Web Application Development [asp.net using c#] – Lab Manual Solutions MCA/MScIT Sem-3 , 2024-25

Lab Ex.1

Create a web application to display "Welcome to the world of ASP.NET" on web browser when user "Click" button is clicked.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Registration.aspx.cs"</pre>
Inherits="Registration" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:Button id="btn1" runat="server" Text="Click me" onclick="btn1_Click" />
    </div>
    </form>
</body>
</html>
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Registration : System.Web.UI.Page
    protected void Page_Load(object sender, EventArgs e)
    {
    protected void btn1_Click(object sender, EventArgs e)
        Response.Write("Welcome to the world of ASP.NET");
}
```

Create a web page in which user can enter enrollment no, student name and marks of 5 subjects. Calculate total, percentage and grade of student and display it. [Use text box, label, button control].

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Lab2.aspx.cs" Inherits="Lab2"</pre>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        <asp:Label ID="Label1" runat="server" Text="Enrollment No."></asp:Label>
        <asp:TextBox ID="fEnroll" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label2" runat="server" Text="Student Name"></asp:Label>
        <asp:TextBox ID="fStudent" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label3" runat="server" Text="Subject1"></asp:Label>
        <asp:TextBox ID="fSubj1" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label4" runat="server" Text="Subject2"></asp:Label>
        <asp:TextBox ID="fSubj2" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label5" runat="server" Text="Subject3"></asp:Label>
        <asp:TextBox ID="fSubj3" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label6" runat="server" Text="Subject4"></asp:Label>
        <asp:TextBox ID="fSubj4" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label7" runat="server" Text="Subject5"></asp:Label>
        <asp:TextBox ID="fSubj5" runat="server"></asp:TextBox>
    </div>
    <div>
        <asp:Button ID="Button1" runat="server" Text="Result" onclick="Button1_Click"</pre>
    </div>
    <div>
        <asp:Label ID="fTotal" runat="server" Text="Label"></asp:Label><br/>>
        <asp:Label ID="fAvg" runat="server" Text="Label"></asp:Label><br />
        <asp:Label ID="fGrade" runat="server" Text="Label"></asp:Label>
    </div>
    </form>
</body>
```

```
</html>
int s1, s2, s3, s4, s5, totalMarks;
        s1 =Int32.Parse( fSubj1.Text);
        s2 = Int32.Parse(fSubj2.Text);
        s3 = Int32.Parse(fSubj3.Text);
        s4 = Int32.Parse(fSubj4.Text);
        s5 = Int32.Parse(fSubj5.Text);
        totalMarks = s1 + s2 + s3 + s4 + s5;
        double percentage = (totalMarks / 5.0); // Assuming each subject is out of
100
        // Determine grade based on percentage
        string grade=string.Empty;
        if (percentage >= 90)
            grade = "A+";
        else if (percentage >= 80)
            grade = "A";
        else if (percentage >= 70)
            grade = "B";
        else if (percentage >= 60)
            grade = "C";
        else if (percentage >= 50)
            grade = "D";
        else
            grade = "F"; // Fail
        fTotal.Text = "Total: "+totalMarks.ToString();
        fPercent.Text = "Percentage: "+percentage.ToString();
        fGrade.Text = "Grade: "+grade.ToString();
```

Write a program to enable - disable textbox and change width of text box programmatically.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Lab3.aspx.cs" Inherits="Lab3"</pre>
<mark>%></mark>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
     <div>
             <asp:TextBox ID="txtDynamic" runat="server"></asp:TextBox>
             <asp:Button ID="btnToggle" runat="server" Text="Toggle Enable/Disable"</pre>
OnClick="btnToggle Click" />
            <asp:Button ID="btnChangeWidth" runat="server" Text="Change Width"</pre>
OnClick="btnChangeWidth_Click" />
        </div>
    </form>
</body>
</html>
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Lab3 : System.Web.UI.Page
   protected void Page Load(object sender, EventArgs e)
       if (!IsPostBack)
       {
           txtDynamic.Enabled = true;
           txtDynamic.Width = new Unit(200);
    }
    protected void btnToggle Click(object sender, EventArgs e)
       txtDynamic.Enabled = !txtDynamic.Enabled;
    }
    protected void btnChangeWidth_Click(object sender, EventArgs e)
      txtDynamic.Width = new Unit(txtDynamic.Width.Value + 50);
    }
}
------
```

Create a web page that will take two radio buttons labeled as a gender, if user selects radio button the gender will be changed according to selected radio button.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Lab4.aspx.cs" Inherits="Lab4"</pre>
<mark>%></mark>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        <asp:Label ID="Label1" runat="server" Text="Gender"></asp:Label>
        <asp:RadioButton ID="fMale" runat="server" Text="Male" GroupName="gender" />
        <asp:RadioButton ID="fFemale" runat="server" Text="Female" GroupName="gender"</pre>
/>
    </div>
        <asp:Button ID="Button1" runat="server" Text="Submit" onclick="Button1_Click"</pre>
<div>
/></div>
    </form>
```

```
</body>
</html>
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

public partial class Lab4 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (fMale.Checked == true) Response.Write("Male Checked");
        if (fFemale.Checked == true) Response.Write("Female Checked");
    }
}
```

