FORM NO.-F/TL/021
Rev.00Date 20.03.2020

Dr. M.G.R.
EDUCATIONAL AND RESEARCH INSTITUTE
DEEMED TO BE UNIVERSITY
University with Graded Autonomy Status
(An ISO 21001 : 2018 Certified Institution)
Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.

RECORD NOTEBOOK

BIT18L03 – WEB TECHNOLOGY AND WEB SERVICES LAB

2023-2024 (EVEN SEMESTER)

DEPARTMENT OF

COMPUTER SCIENCE AND ENGINEERING

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REGISTER NO	**: 211191101076**
COURSE	**: B.TECH CSE-DS&AI**
YEAR/SEM/SEC	**:III/VI/B**

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BONAFIDE CERTIFICATE

REGISTER NO : 211191101076

Subject Name : WEB TECHNOLOGY AND WEB SERVICES LAB
Subject Code : BIT18L03
Department : COMPUTER SCIENCE AND ENGINEERING

Certified that this is the bonafide record of work done by **K SAI KALYAN** of **III Year B.Tech. (CSE-DS&AI), Sec- B** in the WEB TECHNOLOGY AND WEB SERVICES LAB during the year 2023-2024.

Signature of Lab-in-Charge **Signature of Head of Dept.**

Submitted for the Practical Examination held on ……

Internal Examiner **External Examiner**

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EX.NO: 01
DATE:04/01/24

CREATE A WEB PAGE WITH THE FOLLOWING USING HTML

i) To embed an image map in a web page

ii) To fix the hot spots

iii) Show all the related information when the hot spots are clicked.

AIM:

To create a web page that includes a map and displays the related information when a hot spot is clicked in the map.

ALGORITHM:

1. Create a html file with map tag
2. Set the source attribute of the image tag to the location of the image and set the use map attribute
3. Specify an area with name, shape and href set to the appropriate values
4. Repeat step 3 as many hot spots you want to put in the map
5. Create html files for each hot spots the user will select.

DESCRIPTION

The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags but uses the tags to interpret the content of the page. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items.

PROGRAM:

ImageMap.html

```
<!DOCTYPE html>
<html>
<head>
   <title>Image Map</title>
</head>
<body>
   <img src="india map.jpg" usemap="#metroid" ismap="ismap">
   <map name="metroid" id="metroid">
      <area href='TamilNadu.html' shape='circle' coords='175,495,30' title='TamilNadu'/>
      <area href="Karnataka.html" shape="rect" coords="100,400,150,450" title="Karnataka" />
      <area href="AndhraPradesh.html" shape="poly" coords="150,415,175,348,265,360,190,420,190,440"
title="Andhra Pradesh" />
      <area href="Kerala.html" shape="poly" coords="108,455,150,515,115,490,148,495,110,448,155,501"
title="Kerala" />
   </map>
</body>
</html>
```

TamilNadu.html

```
<!DOCTYPE html>
<html>
<head>
   <title>About Tamil Nadu</title>
</head>
<body>
   <center><h1>Tamil Nadu</h1></center>
   <hr>
   <ul>
      <li>Area: 130,058 Sq. Kms.</li>
      <li>Capital: Chennai</li>
      <li>Language: Tamil</li>
      <li>Population: 6,21,10,839</li>
```

```
    </ul>
    <hr>
</body>
</html>
```

Karnataka.html

```
<!DOCTYPE html>
<html>
<head>
    <title>About Karnataka</title>
</head>
<body>
    <center><h1>Karnataka</h1></center>
    <hr>
    <ul>
        <li>Area: 191,791 Sq. Kms</li>
        <li>Capital: Bangalore</li>
        <li>Language: Kannada</li>
        <li>Population: 5,27,33,958</li>
    </ul>
    <hr>
    <a href='exp1_india_map.html'>India Map</a>
</body>
</html>
```

Andhrapradesh.html

```
<!DOCTYPE html>
<html>
<head>
    <title>About Andhra Pradesh</title>
</head>
<body>
    <center><h1>Andhra Pradesh</h1></center>
    <hr>
```

```
    <ul>
      <li>Area: 2,75,068 Sq. Kms</li>

     <li>Capital: Hyderabad</li>
      <li>Language: Telugu</li>
      <li>Population: 7,57,27,541</li>
    </ul>
    <hr>
    <a href='Imagemap.Html'>India Map</a>
</body>
</html>
```

Kerala.html

```
<!DOCTYPE html>
<html>
<head>
<title>About Kerala</title>
</head>
<body>
        <center><h1>Kerala</h1></center>
        <hr>
        <ul>
                <li>Area: 38,863 Sq. Kms.</li>
                <li>Capital: Thiruvananthapuram</li>
                <li>Language: Malayalam</li>
                <li>Population: 3,18,38,619</li>
        </ul>
                <a href='Imagemap.Html'>India Map</a>
</body>
</html>
```

OUTPUT:

