Sr.no.	Lis	Date	sign
1.	**Write programs for the following:**		
a.	Create an application to print on screen the output of adding, subtracting, multiplying and dividing two numbers entered by the user in C#		
b.	Create an application to print Floyd's triangle till n rows in C#		
c.	Create an application to demonstrate following operations i. Generate Fibonacci series. ii. Test for prime numbers		
2.	**Write programs for the following:**		
a.	Create a simple application to demonstrate the concepts boxing and unboxing.		
b.	Create a simple application to perform addition and subtraction using delegate.		
c.	Create a simple application to demonstrate use of the concepts of interfaces.		
3.	**Write programs for the following:**		
a.	Create a simple web page with various server controls to demonstrate setting and use of their properties. (Example: AutoPostBack)		
b.	Create a simple application to demonstrate your vacation using calendar control.		
c.	Demonstrate the use of Treeview operations on the web form.		
4.	**Write programs for the following:**		
a.	Create a Registration form to demonstrate use of various Validation controls.		
b.	Create Web Form to demonstrate use of Adrotator Control.		
c	Create Web Form to demonstrate use User Controls		

5.	**Write programs for the following:**		
a.	Create Web Form to demonstrate use of Website Navigation controls.		
b.	Create a web application to demonstrate use of Master Page and content page.		
c.	Create a web application to demonstrate various states of ASP.NET Pages.		
6.	**Write programs for the following:**		
a.	Create a web application for inserting and deleting records from a database.		
b.	Create a web application to display Using Disconnected Data Access and Databinding using GridView.		
7.	**Write programs for the following:**		
a.	Create a web application to demonstrate the use of different types of Cookies.		
b.	Create a web application to demonstrate Form Security and Windows Security with proper Authentication and Authorization properties.		
8.	**Write programs for the following:**		
a.	Create a web application for inserting and deleting records from a database. (Using Execute Non Query).		
b	Create a web application for user defined exception handling.		
9.	**Write programs for the following:**		
a.	Create a web application to demonstrate use of GridView button column and GridView events along with paging and sorting.		
b.	Create a web application to demonstrate data binding using DetailsView and FormView Control		
10.	**Write programs for the following:**		
a.	Create a web application to demonstrate JS Bootstrap Button.		
b.	Create a web application to demonstrate use of various Ajax controls.		
c.	Create a web application to demonstrate Installation and use of NuGet package.		

Pratical no 1

1a. Create an application to print on screen the output of adding, subtracting, multiplying and dividing two numbers entered by the user in C#.

Webform1 code:

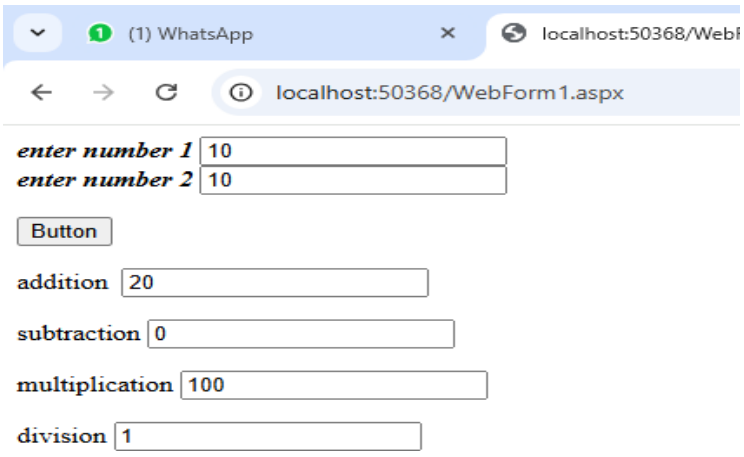
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="if23024_pra1.WebForm1" %>

<!DOCTYPE html>

<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" Font-Bold="True" Font-Italic="True"
Text="enter number 1"></asp:Label>
        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <div>

        <asp:Label ID="Label2" runat="server" BorderStyle="None" Font-Bold="True"
Font-Italic="True" Text="enter number 2"></asp:Label>
        <asp:TextBox ID="TextBox2" runat="server"
OnTextChanged="TextBox2_TextChanged"></asp:TextBox>

    </div>
        <p>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click1"
Text="Button" />
        </p>
        <p>
            <asp:Label ID="Label3" runat="server" Text="addition"></asp:Label>
 <asp:TextBox ID="TextBox3" runat="server"
OnTextChanged="TextBox3_TextChanged"></asp:TextBox>
        </p>
        <p>
            <asp:Label ID="Label4" runat="server" Text="subtraction"></asp:Label>
            <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
        </p>
        <p>
            <asp:Label ID="Label5" runat="server" Text="multiplication"></asp:Label>
            <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
        </p>
        <p>
            <asp:Label ID="Label6" runat="server" Text="division"></asp:Label>
            <asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>
        </p>
    </form>
</body>
</html>
```

C# code:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace if23024_pra1
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {



        }

        protected void Button1_Click1(object sender, EventArgs e)
        {
            int a, b, add, sub, mul, div;
            a = Convert.ToInt16(TextBox1.Text);
            b= Convert.ToInt16(TextBox2.Text);
            add = a + b;
            sub = a - b;
            mul = a * b;
            div = a / b;
            TextBox3.Text = Convert.ToString(add);
            TextBox4.Text = Convert.ToString(sub);
            TextBox5.Text = Convert.ToString(mul);
            TextBox6.Text = Convert.ToString(div);
        }

        protected void TextBox2_TextChanged(object sender, EventArgs e)
        {
         }

        protected void TextBox3_TextChanged(object sender, EventArgs e)
        {

        }
    }
}
```

Output:



1b. Create an application to print Floyd's triangle till n rows in C#. Webcode:

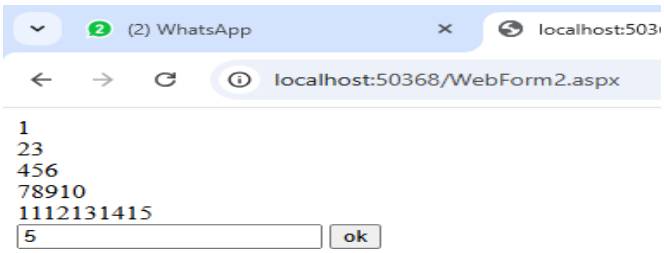
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="if23024_pra1.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="ok" />

    </div>
    </form>
</body>
</html>
```

C# code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace if23024_pra1
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
```

```
        protected void Button1_Click(object sender, EventArgs e)
        {
            int n, i, j, k = 1;
            n = Convert.ToInt16(TextBox1.Text);
            for (j = 1; j <= n; j++)
            {
                for (i = 1; i<=j; i++)
                {
                    Response.Write(k);
                    k++;
                }
                Response.Write("<br>");
            }
        }
    }
}
```

Output:



1c. Create an application to demonstrate following operations i. Generate Fibonacci series. ii. Test for prime numbers.

Web code:

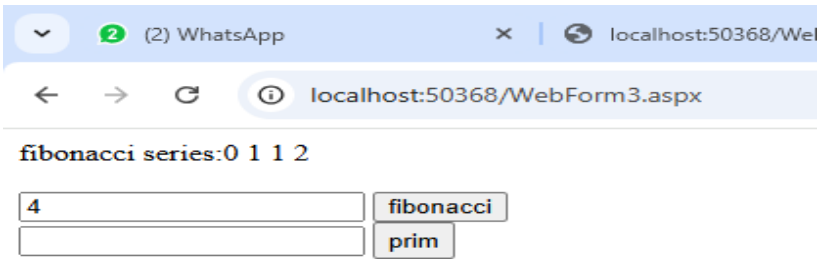
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="if23024_pra1.WebForm3" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <br />
        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="fibonacci" />
        <br />
        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
        <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" style="height:
26px" Text="prim" />

    </div>
    </form>
</body>
```

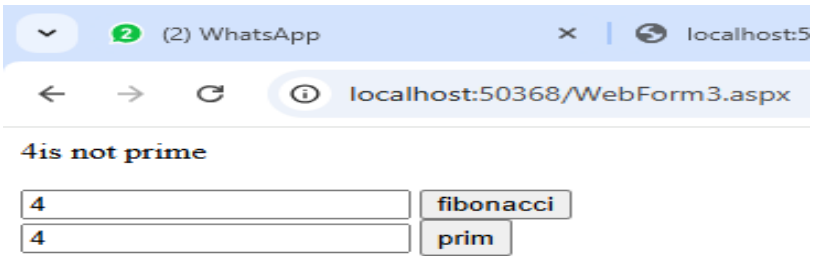
```
</html>
```

C# code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace if23024_pra1
{
    public partial class WebForm3 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            int n1, c;
            n1 = int.Parse(TextBox2.Text);
            for(c=2;c<=n1-1;c++)
            {
                if ((n1 % c) == 0)
                    break;
            }
            if (n1 == 1)
                Response.Write(n1 + "is neither prime nor composite");
            else if (c < n1 - 1)
                Response.Write(n1 + "is not prime");
            else
                Response.Write(n1 + "is prime");
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int f1=0,f2=1,f3,n,c0;
            n = int.Parse(TextBox1.Text);
            c0 = 3;
            Response.Write("fibonacci series:");
            Response.Write(f1 + "\t" + f2);
            while(c0<=n)
            {
                f3 = f1 + f2;
                Response.Write("\t" + f3);
                f1 = f2;
                f2 = f3;
                c0++;
            }
        }
    }
}
```

Output:


(2) WhatsApp
localhost:50368/Wel
localhost:50368/WebForm3.aspx
fibonacci series:0 1 1 2
4
fibonacci
prim


(2) WhatsApp
localhost:5
localhost:50368/WebForm3.aspx
4is not prime
4
fibonacci
4
prim

Practical no:2

a. Create a simple application to demonstrate the concepts boxing and unboxing

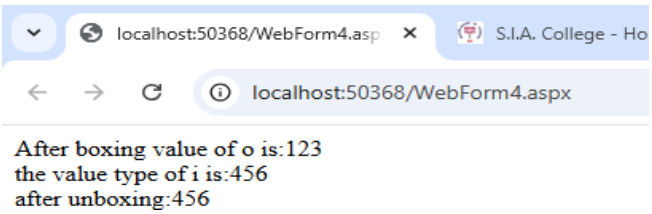
Web code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm4.aspx.cs"
Inherits="if23024_pra1.WebForm4" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

    </div>
        <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
        <br />
        <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        <br />
        <asp:Label ID="Label3" runat="server" Text="Label"></asp:Label>
    </form>
</body>
</html>
```

C# code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace if23024_pra1
{
    public partial class WebForm4 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            int i = 123;
            object o = i;
            i = 456;
            int j = (int)o;
            Label1.Text = ("the value type of i is:") + Convert.ToString(i);
            Label2.Text = ("After boxing value of o is:") + Convert.ToString(o);
            Label3.Text = ("after unboxing:") + Convert.ToString(i);

        }
    }
    }
```

Output:



b. Create a simple application to perform addition and subtraction using delegate

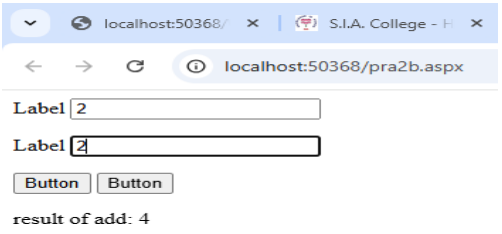
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace lf23001prac1A
{
   public partial class WebForm2 : System.Web.UI.Page
   {
      public delegate int calculate(int a, int b);
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         int num1 = Convert.ToInt16(TextBox1.Text);
         int num2 = Convert.ToInt32(TextBox2.Text);
         calculate calc = add;
         Label3.Text = "result of add:" + calc(num1, num2).ToString();
      }

      protected void Button2_Click(object sender, EventArgs e)
      {
         int num1 = Convert.ToInt32(TextBox1.Text);
         int num2 = Convert.ToInt32(TextBox2.Text);
         calculate calc = sub;
         Label3.Text = "result of sub:" + calc(num1, num2).ToString();
      }
      private int add(int a, int b)
      {
         return a + b;
      }
      private int sub(int a, int b)
      {
```

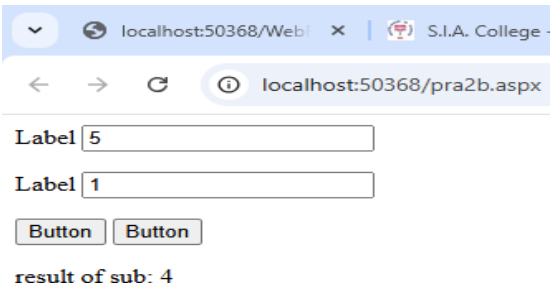
```
        return a - b;
      }
    }
}
```

Web code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="If23001prac1A.WebForm2" %>

<!DOCTYPE html>

<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="Label"></asp:Label>
      <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>

   </div>
      <p>
          </p>
      <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
      <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
      <p>
          </p>
      <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="ADD" />
      <br />
      <br />
      <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="SUB" />
      <p>
          </p>
      <asp:Label ID="Label3" runat="server" Text="Label"></asp:Label>
   </form>
</body>
</html>
```