Write a program which have list box and image controls, list box is used to display items and when user clicks on item in list box it display the item image in image control.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Lab5.aspx.cs" Inherits="Lab5"</pre>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
      <div>
            <asp:ListBox ID="ListBox1" runat="server" AutoPostBack="True"</pre>
OnSelectedIndexChanged="ListBox1 SelectedIndexChanged">
                <asp:ListItem Text="Select an item..." Value="0"></asp:ListItem>
                <asp:ListItem Text="Item 1" Value="1"></asp:ListItem>
                <asp:ListItem Text="Item 2" Value="2"></asp:ListItem>
                <asp:ListItem Text="Item 3" Value="3"></asp:ListItem>
            </asp:ListBox>
            <br />
            <asp:Image ID="fImage" runat="server" Height="200px" Width="200px" />
        </div>
    </form>
</body>
</html>
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Lab5 : System.Web.UI.Page
    protected void Page Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            DisplayImageForSelectedItem();
    protected void ListBox1_SelectedIndexChanged(object sender, EventArgs e)
        DisplayImageForSelectedItem();
    private void DisplayImageForSelectedItem()
        // Map selected index to image URL
        string[] images = {
                "", // Index 0 (no item selected)
                "~/Images/1.jpg", // Index 1 (Item 1)
                "~/Images/2.jpg", // Index 2 (Item 2)
                "~/Images/3.jpg" // Index 3 (Item 3)
            };
        int selectedIndex = ListBox1.SelectedIndex;
        if (selectedIndex >= 0 && selectedIndex < images.Length)</pre>
            fImage.ImageUrl = images[selectedIndex];
        }
        else
             fImage.ImageUrl = "";
    }
}
```

Create a web page for registration which have name, dob, gender, email id, contact no, address, city, pin code, hobbies and display all data in same page with proper layout.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Lab6.aspx.cs" Inherits="Lab6"
%>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<hed runat="server">
```

```
<title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:Label ID="Label1" runat="server" Text="Student Name"></asp:Label>
        <asp:TextBox ID="fName" runat="server"></asp:TextBox>
    </div>
    <div>
        <asp:Label ID="Label2" runat="server" Text="Date of Birth"></asp:Label>
        <asp:TextBox ID="fDob" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label3" runat="server" Text="Gender"></asp:Label>
         <asp:RadioButton ID="fMale" runat="server" Text="Male" GroupName="gender"</pre>
Checked="true" />
         <asp:RadioButton ID="fFemale" runat="server" Text="Female"</pre>
GroupName="gender" />
    </div>
     <div>
        <asp:Label ID="Label4" runat="server" Text="Email"></asp:Label>
        <asp:TextBox ID="fEmail" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label5" runat="server" Text="Contact"></asp:Label>
        <asp:TextBox ID="fContact" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label6" runat="server" Text="Address"></asp:Label>
        <asp:TextBox ID="fAddress" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label7" runat="server" Text="City"></asp:Label>
         <asp:DropDownList ID="fCity" runat="server">
             <asp:ListItem>Vadodara</asp:ListItem>
             <asp:ListItem>Surat</asp:ListItem>
             <asp:ListItem>Anand</asp:ListItem>
             <asp:ListItem>Nadidad</asp:ListItem>
         </asp:DropDownList>
    </div>
     <div>
        <asp:Label ID="Label8" runat="server" Text="Pincode"></asp:Label>
        <asp:TextBox ID="fPincode" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label9" runat="server" Text="Hobbies"></asp:Label>
         <asp:CheckBox ID="CheckBox1" runat="server" Text="Singing" /><br />
         <asp:CheckBox ID="CheckBox2" runat="server" Text="Dancing" /><br />
         <asp:CheckBox ID="CheckBox3" runat="server" Text="Painting" /><br />
         <asp:CheckBox ID="CheckBox4" runat="server" Text="Sports" />
    </div>
    <div>
        <asp:Button ID="fRegisterBtn" runat="server" Text="REGISTER"</pre>
            onclick="fRegisterBtn Click" />
        </div>
```

```
<br /><hr />
        <center>
       <br />
              <div id="output" runat="server" visible="false">
        <h2>Registration Details</h2>
        <strong>Name:</strong> <asp:Label ID="lblName"</p>
runat="server"></asp:Label>
        <strong>Date of Birth:</strong> <asp:Label ID="lblDOB"</p>
runat="server"></asp:Label>
        <strong>Gender:</strong> <asp:Label ID="lblGender"</p>
runat="server"></asp:Label>
        <strong>Email ID:</strong> <asp:Label ID="lblEmail"</p>
runat="server"></asp:Label>
        <strong>Contact No:</strong> <asp:Label ID="lblContactNo"</p>
runat="server"></asp:Label>
        <strong>Address:</strong> <asp:Label ID="lblAddress"</p>
runat="server"></asp:Label>
        <strong>City:</strong> <asp:Label ID="lblCity"
runat="server"></asp:Label>
        <strong>Pin Code:</strong> <asp:Label ID="lblPinCode"</p>
runat="server"></asp:Label>
        <strong>Hobbies:</strong> <asp:Label ID="lblHobbies"</p>
runat="server"></asp:Label>
    </div>
        </center>
    </form>
</body>
</html>
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Lab6 : System.Web.UI.Page
    protected void Page Load(object sender, EventArgs e)
    {
        if (IsPostBack == true) return;
    protected void fRegisterBtn_Click(object sender, EventArgs e)
        String name, dob, gender, email, contactNo, address, city, pinCode;
        name = fName.Text;
        if (fMale.Checked == true)
            gender = "Male";
        else
            gender = "Female";
        dob = fDob.Text;
        email = fEmail.Text;
        contactNo = fContact.Text;
        address = fAddress.Text;
        city = fCity.SelectedItem.ToString();
        pinCode = fPincode.Text;
```

```
string strCheckValue = "";
       if (CheckBox1.Checked)
           strCheckValue = strCheckValue + "," + CheckBox1.Text;
       if (CheckBox2.Checked)
           strCheckValue = strCheckValue + "," + CheckBox2.Text;
       if (CheckBox3.Checked)
           strCheckValue = strCheckValue + "," + CheckBox3.Text;
       if (CheckBox4.Checked)
           strCheckValue = strCheckValue + "," + CheckBox4.Text;
       }
       lblName.Text = name;
       lblDOB.Text = dob;
       lblGender.Text = gender;
       lblEmail.Text = email;
       lblContactNo.Text = contactNo;
       lblAddress.Text = address;
       lblCity.Text = city;
       lblPinCode.Text = pinCode;
       lblHobbies.Text = strCheckValue;
       output.Visible = true;
}
                      _____
```