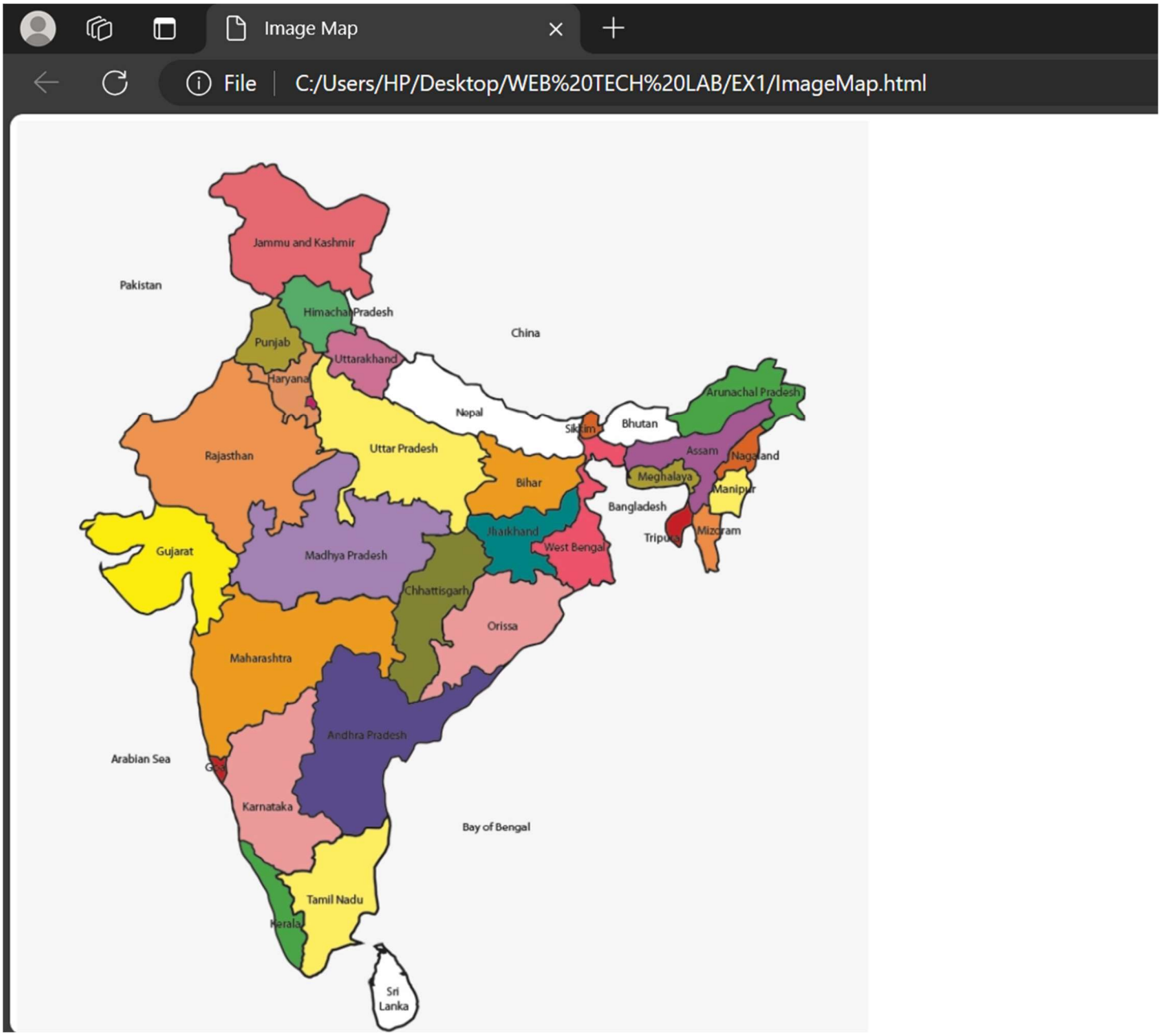
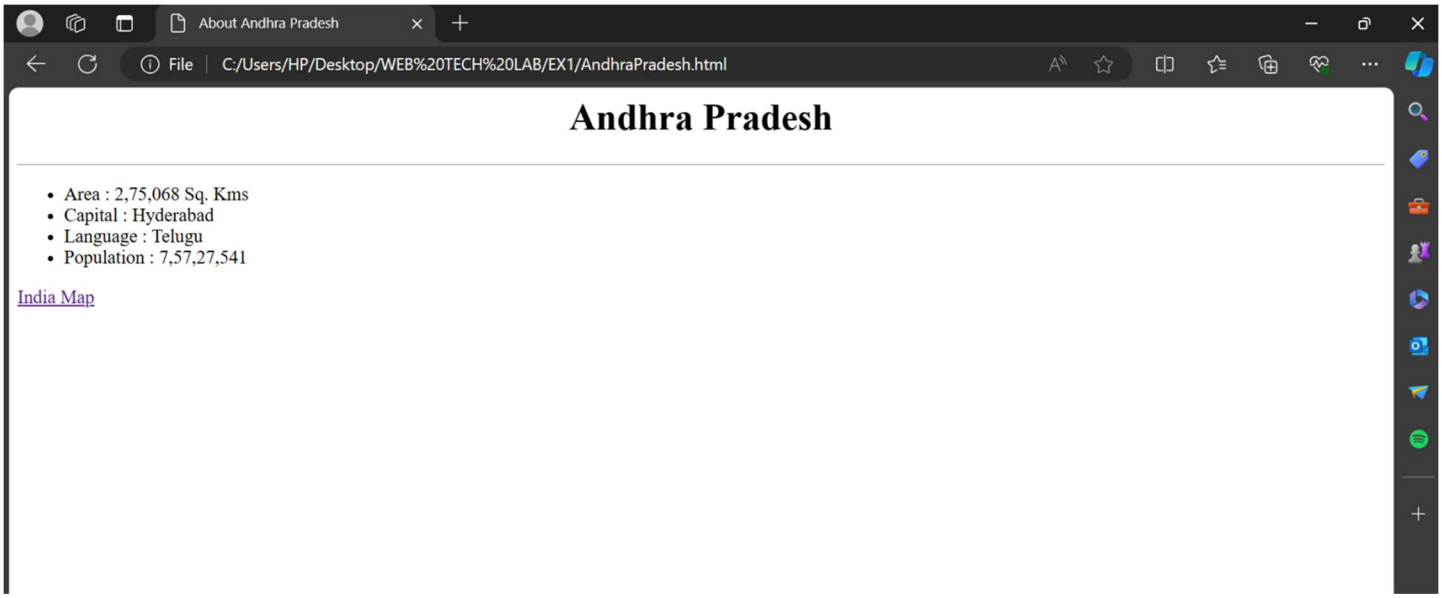
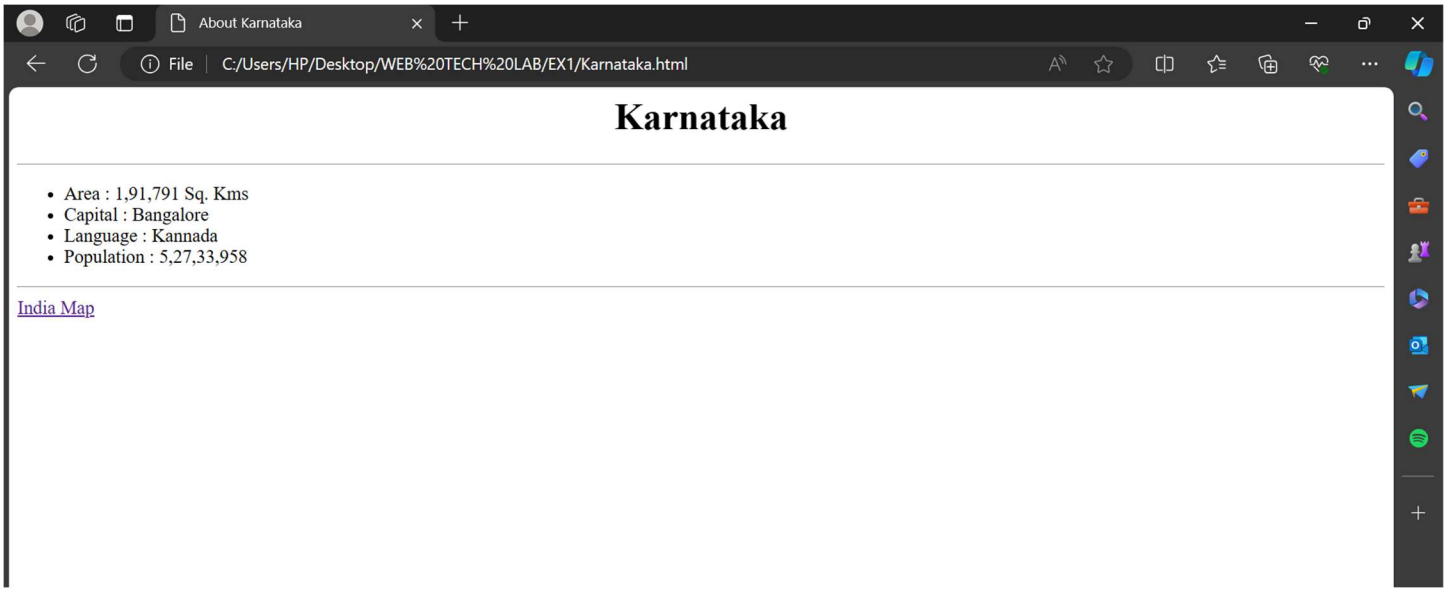
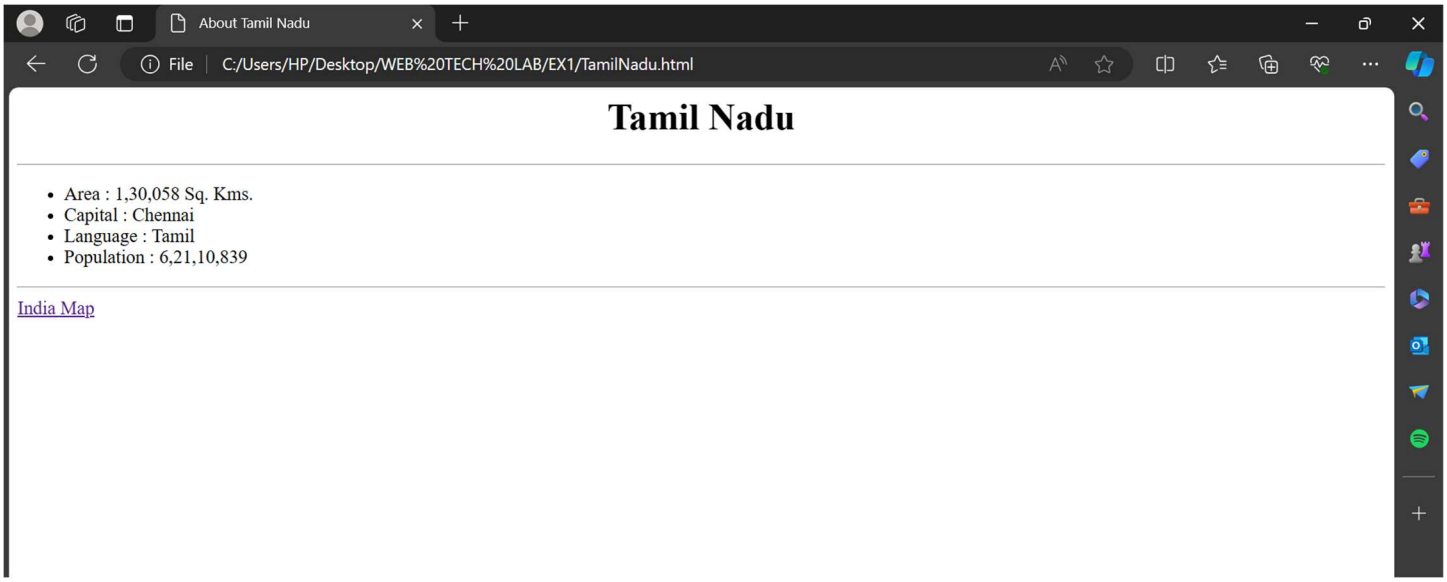
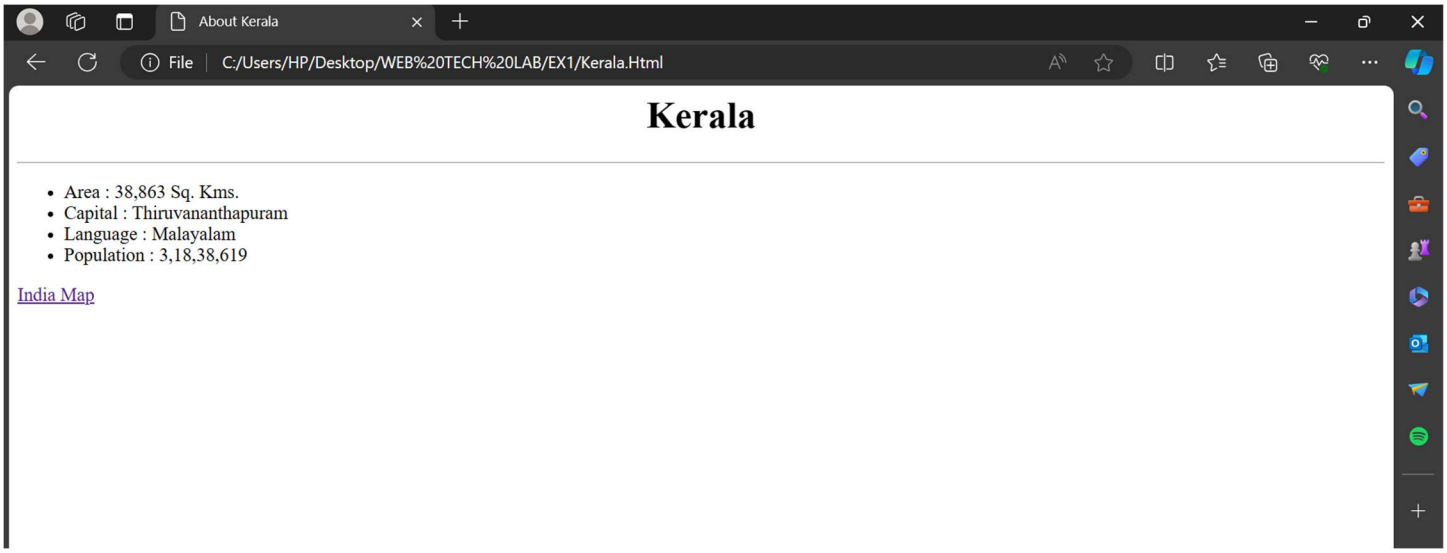