Output:





c. Create a simple application to demonstrate use of the concepts of interfaces. Web code:

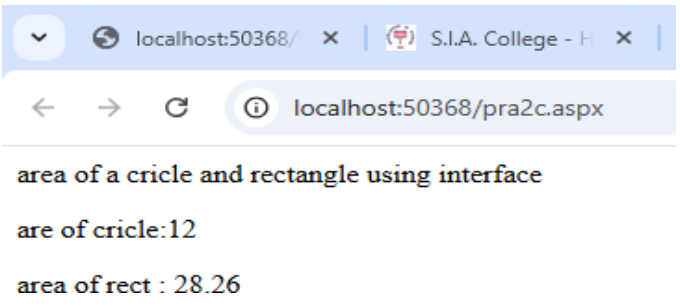
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="pra2c.aspx.cs"
Inherits="if23024_pra1.pra2c" %>

<!DOCTYPE html>

<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="area of a cricle and rectangle
using interface"></asp:Label>

    </div>
        <p>
            are of cricle:<asp:Label ID="Label2" runat="server" Text="are of cricle:
"></asp:Label>
        </p>
        <p>
            area of rect : <asp:Label ID="Label3" runat="server" Text="area of rect :
"></asp:Label>
        </p>
        <p>
             </p>
    </form>
</body>
</html>
```

C# code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace if23024_pra1
{
    public partial class pra2c : System.Web.UI.Page
    {
        interface Area
        {
```

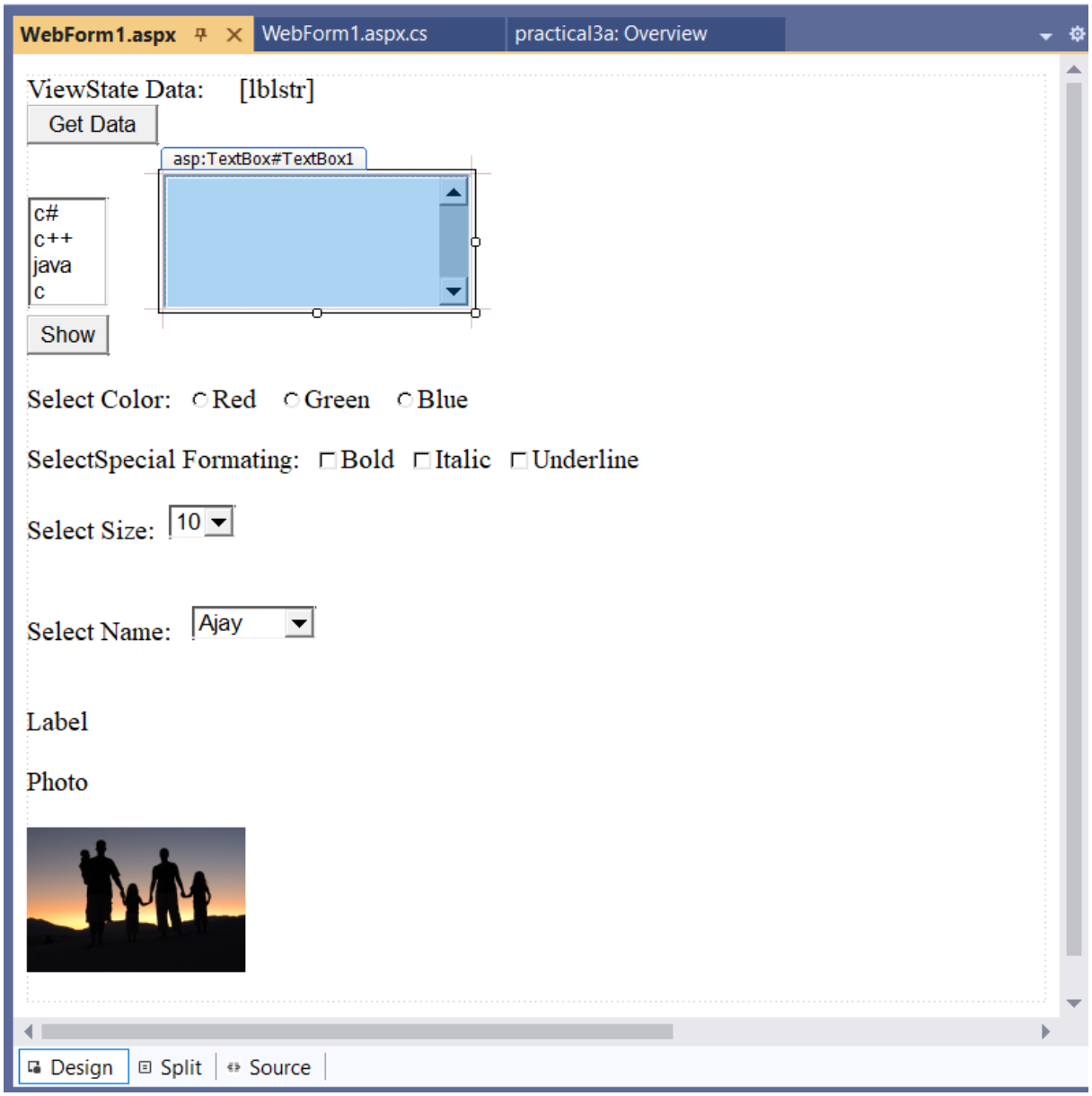
```
        double show(double s, double t);
    }
    class Rect : Area
    {
        public double show(double s, double t)
        {
            return s * t;
        }
    }
    class Circle : Area
    {
        public double show(double s, double t)
        {
            return (3.14 * s * s);
        }
    }
    protected void Page_Load(object sender, EventArgs e)
    {
        Rect r1 = new Rect();
        double x = r1.show(3, 4);
        Circle c1 = new Circle();
        double y = c1.show(3, 4);
        Label2.Text = x.ToString();
        Label3.Text = y.ToString();
    }
}
}
```

Output:



Practical No: 3

3a. Create a simple web page with various server controls to demonstrate setting and use of their properties. (example AutoPostBack)



Pract3a.aspx

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="practical3a.WebForm1" %>

<!DOCTYPE html>

<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="ViewState Data:"></asp:Label>

 

  

<asp:Label ID="lblstr" runat="server"></asp:Label>

<br />

<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Get Data" />

<br />

<br />

<asp:ListBox ID="ListBox1" runat="server" OnSelectedIndexChanged="ListBox1_SelectedIndexChanged1"
AutoPostBack="True" SelectionMode="Multiple" DataTextField="multiple">

<asp:ListItem>c#</asp:ListItem>

<asp:ListItem Value="c++"></asp:ListItem>

<asp:ListItem Value="java"></asp:ListItem>

<asp:ListItem>c</asp:ListItem>

</asp:ListBox>

       

<asp:TextBox ID="TextBox1" runat="server" Height="92px" style="margin-top: 0px" TextMode="MultiLine"
AutoPostBack="True"></asp:TextBox>

<br />

<asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Show" />

<br />

<br />

<asp:Label ID="Label2" runat="server" Text="Select Color:"></asp:Label>

 

<asp:RadioButton ID="RadioButton1" runat="server"
OnCheckedChanged="RadioButton1_CheckedChanged" Text="Red" />

  

<asp:RadioButton ID="RadioButton2" runat="server"
OnCheckedChanged="RadioButton2_CheckedChanged" Text="Green" />
```

```
  

<asp:RadioButton ID="RadioButton3" runat="server"
OnCheckedChanged="RadioButton3_CheckedChanged" Text="Blue" />

<br />

<br />

<asp:Label ID="Label3" runat="server" Text="SelectSpecial Formating:"></asp:Label>

 

<asp:CheckBox ID="CheckBox1" runat="server" OnCheckedChanged="CheckBox1_CheckedChanged"
Text="Bold" />

 

<asp:CheckBox ID="CheckBox2" runat="server" OnCheckedChanged="CheckBox2_CheckedChanged"
Text="Italic" />

 

<asp:CheckBox ID="CheckBox3" runat="server" OnCheckedChanged="CheckBox3_CheckedChanged"
Text="Underline" />

<br />

<br />

<asp:Label ID="Label4" runat="server" Text="Select Size:"></asp:Label>

 

<asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="DropDownList1_SelectedIndexChanged">

<asp:ListItem>10</asp:ListItem>

<asp:ListItem>20</asp:ListItem>

<asp:ListItem>30</asp:ListItem>

<asp:ListItem>40</asp:ListItem>

<asp:ListItem>50</asp:ListItem>

</asp:DropDownList>

<br />

<br />

 <br />

<asp:Label ID="Label5" runat="server" Text="Select Name:"></asp:Label>

  

<asp:DropDownList ID="DropDownList2" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="DropDownList2_SelectedIndexChanged">

<asp:ListItem>Ajay</asp:ListItem>
```

```
<asp:ListItem>Aditya</asp:ListItem>
<asp:ListItem>Anand</asp:ListItem>
<asp:ListItem>Shiv</asp:ListItem>
<asp:ListItem>Saurav</asp:ListItem>
<asp:ListItem>Kartikya</asp:ListItem>
</asp:DropDownList>
<br />
<br />
<br />
<asp:Label ID="Label6" runat="server" Text="Label"></asp:Label>
<br />
<asp:Label ID="Label7" runat="server" Text="Photo"></asp:Label>
<br />
<br />
<asp:Image ID="Image1" runat="server"
ImageUrl="https://upload.wikimedia.org/wikipedia/commons/d/df/Family_Portrait.jpg" Width="160px" />
<br />
<br />
</div>
</form>
</body>
</html>
```

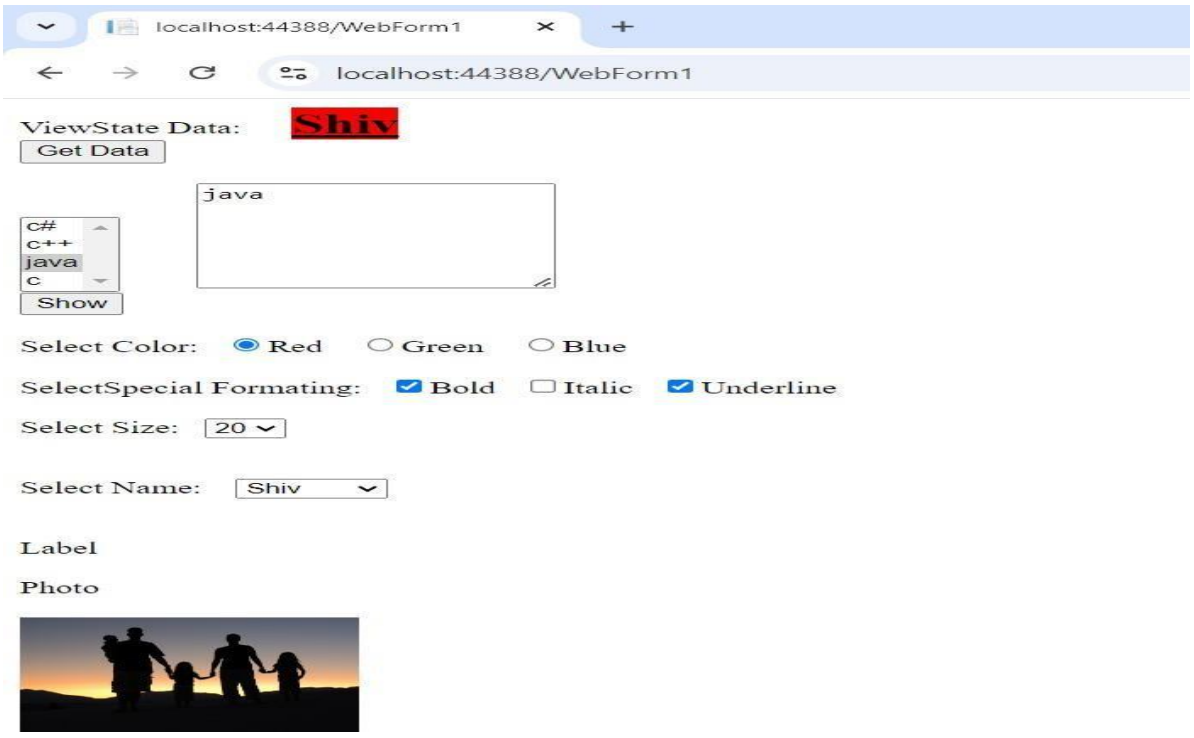
Pract3a.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Reflection.Emit;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace practical3a
{
```

