element as book.

Step 4: Define sub element like bookname, author and price.

Step 5: Create XSL stylesheet and save as sheet.xsl.

Step 6: Display the xml file in any browser.

Step 7: Stop the process.

Program

Bookdts.xml

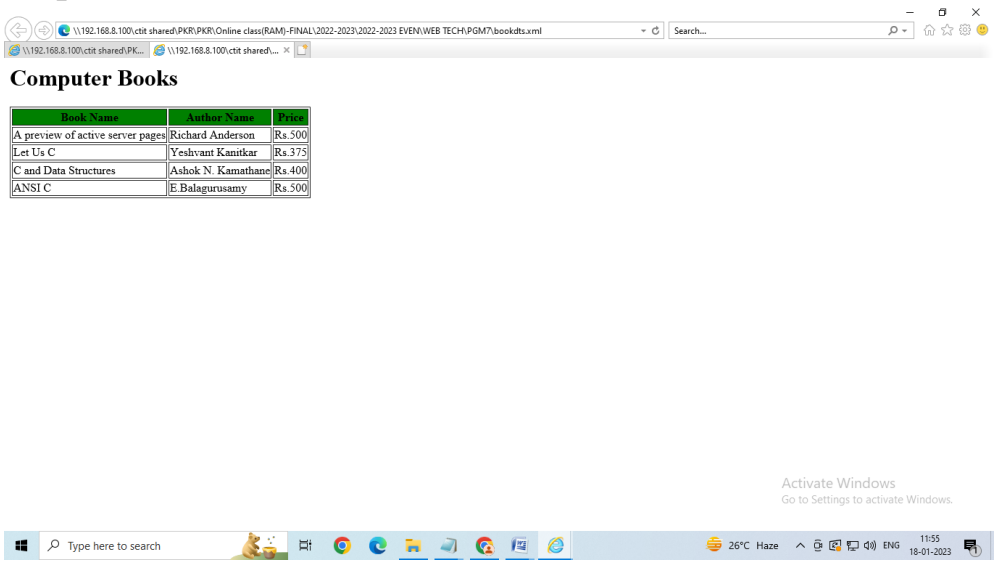
```
<?xml version="1.0" ?>
<?xml-stylesheet type="text/xsl" href="sheet.xsl"?>
<!DOCTYPE book [
<!ELEMENT note (bookname,author,price)>
<!ELEMENT bookname (#PCDATA)>
<!ELEMENT author (#PCDATA)>
<!ELEMENT price (#PCDATA)>
]>
<catalog1>
        <book>
                <bookname> A preview of active server pages </bookname>
                <author> Richard Anderson</author>
                <price> Rs.500 </price>
        </book>
        <book>
                <bookname> Let Us C </bookname>
                <author> Yeshvant Kanitkar </author>
                <price> Rs.375 </price>
        </book>
        <book>
                <bookname> C and Data Structures </bookname>
                <author> Ashok N. Kamathane </author>
                <price> Rs.400 </price>
        </book>
        <book>
                <bookname> ANSI C </bookname>
                <author> E.Balagurusamy </author>
```

```
            <price> Rs.500 </price>
        </book>
</catalog1>
```

sheet.xsl

```
<?xml version="1.0" ?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
  <html>
  <body>
    <h1>Computer Books </h1>
    <table border="1">
      <tr bgcolor="green">
        <th>Book Name</th>
        <th>Author Name</th>
          <th>Price</th>
      </tr>
      <xsl:for-each select="catalog1/book">
      <tr>
        <td><xsl:value-of select="bookname" /></td>
        <td><xsl:value-of select="author" /></td>
          <td><xsl:value-of select="price" /></td>
      </tr>
      </xsl:for-each>
    </table>
    </body>
  </html>
</xsl:template>
</xsl:stylesheet>
```

output



Result

Thus the above program for creating a XML file using XSL stylesheet has been executed and verified successfully.

Program 8

Aim: To create an XML file to store the student details and use stylesheet to displaying the browser.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and create a XML file named as student.xml.

Step 3: Define root element as studentdetails and element as student.

Step 4: Define sub element like name, registernumber, dob, email and phoneno.

Step 5: Create CSS stylesheet and save as Rule.css.

Step 6: Embed the stylesheet into XML file and save it.

Step 7: View the XML file in any browser.

Step 8: Stop the process.