Image Map
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX1/ImageMap.html
Jammu and Kashmir
Pakistan
Himachal Pradesh
China
Punjab
Uttarakhand
Haryana
Nepal
Arunachal Pradesh
Sikkim
Bhutan
Rajasthan
Uttar Pradesh
Assam
Nagaland
Bihar
Meghalaya
Manipur
Bangladesh
Jharkhand
Mizoram
Tripura
Gujarat
Madhya Pradesh
West Bengal
Chhattisgarh
Orissa
Maharashtra
Andhra Pradesh
Arabian Sea
Karnataka
Bay of Bengal
Tamil Nadu
Kerala
Sri Lanka


About Andhra Pradesh
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX1/AndhraPradesh.html
Andhra Pradesh
Area : 2,75,068 Sq. Kms
Capital : Hyderabad
Language : Telugu
Population : 7,57,27,541
India Map


About Karnataka
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX1/Karnataka.html
Karnataka
Area : 1,91,791 Sq. Kms
Capital : Bangalore
Language : Kannada
Population : 5,27,33,958
India Map


About Tamil Nadu
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX1/TamilNadu.html
Tamil Nadu
Area : 1,30,058 Sq. Kms.
Capital : Chennai
Language : Tamil
Population : 6,21,10,839
India Map


About Kerala
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX1/Kerala.Html
Kerala
Area : 38,863 Sq. Kms.
Capital : Thiruvananthapuram
Language : Malayalam
Population : 3,18,38,619
India Map

RESULT:

Thus, the html program To create a web page that includes a map and displays the related information when a hot spot is clicked in the map is executed and output verified

successfully.

EX.NO: 02
DATE: 11/01/24

CREATE A WEB PAGE WITH ALL TYPES OF CASCADING STYLE SHEETS.

AIM:

To create a web page that displays college information using various style sheets.

ALGORITHM:

1. Create a web page with frame sets consisting two frames
2. In the first frame include the links
3. In the second frame set display the web page of thelink
4. create an external style sheet
5. create an inline and internal style sheets and make it link to the external style sheets.

PROGRAM:

XYZ.CSS:

```
h3{font-family:arial;font-
size:20;color:cyan} table{border-
color: green}
td {font-size:20pt; color: magenta}
```

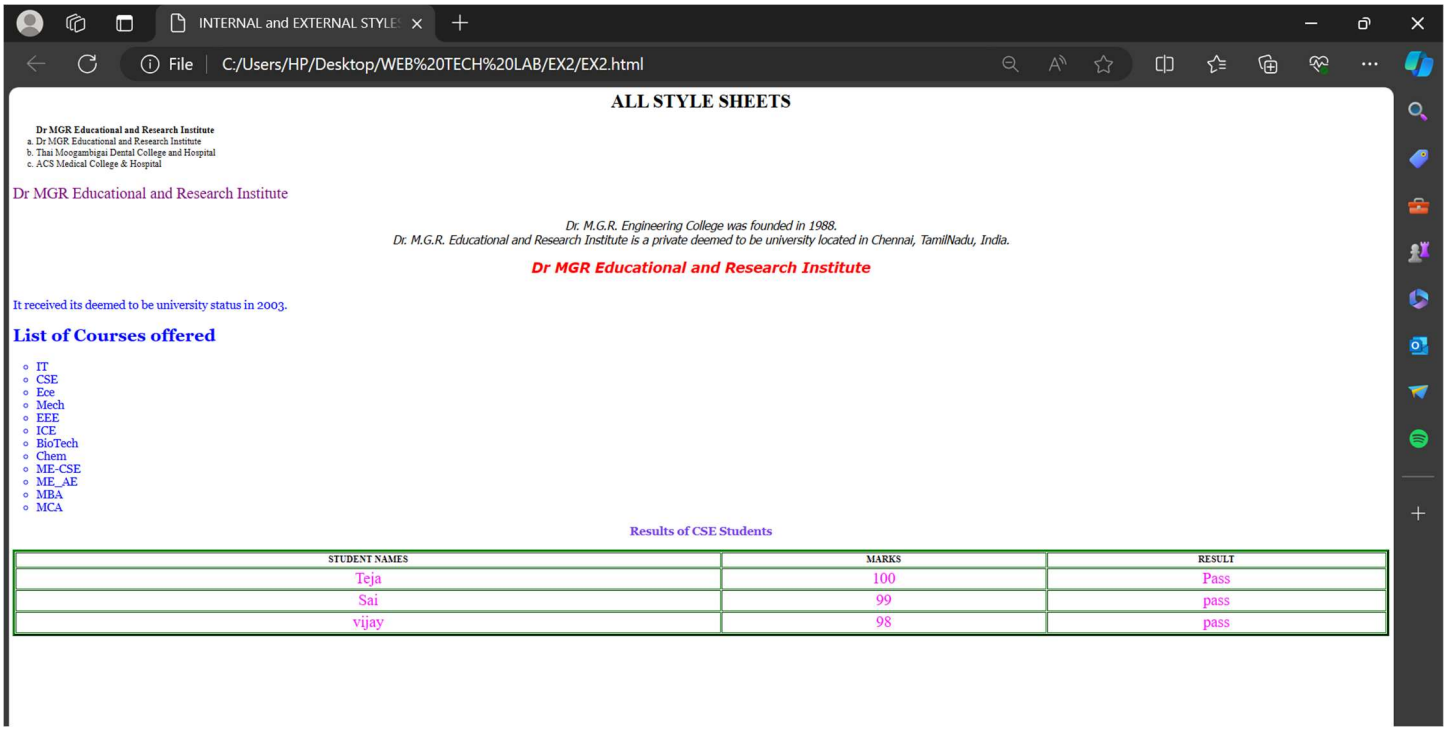
HTML CODE:

```
<html>
<head>
<h1>
<center>ALL STYLE SHEETS</center>
</h1>
<title> INTERNAL and EXTERNAL STYLESHEETS </title>
<link rel="stylesheet" href="xyz.css" type="text/css">
<style type="text/css">h3
{
font-family: Georgia, 'Times New Roman', Times, serif;font-style:
bold; color: rgb(121, 65, 232);text-align:
center; }
. vid {
font-family: verdana;font-style: italic;
color: red; text-align: center
}
.ani {
font-family: tahoma;font-style: italic;
font-size: 20; text-align: center;
}
font {
font-family:
georgia;color: blue;
font-size: 20
}
```

```
ul {
list-style-type: circle
}
</style>
</head>
<body>
<ol style="list-style-type: lower-alpha">
<b>Dr MGR Educational and Research Institute</b>
<li>Dr MGR Educational and Research Institute
<li>Thai Moogambigai Dental College and Hospital
<li>ACS Medical College & Hospital
</ol>
<p style="font-size:20pt; color: purple">Dr MGR Educational and Research Institute</p>
<p class="ani">Dr. M.G.R. Engineering College was founded in 1988.<br>Dr. M.G.R. Educational and Research Institute is a private deemed to be university located in Chennai, TamilNadu, India. <br></p>
<h2 class="vid">Dr MGR Educational and Research Institute</h2>
<br>
<font>It received its deemed to be university status in 2003.</font>
<br>
<font>
<h2>List of Courses offered</h2>
<ul>
<li>IT</li>
<li>CSE</li>
<li>Ece</li>
<li>Mech</li>
<li>EEE</li>
<li>ICE</li>
<li>BioTech</li>
<li>Chem</li>
<li>ME-CSE</li>
```

```
<li>ME_AE</li>
<li>MBA</li>
<li>MCA</li>
</ul>
</font>
<h3>Results of CSE Students</h3>
<table width="100%" cellspacing="2" cellpadding="2" border="5">
<tr>
<th>STUDENT NAMES</th>
<th>MARKS</th>
<th>RESULT</th>
</tr>
<tr>
<td align="center">Teja</td>
<td align="center">100</td>
<td align="center">Pass</td>
</tr>
<tr>
<td align="center">Sai</td>
<td align="center">99</td>
<td align="center">pass</td>
</tr>
<tr>
<td align="center">vijay</td>
<td align="center">98</td>
<td align="center">pass</td>
</tr>
</table>
</body>
</html>
```