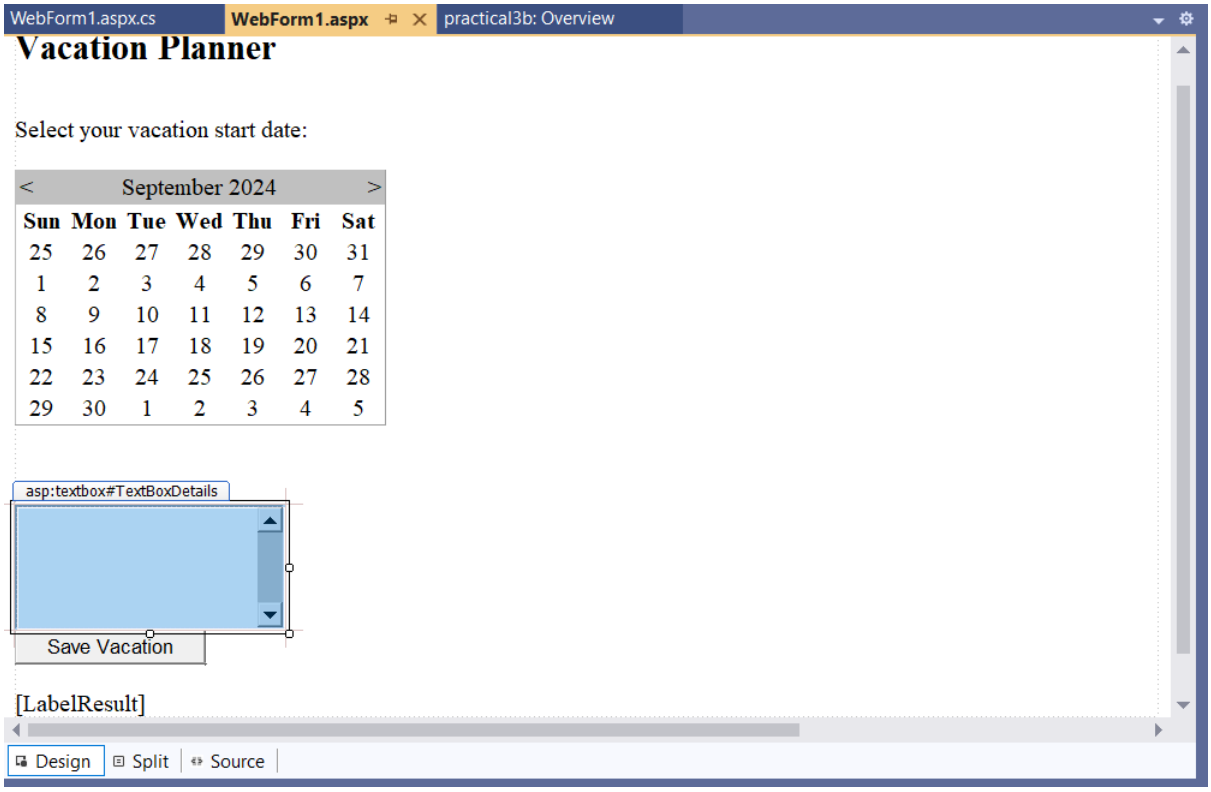
```
public partial class WebForm1 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            string str = "Ajay";
            if (ViewState["name"] == null)
            {
                ViewState["name"] = str;
            }
        }
    }
    protected void Button1_Click(object sender, EventArgs e)
    {

        lblstr.Text = ViewState["name"].ToString();
    }
    protected void Button2_Click(object sender, EventArgs e)
    {
        TextBox1.Text = "";
        for (int i = 0; i < ListBox1.Items.Count;i++)
        {
            if (ListBox1.Items[i].Selected == true)
            {
                TextBox1.Text = TextBox1.Text + "" + ListBox1.Items[i].Text + "\n";
            }
        }
    }
 protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)

        lblstr.Font.Size = int.Parse(DropDownList1.SelectedItem.Text);
    }
```

```
    protected void DropDownList2_SelectedIndexChanged(object sender, EventArgs e)
    {
        lblstr.Text = DropDownList2.SelectedItem.Text;
    }
    protected void RadioButton1_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.BackColor = System.Drawing.Color.Red;
    }
    protected void RadioButton2_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.BackColor = System.Drawing.Color.Green;
    }
    protected void RadioButton3_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.BackColor = System.Drawing.Color.Blue;
    }
    protected void CheckBox1_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.Font.Bold = true;
    }
    protected void CheckBox2_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.Font.Italic = true;
    }
    protected void CheckBox3_CheckedChanged(object sender, EventArgs e)
    {
        lblstr.Font.Underline = true;
    }
  }
}
```

Output:


localhost:44388/WebForm1
localhost:44388/WebForm1
ViewState Data:
Shiv
Get Data
java
c#
c++
java
c
Show
Select Color:
Red
Green
Blue
SelectSpecial Formating:
Bold
Italic
Underline
Select Size:
20
Select Name:
Shiv
Label
Photo

3b. Create a simple application to demonstrate your vacation using callender control.



3b.aspx

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="practical3b.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title></title>

</head>

<body>

<form id="form1" runat="server">

<h2> Vacation Planner</h2>

<asp:Label ID="Label1" runat="server" Text="Select your vacation start date:"></asp:Label>

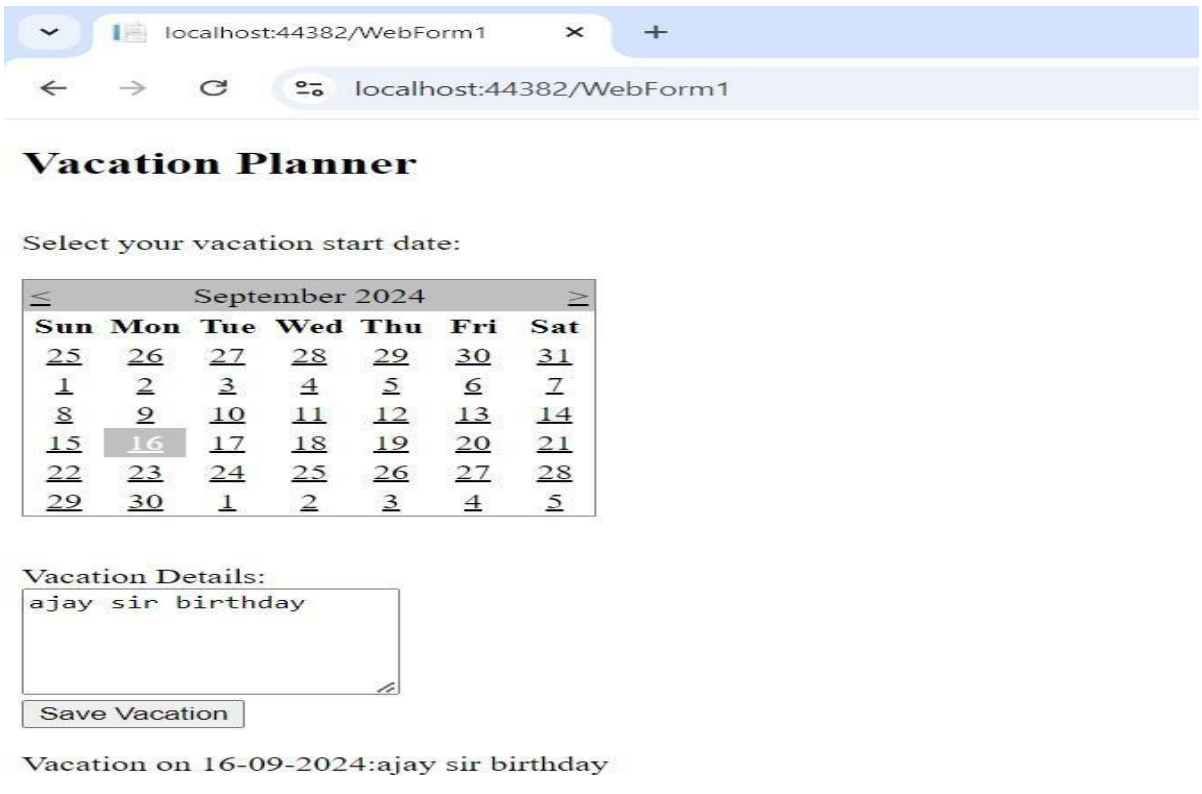

```
<br />
<asp:Calendar ID="Calendar1" runat="server"
OnSelectionChanged="Calender1_SelectionChanged"></asp:Calendar>
<br />
<br />
<asp:Label ID="Label2" runat="server" Text="Vacation Details:"></asp:Label>
<br />
<asp:TextBox ID="TextBoxDetails" runat="server" Rows="5" TextMode="MultiLine"></asp:TextBox>
<br />
<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Save Vacation" />
<br />
<br />
<asp:Label ID="LabelResult" runat="server"></asp:Label>
</div>
</form>
</body>
</html>
```

3b.aspx.cs

```
using Antlr.Runtime.Misc;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace practical3b
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
```

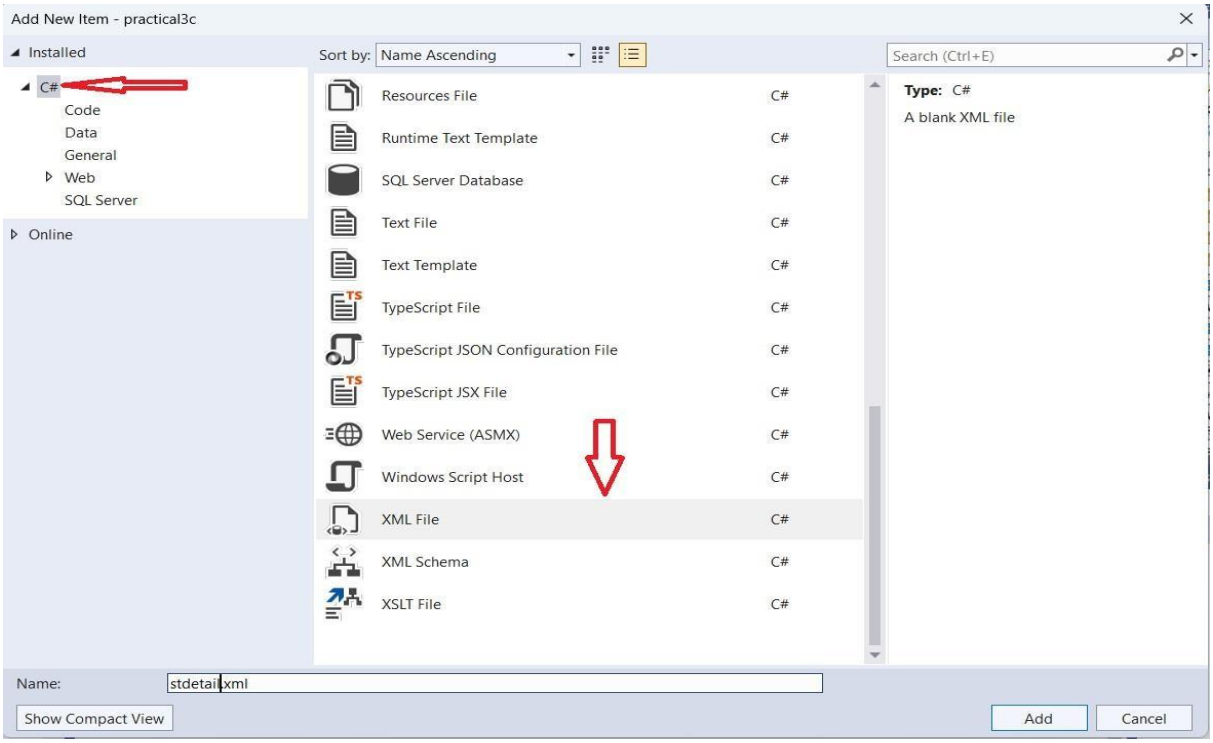
```
}
protected void Calender1_SelectionChanged(object sender, EventArgs e)
{
    LabelResult.Text = "You selected:" + Calendar1.SelectedDate.ToShortDateString();
}
protected void Button1_Click(object sender, EventArgs e)
{
    string vacationDate = Calendar1.SelectedDate.ToShortDateString();
    string vacationDetails = TextBoxDetails.Text;
    if (string.IsNullOrEmpty(vacationDetails))
    {
        LabelResult.Text = "Please enter vacation details.";
    }
    else
    {
        LabelResult.Text = $"Vacation on {vacationDate}:{vacationDetails}";
    } } } }
```

Output:



3c. Demonstrate the use of treeview operations on the web form.