Program

Studentdetails.xml

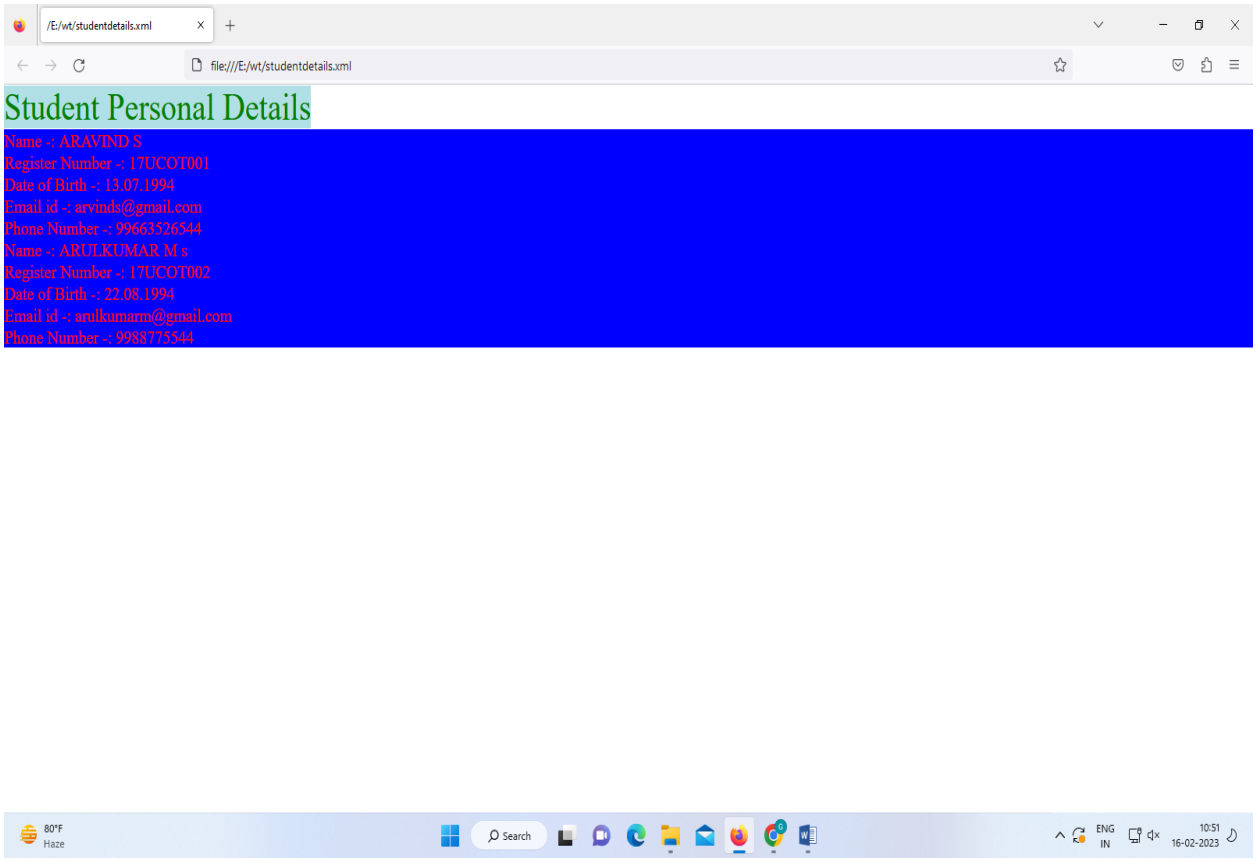
```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="Rule.css"?>
<studentdetails>
   <heading>Student Personal Details </heading>
   <student>
      <name>Name -: ARAVIND S</name>
      <registernumber>Register Number -: 17UCOT001</registernumber>
      <dob>Date of Birth  -: 13.07.1994</dob>
      <emailid>Email id -: arvinds@gmail.com</emailid>
      <phoneno> Phone Number -: 99663526544 </phoneno>
   </student>
    <student>
      <name>Name -: ARULKUMAR M  s</name>
      <registernumber>Register Number -: 17UCOT002</registernumber>
      <dob>Date of Birth  -: 22.08.1994</dob>
```

```
        <emailid>Email id -: arulkumarm@gmail.com</emailid>
        <phoneno> Phone Number -: 9988775544 </phoneno>
    </student>
</studentdetails>
```

Rule.css

```
students {
    color: white;
    background-color : gray;
    width: 100%;
}
 heading {
    color: green;
    font-size : 40px;
    background-color : powderblue;
}
 name, registernumber, dob, emailid, phoneno {
display : block;
color: red;
    font-size : 20px;
    background-color : blue;

}
 title {
    font-size : 25px;
    font-weight : bold;
}
```

Output :



Result

Thus the above program for creatingXML file to store the student details and use stylesheet to displaying the browserhas been executed and verified successfully.