OUTPUT:


INTERNAL and EXTERNAL STYLE
File
C:/Users/HP/Desktop/WEB%20TECH%20LAB/EX2/EX2.html
ALL STYLE SHEETS
Dr MGR Educational and Research Institute
a. Dr MGR Educational and Research Institute
b. Thai Moogambigai Dental College and Hospital
c. ACS Medical College & Hospital
Dr MGR Educational and Research Institute
Dr. M.G.R. Engineering College was founded in 1988.
Dr. M.G.R. Educational and Research Institute is a private deemed to be university located in Chennai, TamilNadu, India.
Dr MGR Educational and Research Institute
It received its deemed to be university status in 2003.
List of Courses offered
IT
CSE
Ece
Mech
EEE
ICE
BioTech
Chem
ME-CSE
ME_AE
MBA
MCA
Results of CSE Students
STUDENT NAMES
MARKS
RESULT
Teja
100
Pass
Sai
99
pass
vijay
98
pass

RESULT:

Thus, the above program to creates a web page with all types of cascading style sheets is executed and output verified successfully.

EX.NO: 03
DATE:18/01/24

CLIENT-SIDE SCRIPTS FOR VALIDATING WEB FORM CONTROLS USING DHTML

AIM:

To develop an html webpage to validate form using DHTML

ALGORITHM:

1. The form will include one text field called "Your Name", and a submitbutton.
2. Validation script will ensure that the user enters their name before the form is sent to the server.
3. Open this page to see it in action.
4. Try pressing the **Send Details** button without filling anything in the "Your Name" field.
5. You might like to open the source code for this form in a separate window
6. The page consists of a JavaScript function called validate form() that performs the form validation, followed by the form itself.

DESCRIPTION

Dynamic HTML or DHTML, is an umbrella term for a collection of technologies used together to create interactive and animated web sites. by using a combination of a static markup language (such as HTML), a client-side scripting language (such as JavaScript), a presentation definition language (such as CSS), and the Document Object Model.

PROGRAM:

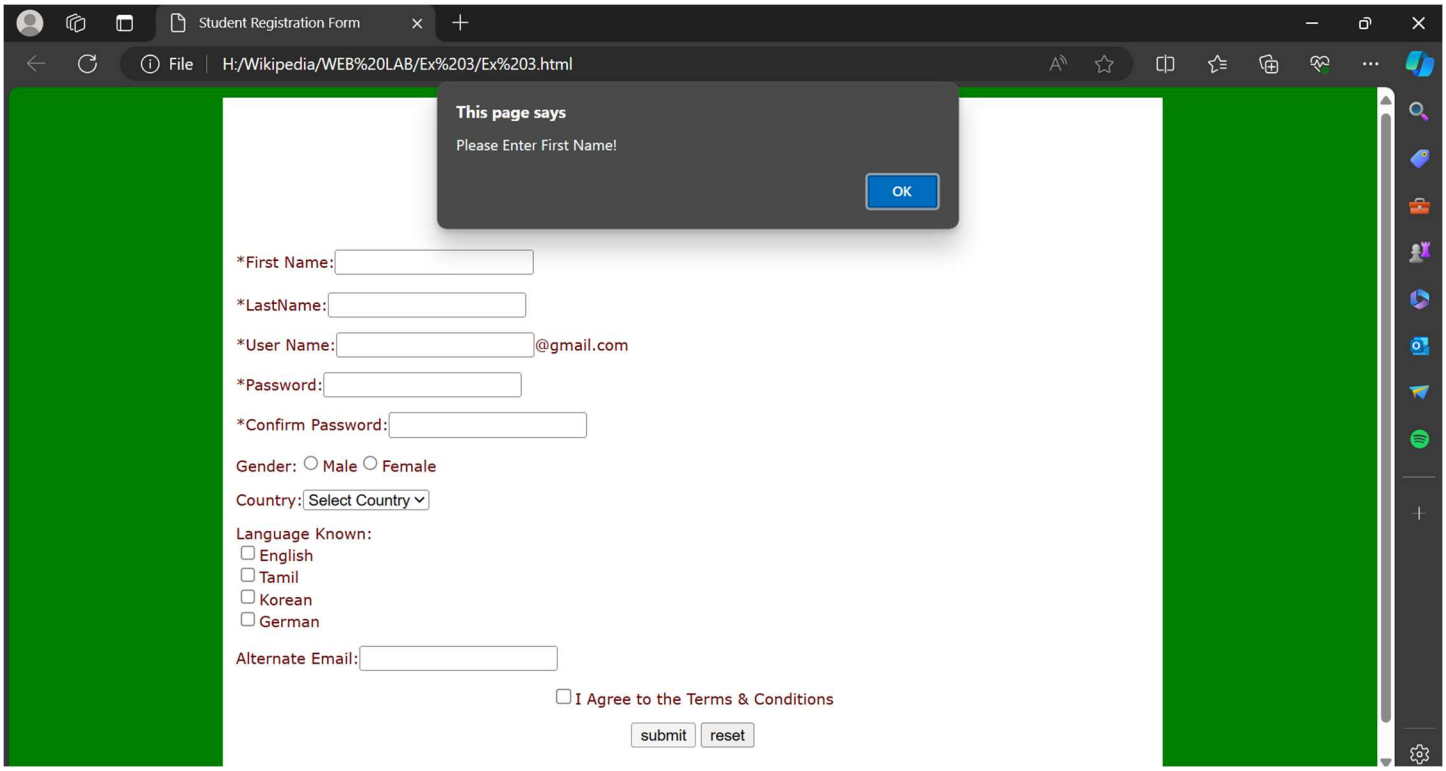
FORM VALIDATION

```
<html>

<head>
   <title>Student Registration Form</title>
</head>

<body align="center" bgcolor="green">
   <script type="text/javascript">

      function display() {
         let a = document.signup.fname.value;
         let b = document.signup.lname.value;
         let c = document.signup.uname.value;
         let d = document.signup.country.value;
         let e = document.signup.aemail.value;
      document.writeln('<h2>' + "Details Entered:" + '</h2>');
      document.writeln('<br/><fontcolor="#0066ff">'+"FirstName:"+'</font>'+a);
      document.writeln('<br/><fontcolor="#0066ff">'+"LastName:"+'</font>'+b);
      document.writeln('<br/><fontcolor="#0066ff">'+"UseName:"+'</font>'+ c);
      document.writeln('<br/><fontcolor="#0066ff">'+"Country:"+'</font>'+ d);
      document.writeln('<br/><fontcolor="#0066ff">'+"AlternateEmail:"+'</font>'+ e);

      }

      function validate() {
         if (document.signup.fname.value == "") {
            alert("Please Enter First Name!");
            return false;
         }
         if (document.signup.lname.value == "") {
            alert("Please Enter Last Name!");
            return false;
         }
         if (document.signup.uname.value == "") {
            alert("Please Enter User Name!");
            return false;
         }
         if (document.signup.pword1.value == "") {
            alert("Please Enter Password!");
            return false;
         }
         if (document.signup.pword1.value.length < 6) {
            alert("Please Enter at least 6 characters for Password!");
            return false;
         }
         if (document.signup.pword2.value == "") {
            alert("Please Enter Password Again!");
```

```
            return false;
        }
        if (document.signup.pword2.value != document.signup.pword1.value) {
            alert("Password Mismatch! Reenter Password.");
            return false;
        }

        alert("Details Entered Successfully");
        display();
        return true;
    }
</script>
<div id="displayDetails"></div>

<table width="100%" height="100%">
    <tr>
        <td colspan="2" width="15%"></td>
        <td colspan="1" bgcolor="#ffffff" width="70%" height="100%">
            <h1 align="center">
                <font color="#0066ff">Email</font>
            </h1>
            <h2 align="center">
                <font color="#0066ff">New User Signup Form</font>
            </h2>
            <form name="signup" method="POST" onsubmit="return validate()" style="padding: 10px;">
                <font face="verdana, arial, helvetica, sans-serif" color="#660000" size="2">
                    <p>*First Name:<input type="text" name="fname" size="20"><br><br>
                        *LastName:<input type="text" name="lname" size="20">
                    </p>
                        <p style="border">*User Name:<input type="text" name="uname"
                        size="20">@gmail.com</p>
                    <p style="border">*Password:<input type="password" name="pword1" size="20"></p>
                        <p style="border">*Confirm Password:<input type="password" name="pword2"
                        size="20"></p>
                    <p>Gender:<input type="radio" name="gen" value="male">Male<input type="radio"
                        name="gen" value="female">Female</p>
                    <p>Country:<select name="country">
                            <option selected>Select Country</option>
                            <option name="country" value="India">India</option>
                            <option name="country" value="Korea">Korea</option>
                            <option name="country" value="Canada">Canada</option>
                            <option name="country" value="Netherlands">Netherlands</option>
                        </select>
                    </p>
                    <p> Language Known:<br> <input type="checkbox" name="lang"
                        value="English">English<br>
                        <input type="checkbox" name="lang" value="Tamil">Tamil<br>
                        <input type="checkbox" name="lang" value="Korean">Korean<br>
                        <input type="checkbox" name="lang" value="German">German<br>
                    </p>
```

```
                <p style="border">Alternate Email:<input type="text" name="aemail" size="20"></p>
                <p align="center"><input type="checkbox" name="agree">I Agree to the Terms &
                 Conditions</p>
                <p align="center"><input type="submit" value="submit"> <input type="reset"
                 value="reset"></p>
              </font>
            </form>
          </td>
          <td Colspan="2" width="15%"> </td>
        </tr>
      </table>
    </body>
    </html>
```