Step1:

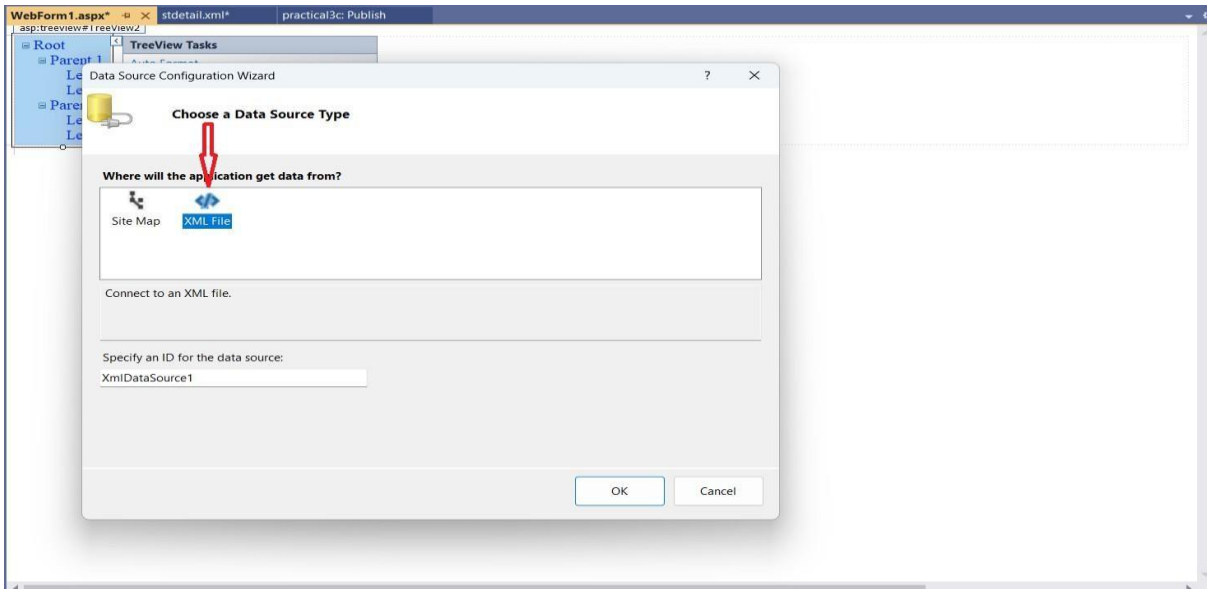


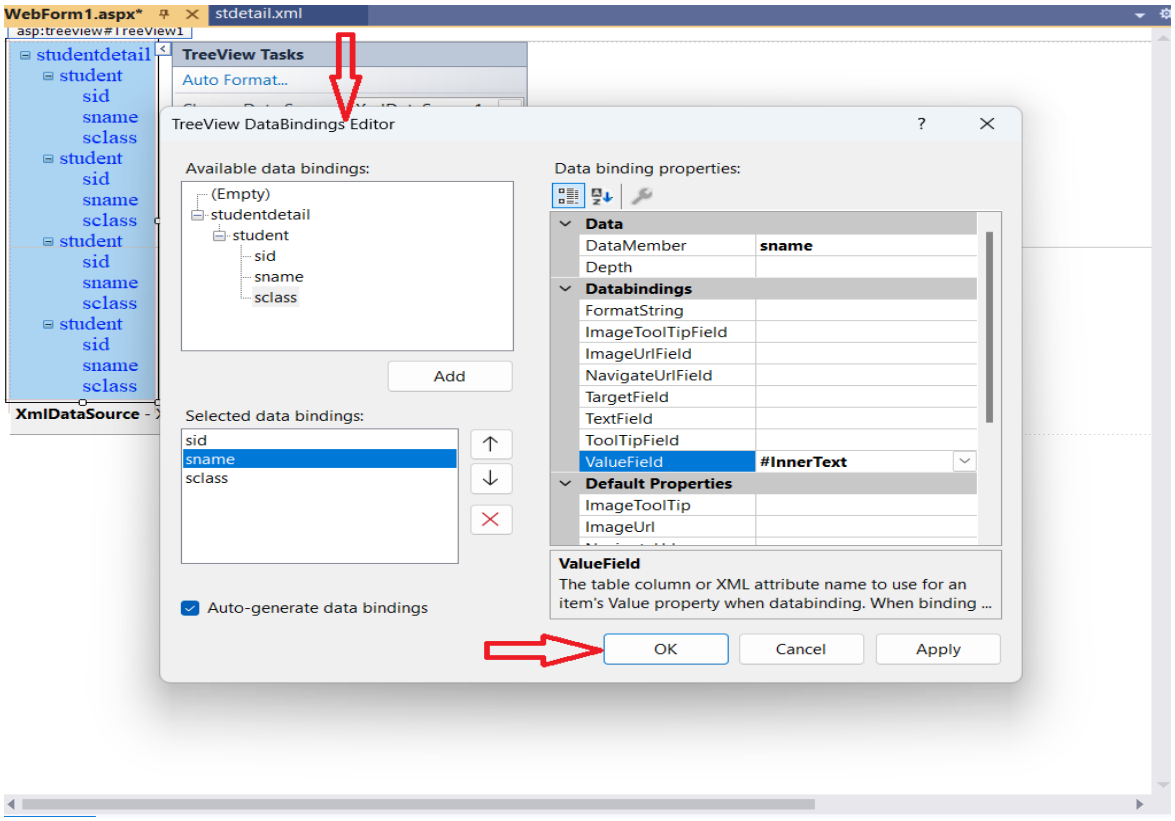
Stdetail.xml:

```
<?xml version="1.0" encoding="utf-8" ?>
<studentdetail>
        <student>
          <sid>1</sid>
          <sname>Saurav</sname>
          <sclass>TYIT</sclass>
        </student>
        <student>
          <sid>2</sid>
          <sname>Anand</sname>
          <sclass>TYCS</sclass>
        </student>
        <student>
          <sid>3</sid>
          <sname>Aditya</sname>
```

```
    <sclass>TYIT</sclass>
  </student>
  <student>
    <sid>4</sid>
    <sname>Shiv</sname>
    <sclass>TYCS</sclass>
  </student>
</studentdetail>
```

Step2:





3c.aspx:

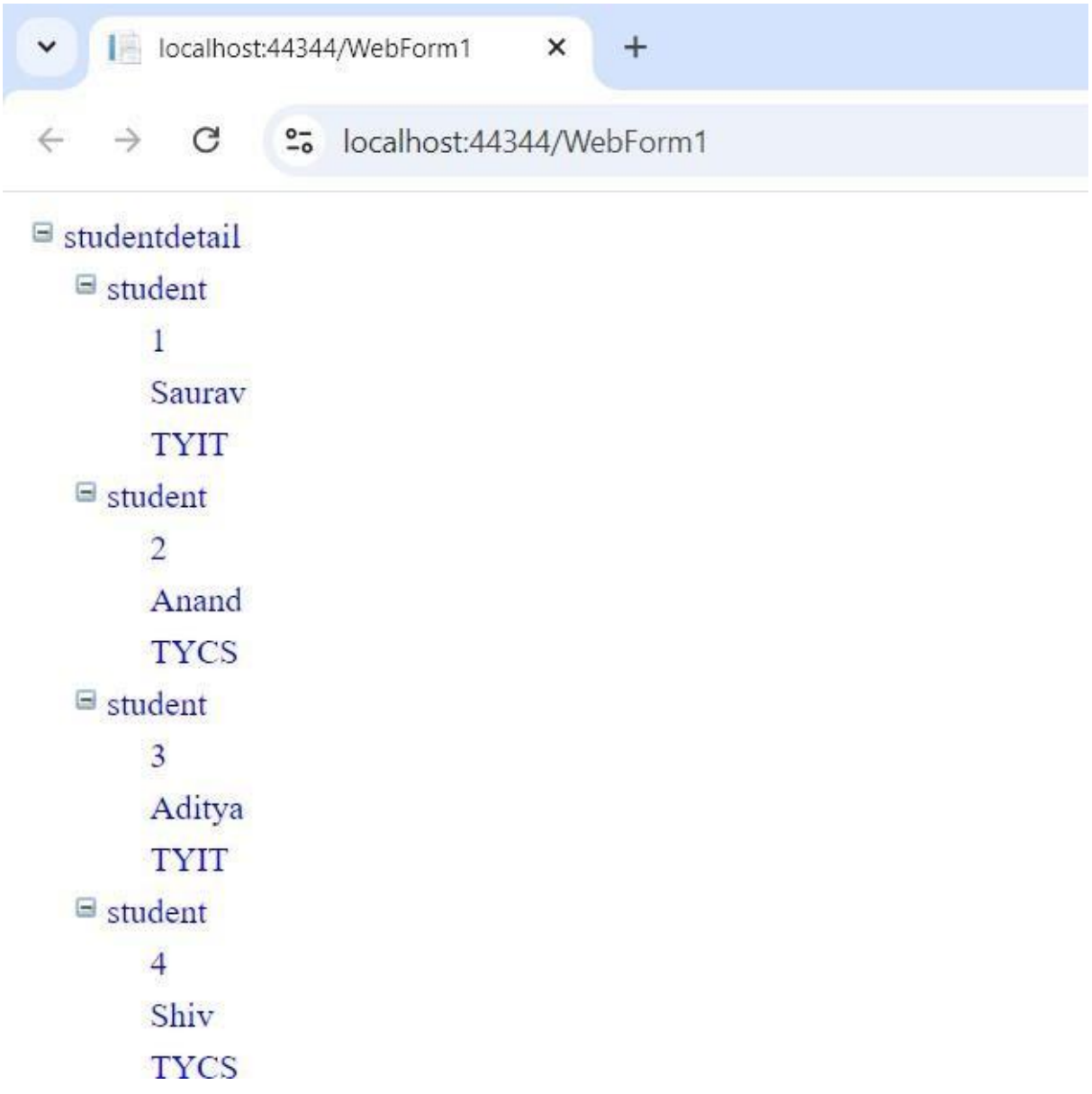
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="practical3c.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

<title></title>

</head>

<body style="z-index: 1; width: 1387px; height: 218px; position: absolute; top: 0px; left: 0px">

<form id="form1" runat="server">

<div>

<asp:TreeView ID="TreeView1" runat="server" DataSourceID="XmlDataSource1">

<DataBindings>

<asp:TreeNodeBinding DataMember="sid" ValueField="#InnerText" />

<asp:TreeNodeBinding DataMember="sname" ValueField="#InnerText" />

<asp:TreeNodeBinding DataMember="sclass" ValueField="#InnerText" />

</DataBindings>

</asp:TreeView>

<asp:XmlDataSource ID="XmlDataSource1" runat="server"
DataFile="~/stdetail.xml"></asp:XmlDataSource>

</div>

</form>

</body>

</html>
```

Pract3c.aspx.cs:

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;
```