Program 9

Aim: To design a simple calculator using php.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and create a PHP script in c:\xampp\htdocs.

Step 3: Start the apache server in xampp control panel.

Step 4: With the php tag, write code to perform calculation.

Step 5: Execute the file and perform the operation.

Step 6: Stop the process.

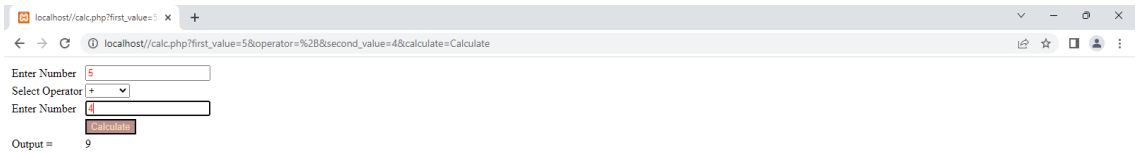
Program

```
<!DOCTYPE html>
<html>
<body>
```

```
 <?php
ini_set('display_errors',0);
 if( isset( $_REQUEST['calculate'] ))
{
$operator=$_REQUEST['operator'];
$n1 = $_REQUEST['first_value'];
$n2 = $_REQUEST['second_value'];
 if($operator=="+")
{
$res= $n1+$n2;
}
if($operator=="-")
{
$res= $n1-$n2;
}
if($operator=="*")
{
$res =$n1*$n2;
}
if($operator=="/")
{
$res= $n1/$n2;
}
 if($_REQUEST['first_value']==NULL || $_REQUEST['second_value']==NULL)
{
echo "<script language=javascript> alert(\"Please Enter Correct values.\");</script>";
}
}
?>

<form>
<table >
 <tr>
<td>Enter Number</td>
<td colspan="1">
<input name="first_value" type="text" style="color:red"/></td>
</tr>

<tr>
<td>Select Operator</td>
<td>
<select name="operator" style="width: 63px">
<option>+</option>
```

```
<option>-</option>
<option>*</option>
<option>/</option>
</select></td>
</tr>

<tr>
<td>Enter Number</td>
<td class="auto-style5">
<input name="second_value" type="text"  style="color:red"/></td>
</tr>

<tr>
<td></td>
<td><input type="submit" name="calculate" value="Calculate"
style="color:wheat;background-color:rosybrown" /></td>
</tr>

<tr>
<td>Output = </td>
<td><?php echo $res;?></td>
</tr>
 </table>
</form>
 </body>
</html>
```

Output :



Result

Thus the above program for designing a simple calculator using phphas been executed and verified successfully.

Program 10

Aim: Towrite a PHP code to retrieve and display a result of Select query.

Algorithm:

Step 1: Start the process.

Step 2: Open notepad and create a php script in c:\xampp\htdocs.

Step 3: Start the apache server in xampp control panel.

Step 4: With the php tag, design to insert the user's input into database.

Step 5: With the form tag, get the student details as input like student regno, name, batch, address, phone and display a button to submit the form to add student details in database.

Step 6: In command prompt, (a)Navigate to the bin folder.

(b)Run the mysql –u root.

(c)Create a tablestudentinfo and use the following attributes such as regno, name, batch, address and phone.

(d)Using select query to display the student details.

Step 7: View the result.

Step 8: Stop the process.

Program

Write a PHP code to retrieve and display a result of Select query.