OUTPUT:


Student Registration Form
File
H:/Wikipedia/WEB%20LAB/Ex%203/Ex%203.html
This page says
Please Enter First Name!
OK
*First Name:
*LastName:
*User Name:
@gmail.com
*Password:
*Confirm Password:
Gender: Male Female
Country: Select Country
Language Known:
English
Tamil
Korean
German
Alternate Email:
I Agree to the Terms & Conditions
submit
reset

RESULT:

Thus, the program to develop an html webpage to validate form using DHTML is executed and output verified successfully.

EX.NO: 04
DATE: 01/02/24

COLOR PALETTE WITH MATRIX OF BUTTONS

AIM

To develop a program in java to create applets.

ALGORITHM:

1. Import all necessary packages and classes
2. Define a class that extends applet and implements action listener and item listener
3. Declare an array of buttons to set colors, two checkboxes for foreground and backgroundcolors
4. Declare a text area to hold the text, a checkbox group for checkboxes
5. Add the array of buttons in the init function.
6. In the action Performed () method, do thefollowing:
    a. Get the action command in the string,
    b. If foreground is checked then set the foreground color to the selected co

DESCRIPTION

A Java applet is a small application written in Java and delivered to users in the form of bytecode. The user launches the Java applet from a web page and it is then executed within a JavaVirtual Machine (JVM) in a process separate from the web browser itself. A Java applet can appearin a frame of the web page, a new application window, Sun's Applet Viewer or a stand-alone toolfor testing applets. Java applets were introduced in the first version of the Java language

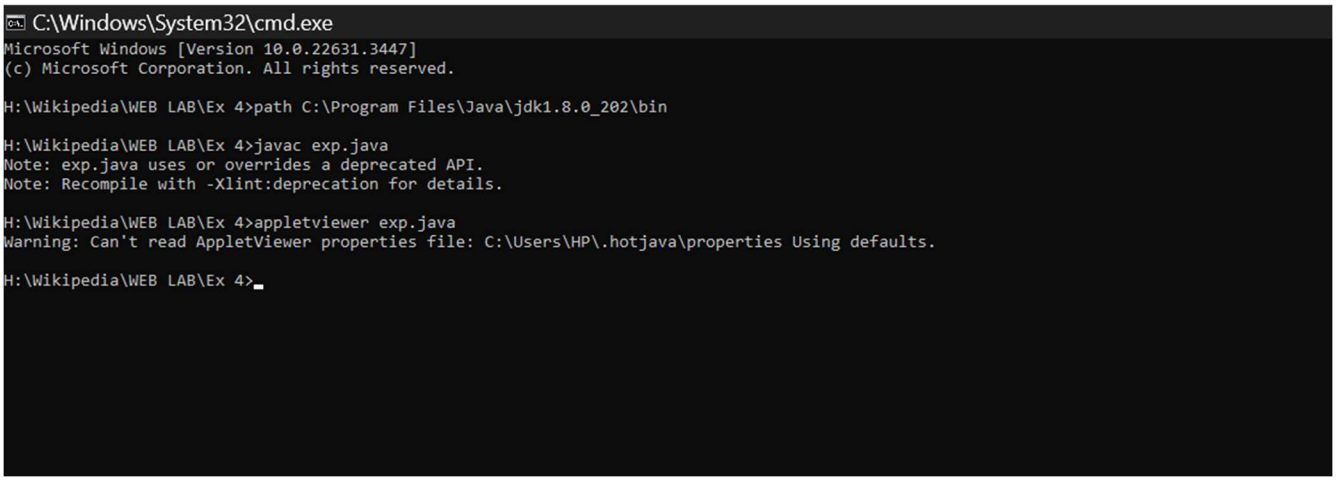
PROGRAM:

```
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
/*<applet code="exp" width=400 height=400> </applet>*/
public class exp extends Applet implements ItemListener{
int currcolor=5;
int flag=1;
String text="Click any of the buttons";
Button buttons[]=new Button[5];
String colours[]={"Red","Blue","Green","Yellow","Magenta"};
Image img;
CheckboxGroup cbg=new CheckboxGroup();
Checkbox box1=new Checkbox("Background Color",cbg,true);
Checkbox box2=new Checkbox("TextColor",cbg,false);
Checkbox box3=new Checkbox("Loading Image",cbg,false);
public void init()
{
for(int i=0;i<5;i++)
{
buttons[i]=new Button(" ");
add(buttons[i]);
}
buttons[0].setBackground(Color.red);
buttons[1].setBackground(Color.blue);
buttons[2].setBackground(Color.green);
buttons[3].setBackground(Color.yellow);
buttons[4].setBackground(Color.magenta);
add(box1);
add(box2);
add(box3); box1.addItemListener(this);
box2.addItemListener(this);
box3.addItemListener(this);
}
public void itemStateChanged(ItemEvent ev)
{
if(box1.getState()==true) flag=1;
else if(box2.getState()==true)
{
text="Default color is black";
flag=2;
}
else if(box3.getState()==true)
{
img=getImage(getDocumentBase(),"flower.jpg");
flag=3;
}
repaint();
```

```
}

public void paint (Graphics g)
{
if(flag==2)
{
g.drawString(text,30,100);
switch (currcolor)
{
case 0: g.setColor(Color.red);
break;
case 1:
g.setColor(Color.blue);
break;
case 2: g.setColor(Color.green);
break;
case 3: g.setColor(Color.yellow);
break;
case 4: g.setColor(Color.magenta); break;
case 5: g.setColor(Color.black);
break;
}
g.drawString(text,30,100);
} else if(flag==1)
{
g.drawString(text,30,100);
switch(currcolor)
{
case 0:
setBackground(Color.red); break;
case 1: setBackground(Color.blue); break;
case 2: setBackground(Color.green); break;
case 3: setBackground(Color.yellow); break;
case 4: setBackground(Color.magenta); break;
case 5: setBackground(Color.white); break;
}
} else if(flag==3)
{
g.drawImage(img,20,90,this);
}
}
public boolean action(Event e,Object o)
{ for(int i=0;i<5;i++)
{
if(e.target==buttons[i])
{ currcolor=i;
text="You have chosen "+colours[i];
repaint ();
return true;
}
```

```
    }
    return false;}}
```

OUTPUT:



RESULT:

Thus the above program in java to create applets is executed and output verified sucessfully

EX.NO: 05
DATE: 08/02/24

PROGRAM USING XML SCHEMA –XSLT/XSL

AIM:

To Develop an XML program describing styles into it.