Write a program that uses a textbox for a user input and validate it using required field validation.

[Please see solution of Lab Ex. 8 for validation]

Lab Ex.8

Create a web page for registration which have name, dob, gender, email id, contact no, address, city, pin code, hobbies. After the user enters the appropriate values the validate button must validates the values entered and display all data in same page with proper layout.

```
<body>
     <form id="form1" runat="server">
        <asp:Label ID="Label1" runat="server" Text="Student Name"></asp:Label>
        <asp:TextBox ID="fName" runat="server"></asp:TextBox>
         <asp:RequiredFieldValidator ID="RFV1" runat="server"</pre>
         ErrorMessage="Name Required" ForeColor="Red"
        ControlToValidate="fName"></asp:RequiredFieldValidator>
    </div>
    <div>
        <asp:Label ID="Label2" runat="server" Text="Date of Birth"></asp:Label>
        <asp:TextBox ID="fDob" runat="server"></asp:TextBox>
          <asp:CompareValidator ID="CompareValidator2" runat="server"</pre>
          ErrorMessage="Invalid Date" ControlToValidate="fDob"
          Operator="DataTypeCheck" Type="Date"></asp:CompareValidator>
    </div>
     <div>
        <asp:Label ID="Label3" runat="server" Text="Gender"></asp:Label>
         <asp:RadioButton ID="fMale" runat="server" Text="Male" GroupName="gender"</pre>
Checked="true" />
         <asp:RadioButton ID="fFemale" runat="server" Text="Female"</pre>
GroupName="gender" />
    </div>
     <div>
        <asp:Label ID="Label4" runat="server" Text="Email"></asp:Label>
        <asp:TextBox ID="fEmail" runat="server"></asp:TextBox>
          <asp:RegularExpressionValidator ID="REV1" runat="server"</pre>
             ErrorMessage="Invalid Format" ControlToValidate="fEmail"
             ValidationExpression="\w+([-+.']\w+)*@\w+([-.]\w+)*\.\w+([-
.]\w+)*"></asp:RegularExpressionValidator>
    </div>
     <div>
        <asp:Label ID="Label5" runat="server" Text="Contact"></asp:Label>
        <asp:TextBox ID="fContact" runat="server"></asp:TextBox>
    </div>
     <div>
        <asp:Label ID="Label6" runat="server" Text="Address"></asp:Label>
        <asp:TextBox ID="fAddress" runat="server"></asp:TextBox>
         <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"</pre>
ControlToValidate="fAddress" ErrorMessage="Address
Required"></asp:RequiredFieldValidator>
    </div>
     <div>
        <asp:Label ID="Label7" runat="server" Text="City"></asp:Label>
         <asp:DropDownList ID="fCity" runat="server">
             <asp:ListItem>Vadodara</asp:ListItem>
             <asp:ListItem>Surat</asp:ListItem>
             <asp:ListItem>Anand</asp:ListItem>
             <asp:ListItem>Nadidad</asp:ListItem>
         </asp:DropDownList>
    </div>
     <div>
        <asp:Label ID="Label8" runat="server" Text="Pincode"></asp:Label>
        <asp:TextBox ID="fPincode" runat="server"></asp:TextBox>
          <asp:RegularExpressionValidator ID="RegularExpressionValidator1"</pre>
             runat="server"
             ErrorMessage="Invalid Format" ControlToValidate="fPincode"
```

```