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


namespace practical3c
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
      }
   }
}
```

Output:



Practical no: 4

Q4a) Create a Registration form to demonstrate use of various Validation controls.

Prac4a.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="prac4a.aspx.cs"
Inherits="prac4_40.prac4a" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Validation Example</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>

            <!-- Name Field -->
            <asp:Label ID="Label1" runat="server" Text="Enter Name:"></asp:Label>
              
            <asp:TextBox ID="Txtname" runat="server"></asp:TextBox>
            <asp:RequiredFieldValidator ID="reqname" runat="server"
ControlToValidate="Txtname"
                ErrorMessage="Please enter name!!"
ForeColor="Red"></asp:RequiredFieldValidator>

            <br /><br />

            <!-- Age Field -->
            <asp:Label ID="Label2" runat="server" Text="Enter Age:"></asp:Label>
            <asp:TextBox ID="txtage" runat="server" Height="19px"
Width="134px"></asp:TextBox>
            <asp:RangeValidator ID="RangeValidator1" runat="server"
ControlToValidate="txtage"
                ErrorMessage="Invalid Age!!" ForeColor="Red" MinimumValue="18"
MaximumValue="50" Type="Integer" />

            <br /><br />

            <!-- Email Field -->
            <asp:Label ID="Label3" runat="server" Text="Enter email:"></asp:Label>
             
            <asp:TextBox ID="txtemail" runat="server"></asp:TextBox>
            <asp:RegularExpressionValidator ID="RegularExpressionValidator1"
runat="server" ControlToValidate="txtemail"
                ErrorMessage="Invalid Email!!" ForeColor="Red"
                ValidationExpression="^[^@\s]+@[^@\s]+\.[^@\s]+$" />

            <br /><br />

            <!-- Password Field -->
            <asp:Label ID="Label4" runat="server" Text="Enter Password:"></asp:Label>
             
```

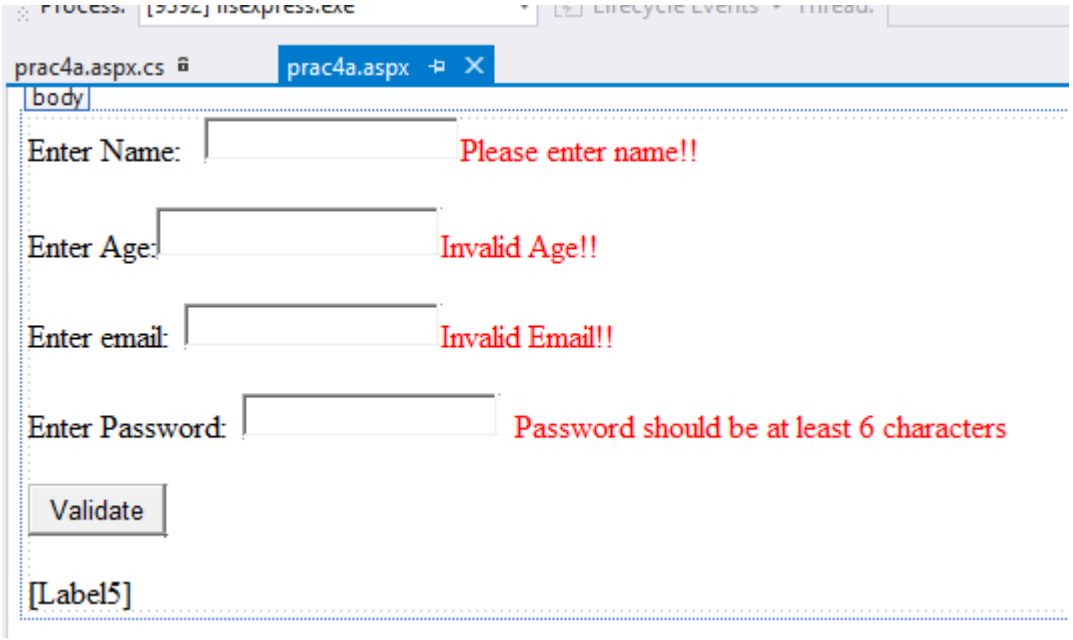
```
            <asp:TextBox ID="txtpass" runat="server"
TextMode="Password"></asp:TextBox>
             
            <asp:CustomValidator ID="CustomValidator1" runat="server"
ControlToValidate="txtpass"
                OnServerValidate="Passwordlen_ServerValidate"
                ErrorMessage="Password should be at least 6 characters"
ForeColor="Red" />

            <br /><br />

            <!-- Submit Button -->
            <asp:Button ID="Button1" runat="server" Text="Validate"
OnClick="Button1_Click" />

            <br /><br />

            <!-- Result Label -->
            <asp:Label ID="Label5" runat="server" Text=""></asp:Label>

            <br />
        </div>
    </form>
</body>
</html>
```

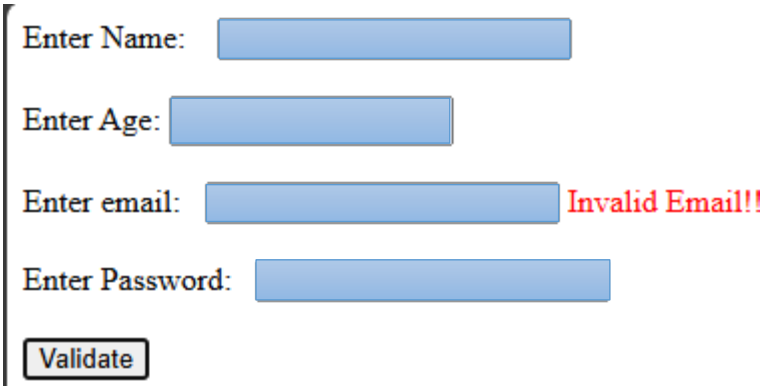
Prac4a.aspx.cs

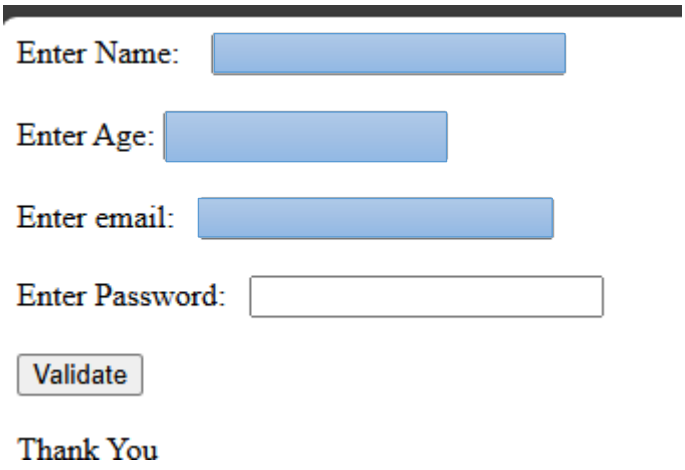
```
using System;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace prac4_40
{
    public partial class prac4a : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            if (Page.IsValid)
            {
                Label5.Text = "Thank You";
            }
            else
            {
                Label5.Text = "There are few issues...";
            }
        }

        protected void Passwordlen_ServerValidate(object source,
ServerValidateEventArgs args)
        {
            if (args.Value.Length >= 6)
            {
                args.IsValid = true;
            }
            else
```

```
            {
                args.IsValid = false;
            }
        }
    }
}
```

Design







Q4b) Create Web Form to demonstrate use of Adrotator Control

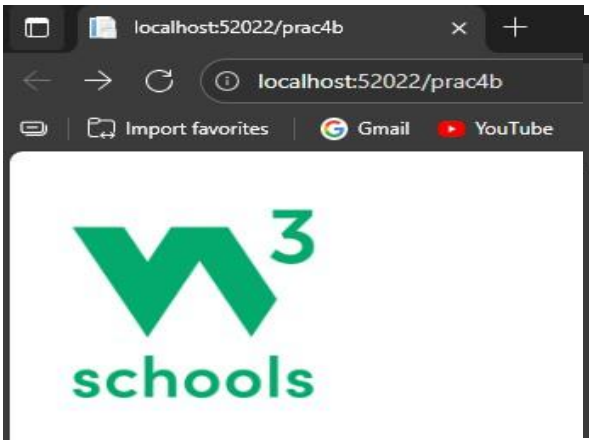
Prac4b.aspx

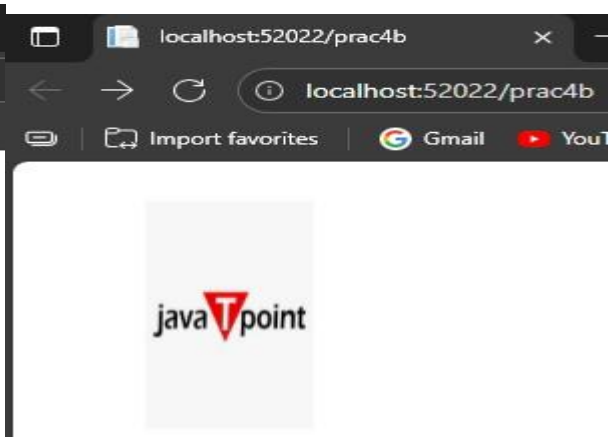
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="prac4b.aspx.cs"
Inherits="prac4_40.prac4b" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:ScriptManager ID="ScriptManager1" runat="server">
        </asp:ScriptManager>

    </div>
        <asp:Timer ID="Timer1" runat="server">
        </asp:Timer>
        <asp:UpdatePanel ID="UpdatePanel1" runat="server">
            <Triggers>
                <asp:AsyncPostBackTrigger ControlID ="Timer1" EventName ="Tick">
                </asp:AsyncPostBackTrigger>
                </Triggers>
        <ContentTemplate>
            <asp:AdRotator ID="AdRotator1" runat="server"
AdvertisementFile="~/prac4b.xml" Height="200px" Width="200px"/>
         </ContentTemplate>
        </asp:UpdatePanel>
    </form>
</body>
</html>
```

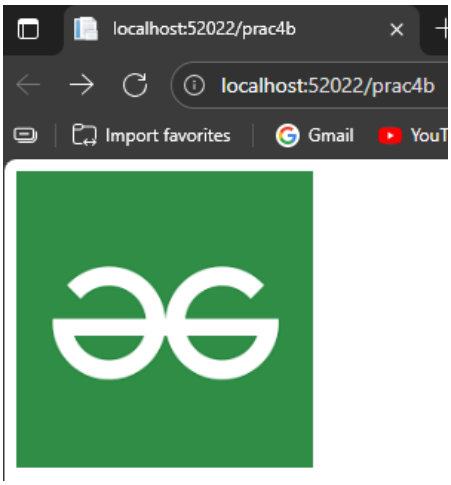
Prac4b.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
  <Ad>
    <ImageUrl>Images/w3schools.jpg</ImageUrl>
    <NavigateUrl>https://www.w3schools.com/</NavigateUrl>
    <AlternateText>W3Schools</AlternateText>
  </Ad>
  <Ad>
    <ImageUrl>Images/javatpoint.png</ImageUrl>
    <NavigateUrl>https://www.tpointtech.com/</NavigateUrl>
    <AlternateText>JavaTpoint</AlternateText>
  </Ad>
  <Ad>
    <ImageUrl>Images/geeks4geeks.png</ImageUrl>
    <NavigateUrl>https://www.geeksforgeeks.org/</NavigateUrl>
```

```
    <AlternateText>JavaTpoint</AlternateText>
  </Ad>
</Advertisements>
```







Practical No: 05

5a) Create Web form demonstrate use of Website Navigation controls and site map

1) WebForm1.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication26.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:SiteMapPath ID="SiteMapPath1" runat="server">
        </asp:SiteMapPath>
        <br />
        <br />
        <asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1"
OnMenuItemClick="Menu1_MenuItemClick">
        </asp:Menu>
        <br />
        <asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
        <br />

    </div>
    </form>
</body>
</html>
```

2) WebForm2.apsx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="WebApplication26.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:SiteMapPath ID="SiteMapPath1" runat="server">
        </asp:SiteMapPath>
        <br /> Welcome to online Store
```

```
    </div>
    </form>
</body>
</html>
```

3) WebForm3.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="WebApplication26.WebForm3" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:SiteMapPath ID="SiteMapPath1" runat="server">
        </asp:SiteMapPath>
        <br /> Hi Welcome to Online Shopping :Mobiles

    </div>
    </form>
</body>
</html>
```

4) Web.config

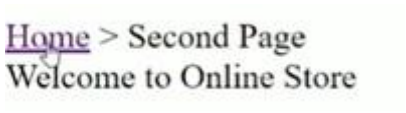
```
<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  http://go.microsoft.com/fwlink/?LinkId=169433
  -->
<configuration>
  <system.web>
    <siteMap>
      <providers>
        <remove name="MySqlSiteMapProvider"/>
      </providers>
    </siteMap>