ALGORITHM:

1. The xsl: output element specifies how to display the result tree.
2. The XSL processor produces the output result tree.
3. It should be specified by xsl:output element.
4. The method attribute of xsl:output specifies the overall process to produce the result tree.
5. The HTML output method results the tree as HTML document.

DESCRIPTION

Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. It is defined in the XML 1.0 Specification produced by the W3C, and several other related specifications,[4] all free open standards.

PROGRAM

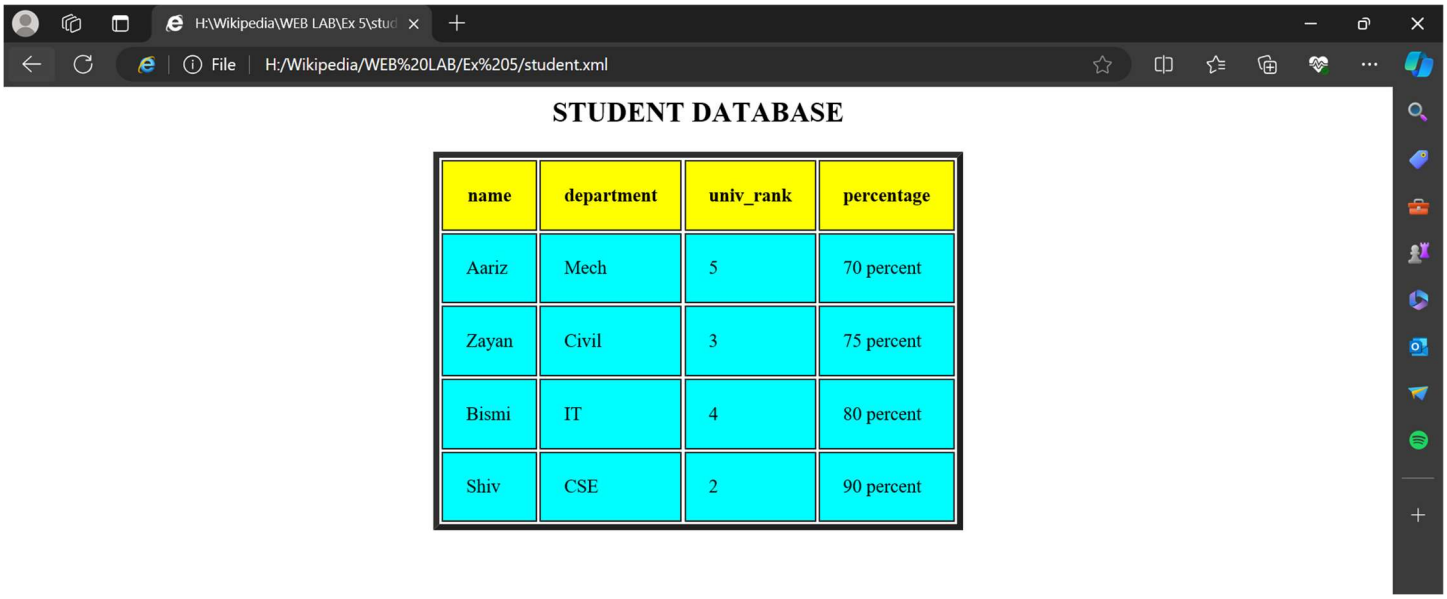
STUDENT.XML

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" version="2.0" href="student.xsl"?>
<student>
<Person-Details>
<name>Aariz</name>
<department>Mech</department>
<univ_rank>5</univ_rank>
<percentage>70 percent</percentage>
</Person-Details>
<Person-Details>
<name>Bismi</name>
<department>IT</department>
<univ_rank>4</univ_rank>
<percentage>80 percent</percentage>
</Person-Details>
<Person-Details>
<name>Shiv</name>
<department>CSE</department>
<univ_rank>2</univ_rank>
<percentage>90 percent</percentage>
</Person-Details>
<Person-Details>
<name>Zayan</name>
<department>Civil</department>
<univ_rank>3</univ_rank>
<percentage>75 percent</percentage>
</Person-Details>
</student>
```

STUDENT.XSL

```
<?xml version="1.0"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
<html>
<body>
<h2><center>STUDENT DATABASE</center></h2>
<table align="center" border="5" cellpadding="20">
<tr bgcolor="yellow">
<th>name</th>
<th>department</th>
<th>univ_rank</th>
<th>percentage</th>
</tr>
<xsl:for-each select="student/Person-Details">
<xsl:sort select="percentage"/>
<tr bgcolor="cyan">
<td><xsl:value-of select="name"/></td>
<td><xsl:value-of select="department"/></td>
<td><xsl:value-of select="univ_rank"/></td>
<td><xsl:value-of select="percentage"/></td>
</tr>
</xsl:for-each>
</table>
</body>
</html>
</xsl:template>
</xsl:stylesheet>
```

OUTPUT



STUDENT DATABASE

name	department	univ_rank	percentage
Aariz	Mech	5	70 percent
Zayan	Civil	3	75 percent
Bismi	IT	4	80 percent
Shiv	CSE	2	90 percent

RESULT :

Thus the program using xml schema – xslt/xsl is executed and output verified successfully

EX.NO :06
DATE:10/02/24

CREATE A WEB FORM FOR AN ONLINE LIBRARY USING VARIOUS ASP.NET CONTROLS

AIM:

To create a Web form for an online library using ASP.NET.

ALGORITHM:

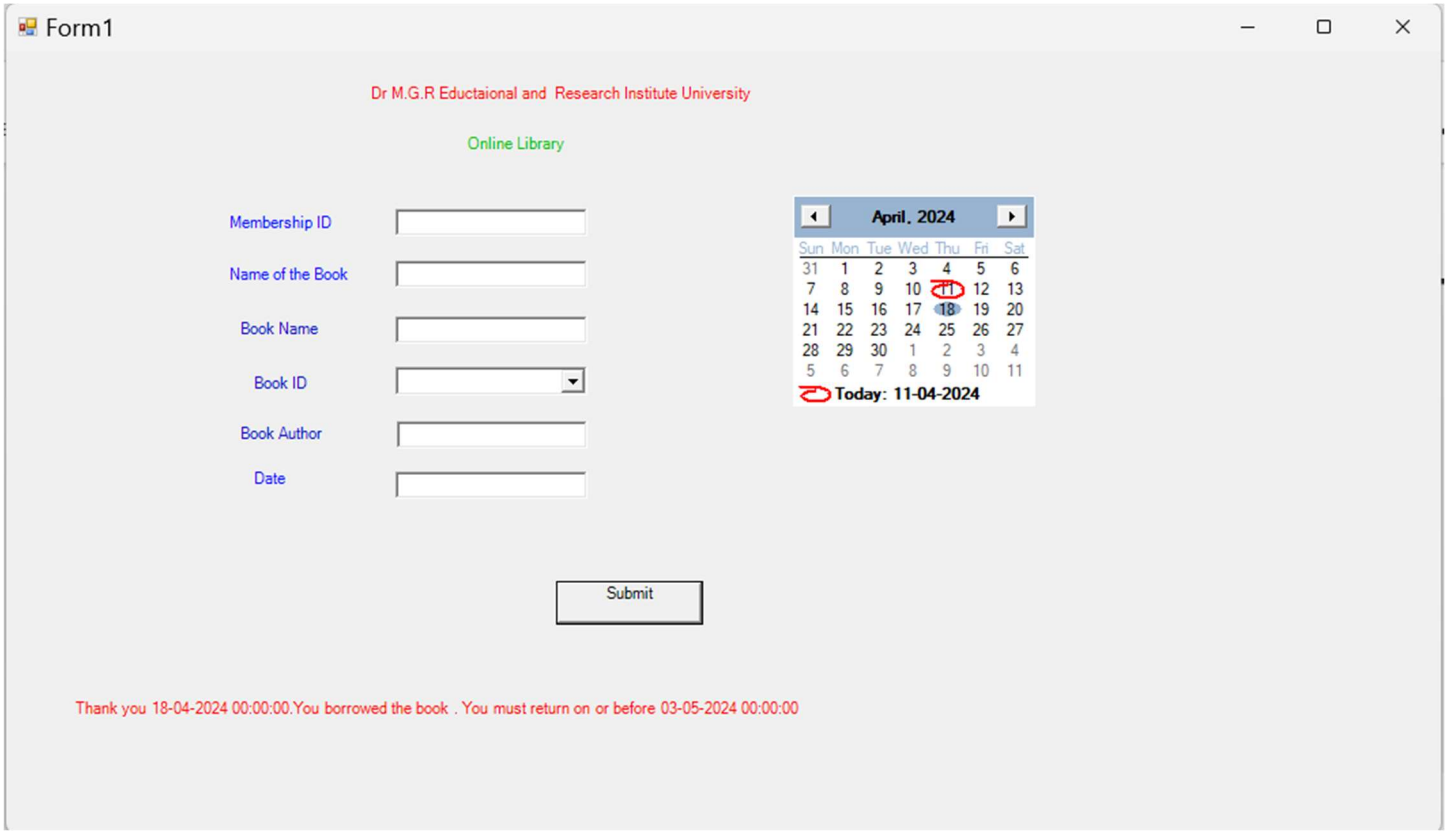
1. Open visual studio 2010 for create web application.
2. open a new web form for designing online library page.
3. Add various control like label, textbox, dropdown list, list box, calendar etc.,
4. Write a code for dynamic web page using visual basic.
5. Execute the application.

PROGRAM:

Webform1.aspx.vb