ValidationExpression="\d{6}"></asp:RegularExpressionValidator>
    </div>
     <div>
        <asp:Label ID="Label9" runat="server" Text="Hobbies"></asp:Label>
         <asp:CheckBox ID="CheckBox1" runat="server" Text="Singing" /><br />
         <asp:CheckBox ID="CheckBox2" runat="server" Text="Dancing" /><br />
         <asp:CheckBox ID="CheckBox3" runat="server" Text="Painting" /><br />
         <asp:CheckBox ID="CheckBox4" runat="server" Text="Sports" />
    </div>
    <div>
        <asp:Button ID="fRegisterBtn" runat="server" Text="REGISTER"</pre>
            onclick="fRegisterBtn_Click" />
        </div>
        <br /><hr />
        <center>
       <br />
              <div id="output" runat="server" visible="false">
        <h2>Registration Details</h2>
        <strong>Name:</strong> <asp:Label ID="lblName"</p>
runat="server"></asp:Label>
        <strong>Date of Birth:</strong> <asp:Label ID="lblDOB"</p>
runat="server"></asp:Label>
        <strong>Gender:</strong> <asp:Label ID="lblGender"</p>
runat="server"></asp:Label>
        <strong>Email ID:</strong> <asp:Label ID="lblEmail"</p>
runat="server"></asp:Label>
        <strong>Contact No:</strong> <asp:Label ID="lblContactNo"</p>
runat="server"></asp:Label>
        <strong>Address:</strong> <asp:Label ID="lblAddress"</p>
runat="server"></asp:Label>
        <strong>City:</strong> <asp:Label ID="lblCity"
runat="server"></asp:Label>
        <strong>Pin Code:</strong> <asp:Label ID="lblPinCode"</p>
runat="server"></asp:Label>
        <strong>Hobbies:</strong> <asp:Label ID="lblHobbies"</p>
runat="server"></asp:Label>
   </div>
        </center>
    </form>
</body>
</html>
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Lab7_And_8 : System.Web.UI.Page
    protected void Page Load(object sender, EventArgs e)
```

```
if (IsPostBack == true) return;
    protected void fRegisterBtn Click(object sender, EventArgs e)
        String name, dob, gender, email, contactNo, address, city, pinCode;
        name = fName.Text;
        if (fMale.Checked == true)
            gender = "Male";
        else
            gender = "Female";
        dob = fDob.Text;
        email = fEmail.Text;
        contactNo = fContact.Text;
        address = fAddress.Text;
        city = fCity.SelectedItem.ToString();
        pinCode = fPincode.Text;
        string strCheckValue = "";
        if (CheckBox1.Checked)
            strCheckValue = strCheckValue + "," + CheckBox1.Text;
        if (CheckBox2.Checked)
            strCheckValue = strCheckValue + "," + CheckBox2.Text;
        if (CheckBox3.Checked)
            strCheckValue = strCheckValue + "," + CheckBox3.Text;
        if (CheckBox4.Checked)
            strCheckValue = strCheckValue + "," + CheckBox4.Text;
        }
        lblName.Text = name;
        lblDOB.Text = dob;
        lblGender.Text = gender;
        lblEmail.Text = email;
        lblContactNo.Text = contactNo;
        lblAddress.Text = address;
        lblCity.Text = city;
        lblPinCode.Text = pinCode;
        lblHobbies.Text = strCheckValue;
        output.Visible = true;
    }
}
                                        Lab Ex.9
```