    <compilation debug="true" targetFramework="4.5.2"/>
    <httpRuntime targetFramework="4.5.2"/>
    <httpModules>
      <add name="ApplicationInsightsWebTracking"
type="Microsoft.ApplicationInsights.Web.ApplicationInsightsHttpModule,
Microsoft.AI.Web"/>
    </httpModules>
  </system.web>
  <system.codedom>
    <compilers>
      <compiler language="c#;cs;csharp" extension=".cs"
        type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.CSharpCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
        warningLevel="4" compilerOptions="/langversion:6 /nowarn:1659;1699;1701"/>
```

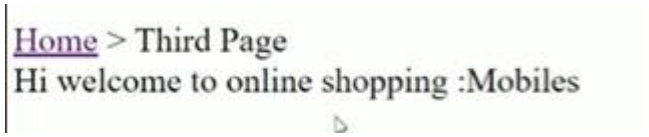
```
      <compiler language="vb;vbs;visualbasic;vbscript" extension=".vb"
        type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.VBCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35"
        warningLevel="4" compilerOptions="/langversion:14 /nowarn:41008
/define:_MYTYPE=\&quot;Web\&quot; /optionInfer+"/>
    </compilers>
  </system.codedom>
  <system.webServer>
    <validation validateIntegratedModeConfiguration="false"/>
    <modules>
      <remove name="ApplicationInsightsWebTracking"/>
      <add name="ApplicationInsightsWebTracking"
type="Microsoft.ApplicationInsights.Web.ApplicationInsightsHttpModule,
Microsoft.AI.Web"
        preCondition="managedHandler"/>
    </modules>
  </system.webServer>
</configuration>
```

5) Web.sitemap

```
<?xml version="1.0" encoding="utf-8" ?>
<siteMap xmlns="http://schemas.microsoft.com/AspNet/SiteMap-File-1.0" >
    <siteMapNode url="WebForm1.aspx" title="Home"  description="Home">
        <siteMapNode url="" title="Second Page"  description="Second Page" />
        <siteMapNode url="" title="Third Page"  description="Third Page" />
    </siteMapNode>
</siteMap>
```

Output:





5b) create a web page to demonstrate use of master page

1) WebForm1.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="WebApplication29.WebForm1" Theme="Skin1"%>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
```

```
    <asp:Label ID="Label1" runat="server" SkinId="lb1" Text="Select The
Date"></asp:Label>
    <br />
    <asp:Calendar ID="Calendar1" runat="server"></asp:Calendar>
    <br />
    <asp:HyperLink ID="HyperLink1" runat="server"
NavigateUrl="~/WebForm2.aspx">Next</asp:HyperLink>
</asp:Content>
```

2) WebForm2.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="WebForm2.aspx.cs" Inherits="WebApplication29.WebForm2" Theme="Skin1" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    <asp:Label ID="Label1" runat="server" Text="Label" SkinId="lb1"></asp:Label>
</asp:Content>
```

3) Skin1.skin

```
<asp:Label runat="server" SkinId="lb1" backcolor=blue/>
```

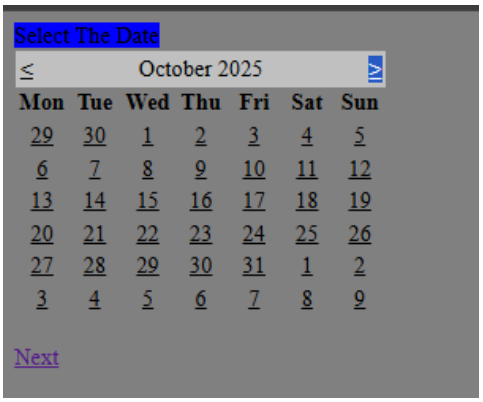
4) Stylesheet1.css

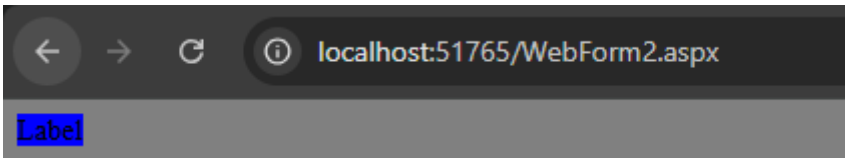
```
body {
    background-color: gray;
    font:italic;
}
```

5) Site1.Master

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="WebApplication29.Site1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <asp:ContentPlaceHolder ID="head" runat="server">
    </asp:ContentPlaceHolder>
</head>
<body>
    <link href="StyleSheet1.css" rel="stylesheet" type="text/css"/>
    <form id="form1" runat="server">
    <div>
        <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">

        </asp:ContentPlaceHolder>
    </div>
    </form>
</body>
</html>
```

Output:





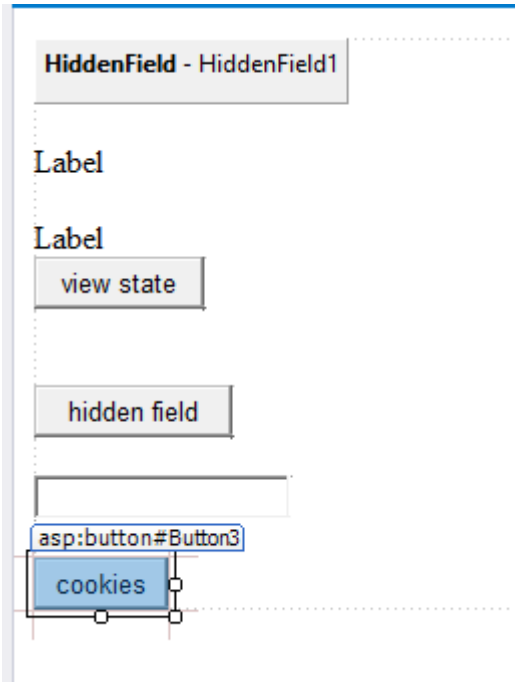
5C) Create a web application to demonstrate various states of asp.net pages.

1)WebForm1.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication50
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void TextBox1_TextChanged(object sender, EventArgs e)
        {
            if (IsPostBack)

            {

                if (ViewState["count"] != null)

                {
                    int ViewstateVal = Convert.ToInt32(ViewState["count"]) + 1;

                    Label2.Text = "View State:" + ViewstateVal.ToString();

                    ViewState["count"] = ViewstateVal.ToString();

                }

                else
```

```
                {

                    ViewState["count"] = "1";

                }

            }
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Label1.Text = ViewState["count"].ToString();
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            if (HiddenField1.Value != null)
            {
                int val = Convert.ToInt32(HiddenField1.Value) + 1;
                HiddenField1.Value = val.ToString();
            }
        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            HttpCookie h = new HttpCookie("name");
            h.Value = TextBox1.Text;
            Response.Cookies.Add(h);
            Response.Redirect("WebForm2.aspx");
        }
    }
}
```

2) WebForm1.aspx



3) WebForm2.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication50
{ public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (Request.Cookies["name"] != null)
                Response.Write("Welcome: " + Request.Cookies["name"].Value);
}}}
```

Output:

Practical no – 6

a. Create a web application for inserting and deleting records from a database

WebForm1.aspx:

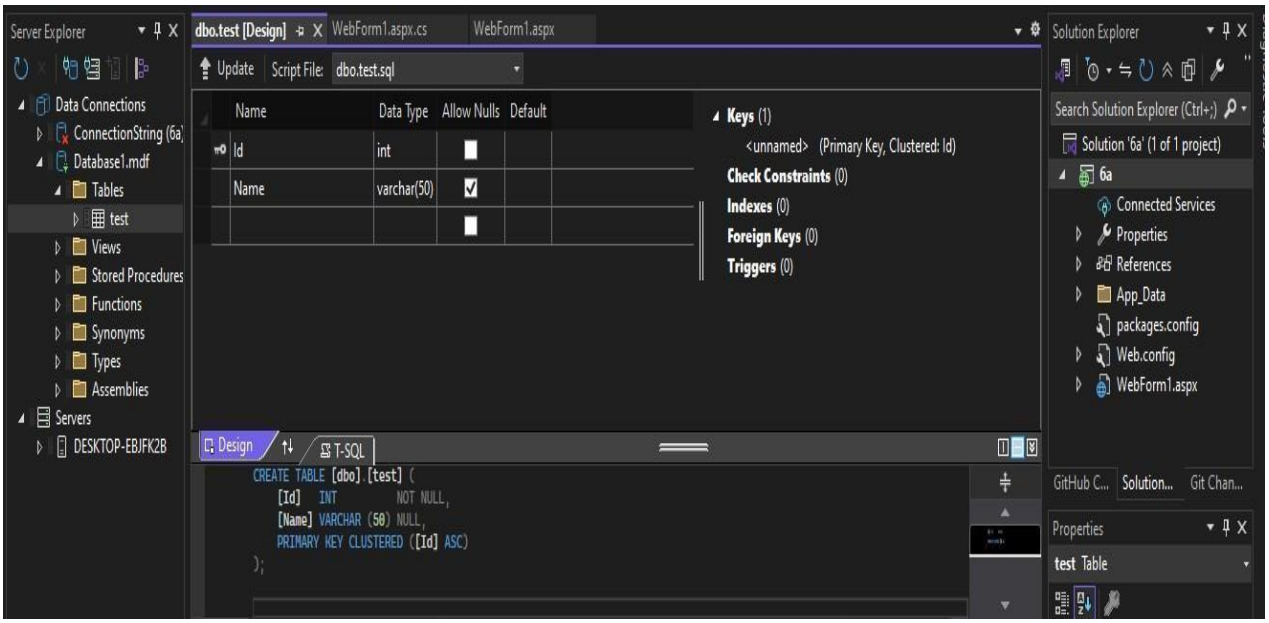
```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="_6a.WebForm1" %>

<!DOCTYPE html>

<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="Enter Your Id: "></asp:Label>
      <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
      <div>
         <br />
         <asp:Label ID="Label2" runat="server" Text="Enter Your Name:"></asp:Label>
         <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="view"
/>
         <asp:Button ID="Button2" runat="server" Text="insert" OnClick="Button2_Click"
/>
         <asp:Button ID="Button4" runat="server" Text="Delete"
OnClick="Button4_Click"  />
         <br />
         <br />
         <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataKeyNames="Id" DataSourceID="SqlDataSource1">
            <Columns>
               <asp:BoundField DataField="Id" HeaderText="Id" ReadOnly="True"
SortExpression="Id" />
               <asp:BoundField DataField="Name" HeaderText="Name"
SortExpression="Name" />
            </Columns>
         </asp:GridView>
         <asp:SqlDataSource  ID="SqlDataSource1"  runat="server"
ConnectionString="<%$  ConnectionStrings:ConnectionString  %>"
SelectCommand="SELECT * FROM [test]"></asp:SqlDataSource>
```

```
            <br />
            <asp:Label ID="Label3" runat="server" Height="75px" Text=" "
Width="250px"></asp:Label>
        </div>
    </form>
</body>
</html>
```

WebForm1.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace _6a
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        SqlCommand cmd = new SqlCommand();
        SqlDataReader rd;
        SqlDataSource con = new SqlDataSource();
        protected void Page_Load(object sender, EventArgs e)
        {
            con.ConnectionString = "Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=|DataDirectory|\\Database1.m
df;Integrated Security=True;";
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            con.SelectCommand = "Select * from test";
            GridView1.DataBind();
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            SqlParameter p1 = new SqlParameter();
            SqlParameter p2 = new SqlParameter();
            con.InsertParameters.Add("p1",  System.Data.DbType.Int32,  TextBox1.Text);
            con.InsertParameters.Add("p2",System.Data.DbType.String,TextBox2.Text);
            con.InsertCommand = "insert into test values(@p1,@p2);";
            con.Insert();
```