```
Imports System
Imports System.Collections.Generic
Imports System.ComponentModel
Imports System.Text
Imports System.Web
Imports System.Web.UI
Imports System.Web.UI.WebControls


<DefaultProperty("Text"), ToolboxData("<{0}:ServerControl1 runat=server></{0}:ServerControl1>")>
Public Class ServerControl1
   Inherits WebControl

   <Bindable(True), Category("Appearance"), DefaultValue(""), Localizable(True)>
   Property Text() As String
      Get
         Dim s As String = CStr(ViewState("Text"))
         If s Is Nothing Then
            Return "[" & Me.ID & "]"
         Else
            Return s
         End If
      End Get

      Set(ByVal Value As String)
         ViewState("Text") = Value
      End Set
   End Property

   Protected Overrides Sub RenderContents(ByVal output As HtmlTextWriter)
      output.Write(Text)
   End Sub

   Private Sub ServerControl1_Load(sender As Object, e As EventArgs) Handles Me.Load

   End Sub
    End Class
```

OUTPUT:


Form1
Dr M.G.R Eductaional and Research Institute University
Online Library
Membership ID
Name of the Book
Book Name
Book ID
Book Author
Date
April, 2024
Sun Mon Tue Wed Thu Fri Sat
31 1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 1 2 3 4
5 6 7 8 9 10 11
Today: 11-04-2024
Submit
Thank you 18-04-2024 00:00:00.You borrowed the book . You must return on or before 03-05-2024 00:00:00

RESULT:

Thus the above program to create a web form for an online library using various asp.net controls executed and output verified successfully

EX.NO: 07
DATE: 15/02/24

SEND A SIMPLE E-MAIL TO YOUR FRIENDS USING JSP APPLICATION

AIM:

Create a JSP application to Send a simple E-Mail to your friends.

ALGORITHM:

STEP 1 Open the NetBeans IDE.

STEP 2 Choose "Java web" -> "Web application" as in the following.

STEP 3 Specify "JSPMailApp" as the project name as in the following

STEP 4 Select the Server and version wizard as in the following.

STEP 5 Now delete the default "index.jsp" file and create a new "index.html" file with the following code.This page is created to receive the values from the user, like mail-id, subject and message content that they want to send. Then we send these details to the "mailJSP.jsp" page to respond depending on them

PROGRAM:

index.html

```
<!DOCTYPE html>
<html>
<head>
<title>Sending Mail Through JSP</title>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<meta name="viewport" content="width=device-width">
</head>
<body bgcolor="khaki">
<form action="mailJSP.jsp">
<table><tr><td><b><font color="red">To:
</td>
<td><b><b><input type="text" name="mail" value="Enter sender mail-id"/><br/>
</td></tr>
<tr><td>
<b><font color="red">Subject:</td>
<td>
<input type="text" name="sub" value="Enter Subject Line"><br/>
</td></tr>
<tr><td>
<b><font color="red">Message Text:
</td>
<td>
<textarea rows="12" cols="80" name="mess"></textarea><br/>
</td></tr>
<tr><td>
<input type="submit" value="Send">
</td>
<td>
<input type="reset" value="Reset">
</td></tr>
</table></form></body></html>
```

STEP 6 Now create a new JSP page "mailJSP.jsp" and write the following code for it. In the comment line I'll provide you a short description of the use of each attribute.

mailJSP.jsp

```
<%@ page import="java.util.*,javax.mail.*"%>
<%@ page import="javax.mail.internet.*" %>
<%
String result;
final String to =
request.getParameter("mail"); final
String subject =
request.getParameter("sub"); final String
messg =request.getParameter("mess");
final String from = "enter your gmail-
id";
final String pass = "enter your gmail-
password"; String host =
"smtp.gmail.com";
Properties props = new
Properties(); props.
Put("mail.smtp.host", host);
props. Put("mail.transport.protocol",
"smtp"); props.put("mail.smtp.auth",
"true");
props.put("mail.smtp.starttls.enable",
"true"); props.put("mail.user", from);
props.put("mail.password", pass);
props.put("mail.port", "465");
Session mailSession = Session.getInstance(props, new javax.mail.Authenticator() {

@Override
protected PasswordAuthentication
getPasswordAuthentication() { return new Password
```