Write a program to check the length of the string in the text box using custom validation.

```
<math display="C#" AutoEventWireup="true" CodeFile="Lab9.aspx.cs" Inherits="Lab9"

>>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"

"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
     <script type="text/javascript">
         function validateStringLength(sender, args) {
             var maxLength = 50;
             var inputValue = args.Value.trim();
             args.IsValid = (inputValue.length <= maxLength);</pre>
    </script>
</head>
<body>
    <form id="form1" runat="server">
    <div>
    Enter any string :
        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        <asp:CustomValidator ID="CustomValidator1" runat="server"</pre>
ControlToValidate="TextBox1"
        ErrorMessage="String length must be less than 50 characters"
ClientValidationFunction="validateStringLength"></asp:CustomValidator>
    </div>
    <div>
        <asp:Button ID="Button1" runat="server" Text="Submit" />
    </div>
    </form>
</body>
</html>
                                        Lab Ex.10
```

Create a master page that contain links for home page, about us page and contact page, when user clicks on particular link it will display that particular page.

Step:1 Add a master page [for ex. MasterPage.master]

Step:2 Now and three content pages as – Home.aspx, About.aspx, Contact.aspx

MasterPage.master

```
<nav>
                    <l
                        <asp:HyperLink ID="HyperLink1" runat="server"</li>
NavigateUrl="~/Home.aspx">Home</asp:HyperLink>
                        <asp:HyperLink ID="HyperLink2" runat="server"</pre>
NavigateUrl="~/About.aspx">AboutUs</asp:HyperLink>
                        <asp:HyperLink ID="HyperLink3" runat="server"</pre>
NavigateUrl="~/Contact.aspx">ContactUs</asp:HyperLink>
                    </nav>
            </header>
        <asp:ContentPlaceHolder id="ContentPlaceHolder1" runat="server">
        </asp:ContentPlaceHolder>
    </div>
    </form>
</body>
</html>
Home.aspx
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master"</pre>
AutoEventWireup="true" CodeFile="Home.aspx.cs" Inherits=" Default" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
Welcome to Home Page
</asp:Content>
About.aspx
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master"</pre>
AutoEventWireup="true" CodeFile="About.aspx.cs" Inherits=" Default" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
We are professional in website development
</asp:Content>
Contact.aspx
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master"</pre>
AutoEventWireup="true" CodeFile="Contact.aspx.cs" Inherits=" Default" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
Call us : 9229891004
</asp:Content>
```

Create a web application for registration system that contains navigation control to specify link like registration and login. When user click registration link user should be navigated to registration page. When user click on the login link login page will be display that will redirected to registration page if user logged in to system. [Use master page and session to maintain the user identity].