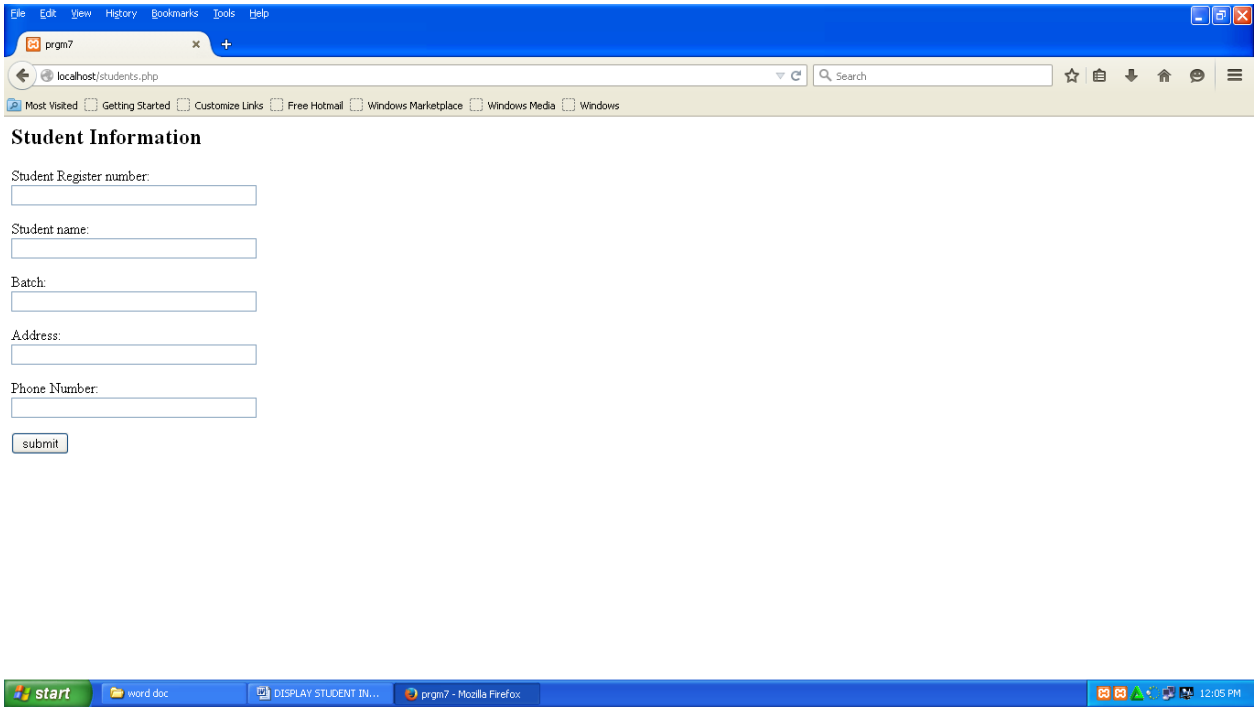
Program name : database.php
Database Name : studet
Table name : studentinfo

```
<html>
<head>
<title> display a result of Select query </title>
```

```
</head>
<body>
<h2>Student Information</h2>
<?php
if(isset($_POST['submit']))
{
$mysqli=new mysqli("localhost","root","","studet");
if($mysqli===false)
{
die("error");
}
echo'<div id="message">';
$inputerror=false;
if(empty($_POST['stu_regno']))
{
echo'error';
$inputError=true;
}
else
{
$regno=$mysqli->escape_string($_POST['stu_regno']);
}
if(empty($_POST['stu_name']))
{
echo'error';
$inputError=true;
}
else
{
$name=$mysqli->escape_string($_POST['stu_name']);
}
if(empty($_POST['stu_batch']))
{
echo'error';
$inputError=true;
}
else
{
$batch=$mysqli->escape_string($_POST['stu_batch']);
}
if(empty($_POST['stu_address']))
{
echo'error';
$inputError=true;
}
else
```

```
{
$address=$mysqli->escape_string($_POST['stu_address']);
}
if(empty($_POST['stu_phone']))
{
echo'error';
$inputError=true;
}
else
{
$phone=$mysqli->escape_string($_POST['stu_phone']);
}
if($inputerror!=true)
{
$sql="insert into studentinfo(regno,name,batch,address,phone)
values('$regno','$name','$batch','$address','$phone')";
if($mysqli->query($sql)===true)
{
echo 'New student name added';
}
else
{
echo' error';
}
}
echo'</div>';
$mysqli -> close();
}
?>
<form action="database.php"  method="POST">
Student Register number:<br/>
<input type="text" name="stu_regno" size="40"/><p/>
Student name:<br/>
<input type="text" name="stu_name" size="40"/><p/>
Batch:<br/>
<input type="text" name="stu_batch" size="40"/><p/>
Address:<br/>
<input type="text" name="stu_address" size="40"/><p/>
Phone Number:<br/>
<input type="text" name="stu_phone" size="40"/>
<p/>
<input type="submit" name="submit" value="submit">
</form>
</body>
</html>
```

OUTPUT:



Result

Thus the above program for retrieve and display a result of Select queryusing php has been executed and verified successfully.