```
Authentication(from, pass);} });
try {
MimeMessage message = new MimeMessage(mailSession);
message.setFrom(new InternetAddress(from));
message.addRecipient(Message.RecipientType.TO,
new InternetAddress(to));
message.setSubject(subject);
message.setText(messg);
Transport.send(message);
result = "Your mail sent
successfully... "; } catch
(MessagingException mex)
{ mex.printStackTrace();
result = "Error: unable to send mail. ..."; }
%>
<title>Sending Mail in JSP</title>
<h1><center><font color="blue">Sending Mail Using JSP</font></h1>
<b><center><font color="red"><% out.println(result);%></b>
```

NOTE: You need to add two JAR files, named "mail.jar" and "activation.jar" to run this app.
You can directly download this JAR file from the Oracle website.

STEP 7 Now our project is ready to run.

Right-click on the "index.html" file and select "Run". The following interface will be generated

STEP 8 Now provide the detail there as "mail-id", "subject-line" and "message-content" as in the following that I provided

STEP 9 Click on the "send" button. The following message will be generated. If it is showing an error, in other words something is missing, then recheck your JSP code and try again else you will get the same message as in the following.

STEP 10 For confirmation of the mail go to the receive mail inbox (those mail-ids that you provide in the sending page) or go to your mail-id and check the sent mail items. As in the following.

OUTPUT:


To:
DsaiB@gmail.com
Subject:
Invitation
WELCOME
Message Text:
Send
Reset


Sending Mail Using JSP
Your mail sent successfully....

RESULT:

Thus the above program to Create a JSP application to Send a simple E-Mail to your friend is executed and output verified sucessfully

EX.NO: 08
DATE: 22/02/24

IMPLEMENTING AN APPLICATION WITH WEB SERVICES

AIM:

To implement an application using web services and database.

ALGORITHM:

1. Start the Program
2. Create a root process for Reservation
3. Create a service with focus on each item
4. Output the items and stop the program

DESCRIPTION

A **Web service** is a method of communications between two electronic devices over the World Wide Web. It is a software function provided at a network address over the web with the service always *on* as in the concept of utility computing. The W3C defines a Web service as a software system designed to support interoperable machine-to machine interaction over a network.It has an interface described in a machine-process able format (specifically WSDL). Other systemsinteract with the Web service in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialization in conjunction with other Web-relatedstandards.

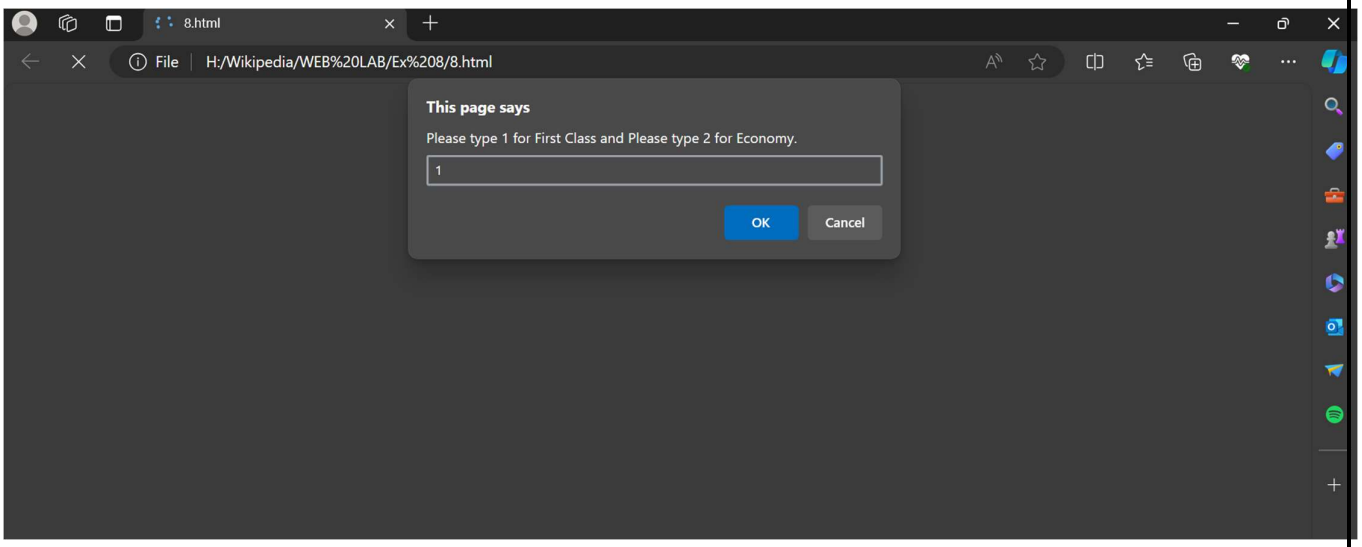
PROGRAM:

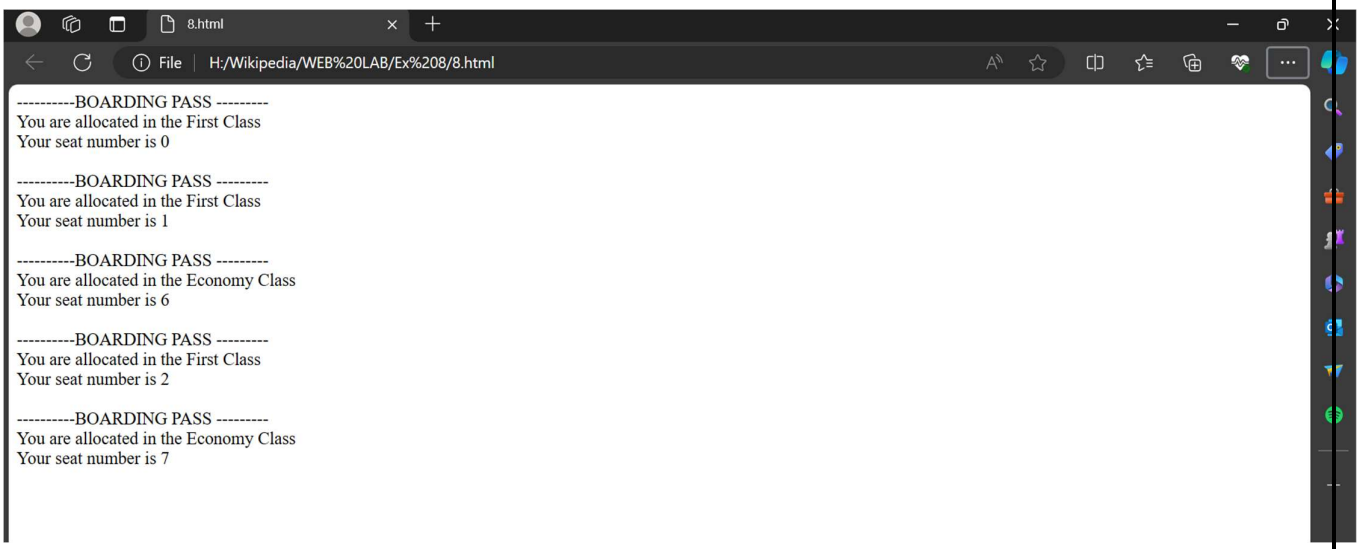
```
<?xml version="1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<!-- Solution11.16 -->
<!-- Airline Reservation System -->
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Airline Reservation System</title>
<script type="text/javascript">
<!--
var input;
var secondInput;
var element;
var secondElement;
var firstCount = 0;
var economyCount = 0;
var seats = [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]; // Allocate 11-element Array

function startArray() {
   for (var i = 0; i < 11; i++) {
      input = window.prompt("Please type 1 for First Class and Please type 2 for Economy.", "0");
      if (input == 1 || input == 2) {
         element = linearSearch(seats);
         if (element == -1 && input == 1) {
            document.writeln("The First Class is already fully booked<br/>");
            secondQuestion(seats);
         } else if (element == -1 && input == 2) {
            document.writeln("The Economy Class is already fully booked<br/>");
            secondQuestion(seats);
         } else {
            boardingPass(input);
         }
      } else {
         window.status = "Byebye!";
         return;
      }
   }
}

function linearSearch(theArray) {
   if (input == 1) {
      for (var n = 0; n < 6; n++)
         if (theArray[n] == 0) return n;
   } else if (input == 2) {
      for (var n = 6; n < 11; n++)
         if (theArray[n] == 0) return n;
   }
```

```
    return -1;}

function boardingPass(theInput) {
    if (input == 1) {
        document.writeln("----------BOARDING PASS --------- <br/>");
        document.writeln("You are allocated in the First Class<br/>");
        document.writeln("Your seat number is " + element + "<br/>");
        document.writeln(" <br/>");
        seats[element] = 1;
        firstCount++;
    } else if (input == 2) {
        document.writeln("----------BOARDING PASS --------- <br/>");
        document.writeln("You are allocated in the Economy Class<br/>");
        document.writeln("Your seat number is " + element + "<br/>");
        document.writeln(" <br/>");
        seats[element] = 1;
        economyCount++;
    }
}

function secondQuestion(theArray) {
    if (input == 1) {
        for (var n = 6; n < 11; n++) {
            if (theArray[n] == 0) {
                secondInput = window.prompt("Do you want to move to Economy Class? (If YES, please
            press 1. If NO, please press 2)", "0");
                if (secondInput == 1) {
                    input = 2;
                    element = linearSearch(seats);
                    document.writeln("You have been allocated to Economy Class<br/>");
                    boardingPass(input);
                    break;
                } else if (secondInput == 2) {
                    document.writeln("Next flight leaves in 3 hours<br/>");
                    break;
                }
            }
        }
    } else if (input == 2) {
        for (var n = 0; n < 6; n++) {
            if (theArray[n] == 0) {
                secondInput = window.prompt("Do you want to move to First Class? (If YES, please press 1.
            If NO, please press 2)", "0");
                if (secondInput == 1) {
                    input = 1;
                    element = linearSearch(seats);
                    document.writeln("You have been allocated to First Class<br/>");
                    boardingPass(input);
                    break;
                } else if (secondInput == 2) {
```

```
                document.writeln("Next flight leaves in 3 hours<br/>");
                break;
            }
        }
    }
  }
}
//-->
</script>
</head>
<body onload="startArray()"></body>
</html>
```

OUTPUT:


8.html
File | H:/Wikipedia/WEB%20LAB/Ex%208/8.html
This page says
Please type 1 for First Class and Please type 2 for Economy.
1
OK
Cancel


8.html
File | H:/Wikipedia/WEB%20LAB/Ex%208/8.html
----------BOARDING PASS ---------
You are allocated in the First Class
Your seat number is 0
----------BOARDING PASS ---------
You are allocated in the First Class
Your seat number is 1
----------BOARDING PASS ---------
You are allocated in the Economy Class
Your seat number is 6
----------BOARDING PASS ---------
You are allocated in the First Class
Your seat number is 2
----------BOARDING PASS ---------
You are allocated in the Economy Class
Your seat number is 7

RESULT:

Thus, the above program to implement an application with web services is executed and output verified successfully