Login.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Login.aspx.cs"</pre>
Inherits="Login" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:Label ID="Label1" runat="server" Text="Username"></asp:Label>
        <asp:TextBox ID="fUsername" runat="server"></asp:TextBox>
    </div>
    <div>
        <asp:Label ID="Label2" runat="server" Text="Password"></asp:Label>
        <asp:TextBox ID="fPwd" runat="server"></asp:TextBox>
    </div>
    <div>
        <asp:Button ID="fLoginBtn" runat="server" Text="Login"</pre>
            onclick="fLoginBtn_Click" />
       Click Here to <asp:HyperLink ID="HyperLink1" runat="server"
NavigateUrl="~/AddStudent.aspx">Register</asp:HyperLink>
    </div>
    </form>
</body>
</html>
Login.aspx.cs
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Login : System.Web.UI.Page
    protected void Page_Load(object sender, EventArgs e)
    }
```

```
protected void fLoginBtn_Click(object sender, EventArgs e)
               Session.Add("user",fUsername.Text);
               Response.Redirect("Home.aspx");
     }
}
MasterPage.master
<%@ Master Language="C#" AutoEventWireup="true" CodeFile="MasterPage.master.cs"</pre>
Inherits="MasterPage" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
     <title></title>
     <asp:ContentPlaceHolder id="head" runat="server">
     </asp:ContentPlaceHolder>
</head>
<body>
     <form id="form1" runat="server">
     <div>
         <center> <asp:Label ID="Label1" runat="server" Text="Student CRUD Module"</pre>
          ForeColor="Blue" Font-Bold="true" Font-Size="Large"></asp:Label></center>
     </div>
     <br />
     <div>
          <asp:HyperLink ID="HyperLink1" runat="server"</pre>
NavigateUrl="~/Home.aspx">HOME</asp:HyperLink>
                
          <asp:HyperLink ID="HyperLink2" runat="server"</pre>
NavigateUrl="~/AddStudent.aspx">ADD STUDENT</asp:HyperLink>
                  
          <asp:HyperLink ID="HyperLink3" runat="server"</pre>
NavigateUrl="~/ViewStudent.aspx">VIEW STUDENT</asp:HyperLink>
                   
          <asp:HyperLink ID="HyperLink4" runat="server">EDIT STUDENT</asp:HyperLink>
             
nbsp;
          <asp:HyperLink ID="HyperLink5" runat="server">DELETE STUDENT</asp:HyperLink>
                                                                                                                                                                                                                                                                                                                                                     
nbsp;                                                                                                                                                                                                                                                                                                                                                    &
bsp;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       &nbs
sp;             
p;            
;            
     
         <asp:ContentPlaceHolder ID="UserCPH" runat="server" >
         </asp:ContentPlaceHolder>
     </div>
     <hr />
     <div>
          <asp:ContentPlaceHolder id="ContentPlaceHolder1" runat="server">
```

```
</asp:ContentPlaceHolder>
    </div>
    <br />
    <hr />
    <div>
    <center>
    <asp:HyperLink ID="HyperLink6" runat="server"</pre>
NavigateUrl="~/logout.aspx">LOGOUT</asp:HyperLink>
    </div>
    <br />
     <div>
     <center> <asp:Label ID="Label2" runat="server" Text="Designed and Developed By</pre>
       ForeColor="Blue" Font-Bold="true" Font-Size="Medium"></asp:Label>Prof. Jigar
Bhawsar, PU</center>
    </div>
    </form>
</body>
</html>
Home.aspx:
c%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master"
AutoEventWireup="true" CodeFile="Home.aspx.cs" Inherits=" Default" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
    <div>
"A Truly Vibrant And Enriching Campus Life"
Studying at the Parul University campus has been a whole adventure for me,
from the experiences in the hostel to the amazing events and festivities which
are organized throughout the year. It is truly an enriching experience which has not
allowed me to express my talent while enjoying the campus festivities.
</div>
</asp:Content>
<asp:Content ID="content3" runat="server" ContentPlaceHolderID="UserCPH">
    Welcome <asp:Label ID="fUsr" runat="server" Text="" ForeColor="Blue" Font-
Bold="true"></asp:Label>
</asp:Content>
Home.aspx.cs
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
```

```
{
    protected void Page Load(object sender, EventArgs e)
        if (Session["user"] == null)
        {
            Response.Redirect("Login.aspx");
        fUsr.Text = Session["user"].ToString();
    }
}
Logout.aspx
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="logout.aspx.cs"</pre>
Inherits="logout" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:HyperLink ID="HyperLink1" runat="server"</pre>
NavigateUrl="~/Login.aspx">Visit Again</asp:HyperLink>
    </div>
    </form>
</body>
</html>
Logout.aspx.cs
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class logout : System.Web.UI.Page
    protected void Page_Load(object sender, EventArgs e)
    {
        Session.Remove("user");
}
```

Write a program that has a form taking the user's name as input. Store this name in a permanent cookie & whenever the page is opened again, then value of the name field should be attached with the cookie's content.

Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"</pre>
Inherits="Default" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <title>Store User Name in Cookie</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Enter your Name:</h2>
            <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
            <asp:Button ID="btnSubmit" Text="Submit" runat="server"</pre>
OnClick="btnSubmit_Click" />
            <br /><br />
            <h3>Names Stored in Cookie:</h3>
            <asp:Label ID="lblStoredNames" runat="server"></asp:Label>
        </div>
    </form>
</body>
</html>
```

```
Default.aspx.cs
using System;
using System.Web;
public partial class Default : System.Web.UI.Page
{
    protected void Page Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            // On page load, check if the cookie exists and display
its value
            if (Request.Cookies["UserNames"] != null)
            {
                lblStoredNames.Text = "Stored Names: " +
Request.Cookies["UserNames"].Value;
            }
            else
            {
                lblStoredNames.Text = "No names stored yet.";
            }
        }
    }
    protected void btnSubmit_Click(object sender, EventArgs e)
    {
        string newName = txtName.Text.Trim();
        if (!string.IsNullOrEmpty(newName))
        {
```

```
// Read the existing cookie, if it exists
            HttpCookie cookie = Request.Cookies["UserNames"];
            if (cookie == null)
            {
                // Create a new cookie if it doesn't exist
                cookie = new HttpCookie("UserNames");
                cookie.Value = newName;
            }
            else
            {
                // Append the new name to the existing cookie value
                cookie.Value += ", " + newName;
            }
            // Set the cookie to never expire
            cookie.Expires = DateTime.Now.AddYears(10);
            Response.Cookies.Add(cookie);
            // Display the updated list of names
            lblStoredNames.Text = "Stored Names: " + cookie.Value;
        }
    }
}
```

Database CRUD operations [Gridview]:

Create student database which contain table stud_registration and have fields like first name, last name, dob, email id, contact number, gender, address, city, pin code. Create web application which will insert, view, search, update, and delete records from stud_registration table. [Use gridview]

[Do as demonstrated in the classroom]

Lab Ex.14

Database CRUD operations [Listview]:

Create product data base which contain product_info table and have fields like product id, product name, product quantity, price. Create a web application with validation which will insert, view, search, update and delete records from table. [Use listview]

Lab Ex.15

Database Operations

Create table employee with the following columns and data types.

Columns Data Type

dept id int

Name nvarchar(20)
DOJ datetime
Salary float

Designation nvarchar(30)

- Insert following records into the table
- Change the candidate name from "Ansh" to "Alpesh".
- Select records from table where salary > 10000 and display it.

[Do as demonstrated in the classroom]

```
Ajax :
Create a Calendar Navigation by using Ajax Calendar Extender control, in
which user can Navigate Year , Month and select date from the Calendar
control.
Default.aspx
<%@ Page Language="C#" AutoEventWireup="true"</pre>
CodeFile="Default2.aspx.cs" Inherits="Default2" %>
<%@ Register Assembly="AjaxControlToolkit"</pre>
Namespace="AjaxControlToolkit" TagPrefix="cc1" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <asp:ScriptManager ID="ScriptManager1" runat="server">
    </asp:ScriptManager>
    <div>
    <asp:TextBox ID="txtDate" runat="server" CssClass="form-</pre>
control"></asp:TextBox>
        <cc1:CalendarExtender ID="CalendarExtender1" runat="server"</pre>
Format="yyyy-MM-dd"
    PopupButtonID="btnPopupCalendar" TargetControlID="txtDate">
        </col:CalendarExtender>
<asp:Button ID="btnPopupCalendar" runat="server" Text="Pick a Date"</pre>
            onclick="btnPopupCalendar Click" />
    </div>
    </form>
</body>
</html>
Default.aspx.cs
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
```

using System.Web.UI;

```
using System.Web.UI.WebControls;

public partial class Default2 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            protected void btnPopupCalendar_Click(object sender, EventArgs e)
        {
            string selectedDate = txtDate.Text;
        }
}
```