```
    }

    protected void Button3_Click(object sender, EventArgs e)
    {
        SqlParameter p1 = new SqlParameter();
     SqlParameter p2 = new SqlParameter();
        con.UpdateParameters.Add("p1", System.Data.DbType.Int32, TextBox1.Text);
        con.UpdateParameters.Add("p2", System.Data.DbType.String, TextBox2.Text);
        con.UpdateCommand = "update test set name=@p2 where id=@p1;";
        con.Update();
    }

    protected void Button4_Click(object sender, EventArgs e)
    {
      SqlParameter p1 = new SqlParameter();
        SqlParameter p2 = new SqlParameter();
        con.DeleteParameters.Add("p1",System.Data.DbType.Int32,TextBox1.Text);
        con.DeleteCommand = "delete test where id=@p1;";
        con.Delete();
    }
  }
}
```



Output:

Enter Your Id:

Enter Your Name:

view insert Delete

Id	Name
1	abc
2	abcd

Enter Your Id: 23001

Enter Your Name: Aman

view insert Delete

Id	Name
1	abc
2	abcd
23001	Aman

6b. Create a web application to display Using Disconnected Data Access and Databinding using GridView.

WebForm1.aspx:

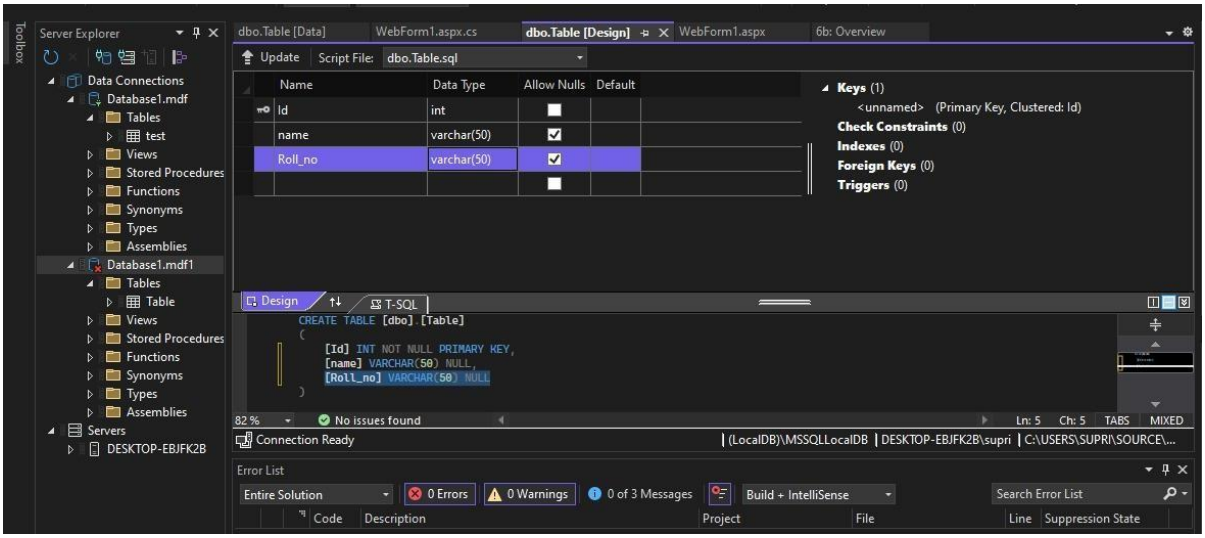
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="_6b.WebForm1" %>

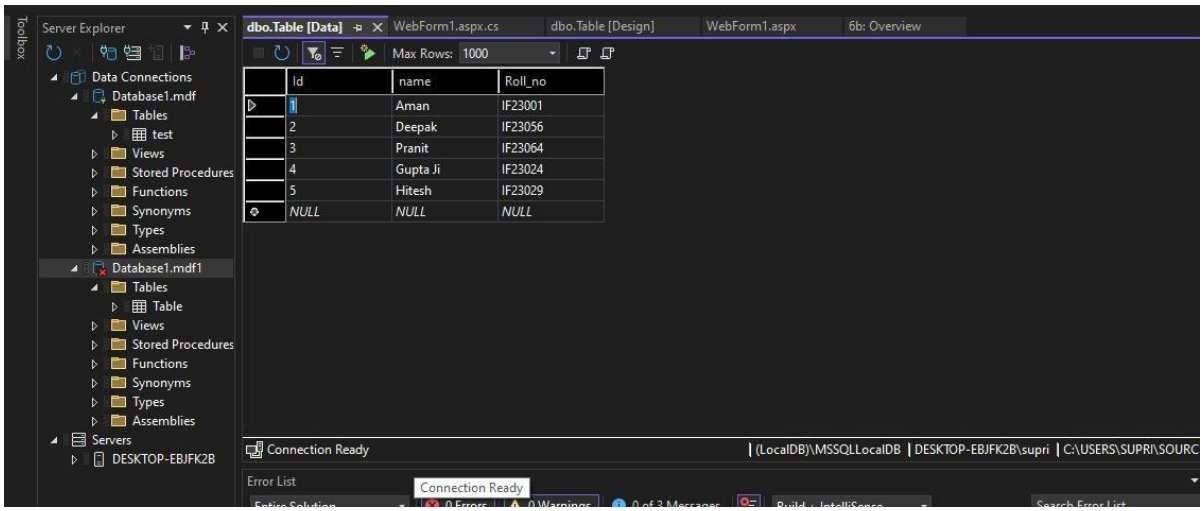
```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server">
            </asp:GridView>
        </div>
        <p>
            <asp:Button ID="Button1" runat="server"
OnClick="Button1_Click" Text="Button" />
        </p>
    </form>
</body>
</html>
```

WebForm1.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
using System.Data;

namespace _6b
{
    public partial class WebForm1 : System.Web.UI.Page
    {
```

```
        SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=C:\\Users\\s
upri\\source\\repos\\6b\\6b\\App_Data\\Database1.mdf;Integrated
Security=True");
        SqlDataAdapter da;
        DataSet ds = new DataSet();
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            da = new SqlDataAdapter("SELECT * FROM [Table]", con);
            int v = da.Fill(ds, "Table");
            GridView1.DataSource = ds;
            GridView1.DataBind();
        }
    }
}
```





Output:

Button

Id	name	Roll_no
1	Aman	IF23001
2	Deepak	IF23056
3	Pranit	IF23064
4	Gupta Ji	IF23024
5	Hitesh	IF23029

Button

Practical no. 7

a. Create a web application to demonstrate the use of different types of Cookies.

aspx code :

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="cookiess.WebForm1" %>

<!DOCTYPE html>

<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="Practical - 7"
Width="657px"></asp:Label>
            <br />
            <br />
            <asp:Label ID="Label2" runat="server" Text="Name"></asp:Label>
            : 
            <asp:TextBox ID="TextBox1" runat="server" Height="16px"
Width="299px"></asp:TextBox>
            <br />
            <br />
            <asp:Label ID="Label3" runat="server"
Text="Email"></asp:Label>
 :
            <asp:TextBox ID="TextBox2" runat="server"
Width="303px"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server"
OnClick="Button1_Click" Text="Session cookies" />
            <asp:Button ID="Button2" runat="server"
OnClick="Button2_Click" Text="Persistent cookies" />
            <br />
            <br />
            <asp:Button ID="Button3" runat="server"
OnClick="Button3_Click" Text="Read all cookies" />
            <asp:Button ID="Button4" runat="server"
OnClick="Button4_Click" Text="Delete cookies" />
            <br />
            <br />
            <br />
            <asp:Label ID="Label4" runat="server" Height="99px" Text="  "
Width="282px"></asp:Label>
            <br />
        </div>
```

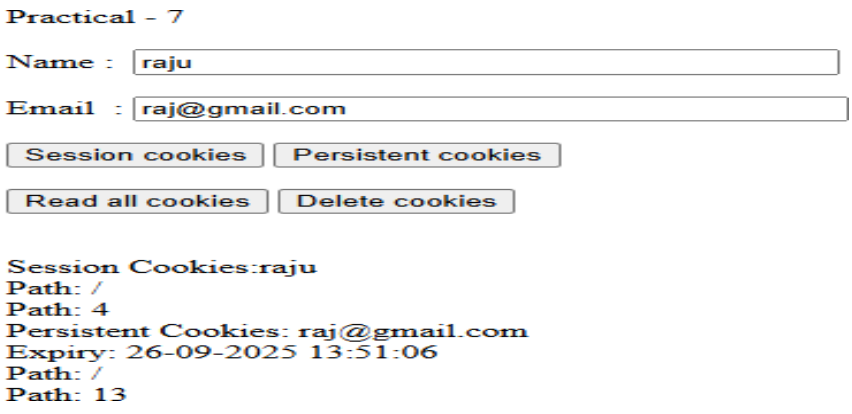
```
    </form>
</body>
   </html>
```

apsx.cs code :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace cookiess
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Response.Cookies["SessionCookie"].Value = TextBox1.Text;
            Label4.Text = "Session Cookies Created";
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            Response.Cookies["PersistentCookie"].Value = TextBox2.Text;
            Response.Cookies["PersistentCookie"].Expires =
DateTime.Now.AddMinutes(2);
            Label4.Text = "Persistent Cookies Created";
        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            string result = "";
            if (Request.Cookies["SessionCookie"] != null)
            {
                result += "Session Cookies:" +
Request.Cookies["SessionCookie"].Value + "<br>";
                result += "Path: " + Request.Cookies["SessionCookie"].Path +
"<br>";
                result += "Path: " + Request.Cookies["SessionCookie"].Value.Length
+ "<br>";
            }
            else
            {
                result += " Session Cookies Not Found<br>";
            }

            if (Request.Cookies["PersistentCookie"] != null)
            {
                result += "Persistent Cookies: " +
Request.Cookies["PersistentCookie"].Value + "<br>";
                result += "Expiry: " + DateTime.Now.AddMinutes(2).ToString() + "
<br>";
```

```
                result += "Path: " + Request.Cookies["PersistentCookie"].Path +
"<br>";
                result += "Path: " +
Request.Cookies["PersistentCookie"].Value.Length + "<br>";
            }
            else
            {
                result += "Persistent Cookies Not Found";
            }
            Label4.Text = result;
        }

        protected void Button4_Click(object sender, EventArgs e)
        {
            string result = "";
            if (Request.Cookies["SessionCookie"] != null)
            {
                Response.Cookies["SessionCookie"].Expires = DateTime.Now.AddDays(-
1);
                result += "Session Cookie deleted<br>";
            }
            else
            {
                result += "Session Cookie not found<br>";
            }

            if (Request.Cookies["PersistentCookie"] != null)
            {
                Response.Cookies["PersistentCookie"].Expires =
DateTime.Now.AddDays(-1);
                result += "Persistent Cookie deleted<br>";
            }
            else
            {
                result += "Persistent Cookie not found<br>";
            }

            Label4.Text = result;
        }
    }
   }
```

Output :



b. Create a web application to demonstrate form security and window security with proper authentication and authorization properties

Code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Reflection.Emit;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace _7b
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["username"] != null)
                Response.Redirect("home.aspx");
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            string username = TextBox1.Text;
            string password = TextBox2.Text;
            if (username == "admin" && password == "admin")
            {
                Session["username"] = username;
                Response.Redirect("WebForm2.aspx");
            }
            else
            {
                Label3.Text = "Username or password is incorrect. .. ";
            }
        }
    }
}
```

Apsx code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="_7b.WebForm1" %>

<!DOCTYPE html>

<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="username"></asp:Label>
 :
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
```

```
            <asp:Label ID="Label2" runat="server" Text="password"></asp:Label>
 :
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Login" />
            <br />
            <asp:Label ID="Label3" runat="server" Height="85px" Text=" "
Width="200px"></asp:Label>
            <br />
        </div>
    </form>
</body>
</html>
```

Second file cs code:

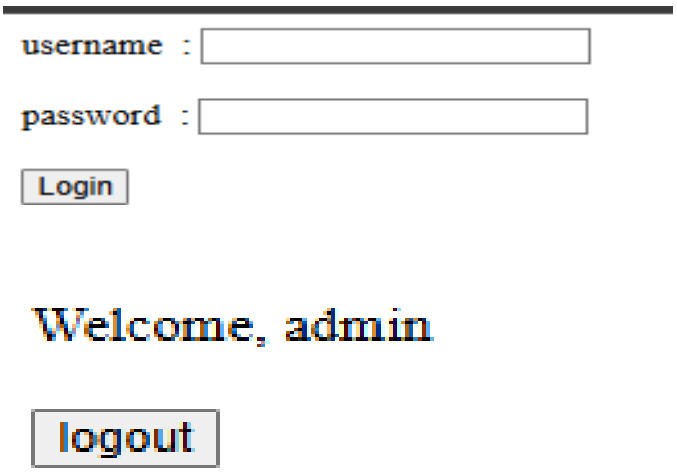
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace _7b
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                if (Session["username"] == null)
                {
                    Response.Redirect("WebForm1.aspx"); // Redirect to login if not
logged in
                }
                else
                {
                    Label1.Text = "Welcome, " + Session["username"].ToString();
                }
            }
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Session.Abandon(); // clear session
            Response.Redirect("WebForm1.aspx");
        }
    }
}
```

Aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="home.aspx.cs"
Inherits="_7b.WebForm2" %>

<!DOCTYPE html>

<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" Height="17px" Text="  "
Width="200px"></asp:Label>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="logout" />
        </div>
    </form>
</body>
</html>
```

Output:



Practical No. 8

8a) Create a web application for inserting and deleting records from a database. (Using ExecuteNon Query)

WebForm1.aspx:

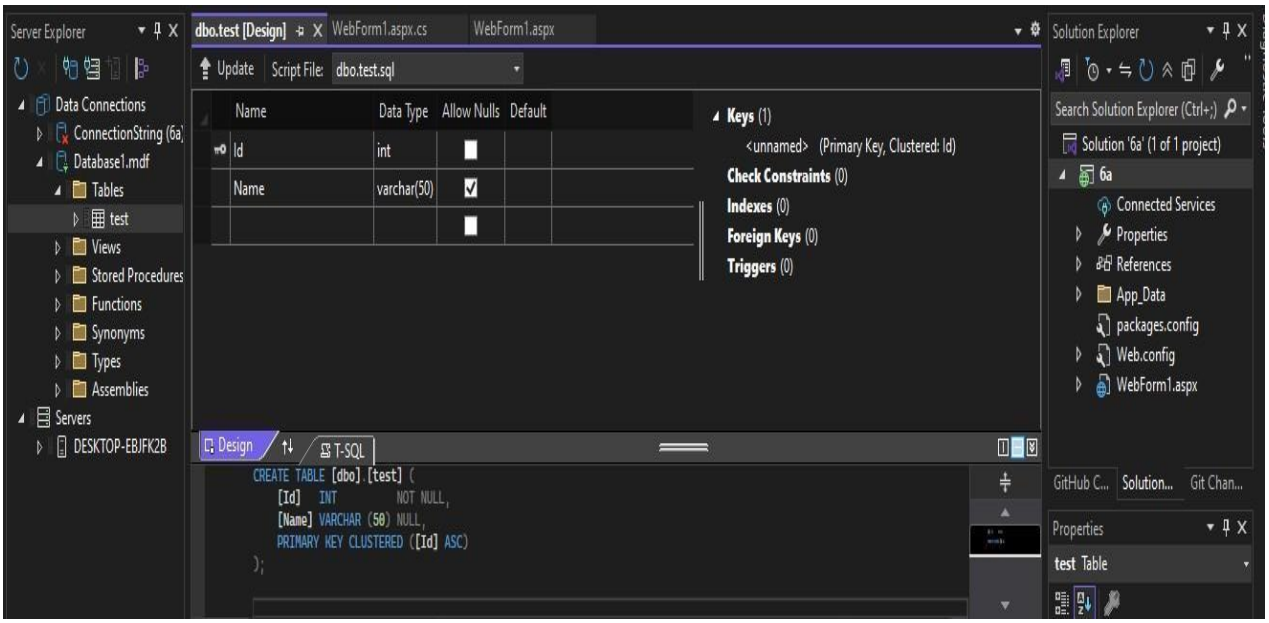
```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="_8a.WebForm1" %>

<!DOCTYPE html>

<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="Enter Your Id: "></asp:Label>
      <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
      <div>
         <br />
         <asp:Label ID="Label2" runat="server" Text="Enter Your Name:"></asp:Label>
         <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="view"
/>
         <asp:Button ID="Button2" runat="server" Text="insert" OnClick="Button2_Click"
/>
         <asp:Button ID="Button4" runat="server" Text="Delete"
OnClick="Button4_Click"  />
         <br />
         <br />
         <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataKeyNames="Id" DataSourceID="SqlDataSource1">
            <Columns>
               <asp:BoundField DataField="Id" HeaderText="Id" ReadOnly="True"
SortExpression="Id" />
               <asp:BoundField DataField="Name" HeaderText="Name"
SortExpression="Name" />
            </Columns>
         </asp:GridView>
         <asp:SqlDataSource  ID="SqlDataSource1"  runat="server"
ConnectionString="<%$  ConnectionStrings:ConnectionString  %>"
SelectCommand="SELECT * FROM [test]"></asp:SqlDataSource>
```

```
            <br />
            <asp:Label ID="Label3" runat="server" Height="75px" Text=" "
Width="250px"></asp:Label>
        </div>
    </form>
</body>
</html>
```

WebForm1.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace _8a
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        SqlCommand cmd = new SqlCommand();
        SqlDataReader rd;
        SqlDataSource con = new SqlDataSource();
        protected void Page_Load(object sender, EventArgs e)
        {
            con.ConnectionString = "Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=|DataDirectory|\\Database1.m
df;Integrated Security=True;";
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            con.SelectCommand = "Select * from test";
            GridView1.DataBind();
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            SqlParameter p1 = new SqlParameter();
            SqlParameter p2 = new SqlParameter();
            con.InsertParameters.Add("p1",  System.Data.DbType.Int32,  TextBox1.Text);
            con.InsertParameters.Add("p2",System.Data.DbType.String,TextBox2.Text);
            con.InsertCommand = "insert into test values(@p1,@p2);";
            con.Insert();
```

```
    }

    protected void Button3_Click(object sender, EventArgs e)
    {
        SqlParameter p1 = new SqlParameter();
     SqlParameter p2 = new SqlParameter();
        con.UpdateParameters.Add("p1", System.Data.DbType.Int32, TextBox1.Text);
        con.UpdateParameters.Add("p2", System.Data.DbType.String, TextBox2.Text);
        con.UpdateCommand = "update test set name=@p2 where id=@p1;";
        con.Update();
    }

    protected void Button4_Click(object sender, EventArgs e)
    {
      SqlParameter p1 = new SqlParameter();
        SqlParameter p2 = new SqlParameter();
        con.DeleteParameters.Add("p1",System.Data.DbType.Int32,TextBox1.Text);
        con.DeleteCommand = "delete test where id=@p1;";
        con.Delete();
    }
  }
}
```



Output:

Enter Your Id:

Enter Your Name:

view insert Delete

Id	Name
1	abc
2	abcd

Enter Your Id: 23001

Enter Your Name: Aman

view insert Delete

Id	Name
1	abc
2	abcd
23001	Aman

8b) Create a web application for user defined exception handling.

aspx file :

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="_8b.WebForm1" %>


<!DOCTYPE html>


<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="Label"></asp:Label>
        </div>
        <p>
            <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
        </p>
    </form>
</body>
</html>
```

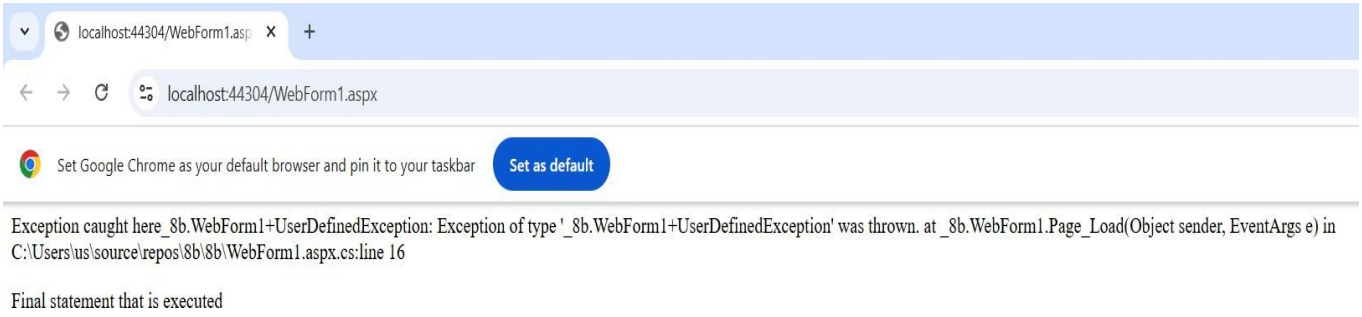
aspx.cs file :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
```

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

namespace _8b
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            try
            {
                throw new UserDefinedException("New userdefined exception");

            }
            catch(Exception ex)
            {
                Label1.Text = "Exception caught here" + ex.ToString();
            }
            Label2.Text = "Final statement that is executed";
        }
        class UserDefinedException : Exception
        {
            public UserDefinedException(String str)
            {
                Console.WriteLine("User defined Ecxeption");
            }

        }
        class HandledException
```

```
        {
            public static void main() { }

        }
    }
}
```

Output:



Practical no. 9

A) Create a web application to demonstrate use of GridView button column and GridView events along with paging and sorting.

aspx code :

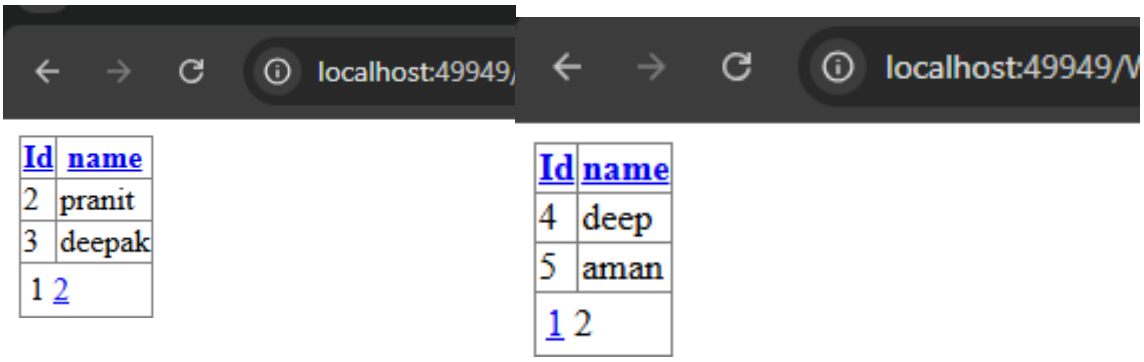
```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="WebApplication31.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

    </div>
        <asp:GridView ID="GridView1" runat="server" AllowPaging="True"
AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Id"
DataSourceID="SqlDataSource1" PageSize="2">
            <Columns>
                <asp:BoundField DataField="Id" HeaderText="Id"
ReadOnly="True" SortExpression="Id" />
                <asp:BoundField DataField="name" HeaderText="name"
SortExpression="name" />
            </Columns>
        </asp:GridView>
        <asp:SqlDataSource ID="SqlDataSource1" runat="server"
ConnectionString="<%$ ConnectionStrings:ConnectionString %>"
SelectCommand="SELECT [Id], [name] FROM [Table]"></asp:SqlDataSource>
    </form>
</body>
</html>
```

WebForm1.aspx.cs | dbo.Table [Data]

Max Rows: 1000

Id	name
2	pranit
3	deepak
4	deep
5	aman
NULL	NULL

Output :

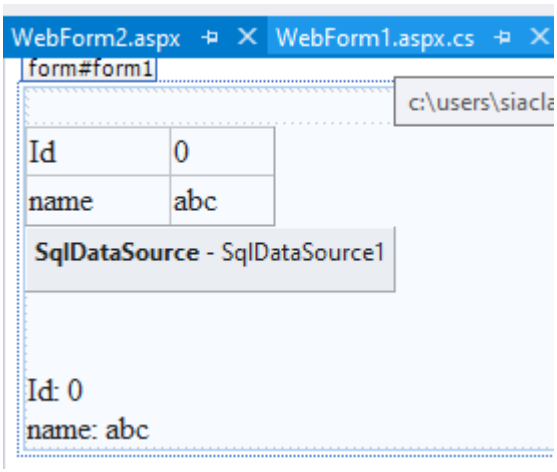


B) Create a web application to demonstrate data binding using DetailsView and FormView Control.

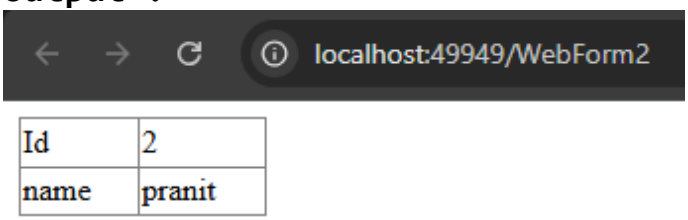
aspx code :

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="WebApplication31.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

    </div>
        <asp:DetailsView ID="DetailsView1" runat="server" AutoGenerateRows="False"
DataKeyNames="Id" DataSourceID="SqlDataSource1" Height="50px" Width="125px">
            <Fields>
                <asp:BoundField DataField="Id" HeaderText="Id" ReadOnly="True"
SortExpression="Id" />
                <asp:BoundField DataField="name" HeaderText="name"
SortExpression="name" />
            </Fields>
        </asp:DetailsView>
        <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:ConnectionString %>" SelectCommand="SELECT [Id], [name] FROM
[Table]"></asp:SqlDataSource>
        <br />
        <asp:FormView ID="FormView1" runat="server" DataKeyNames="Id"
DataSourceID="SqlDataSource1">
            <EditItemTemplate>
                Id:
                <asp:Label ID="IdLabel1" runat="server" Text='<%# Eval("Id") %>' />
                <br />
                name:
                <asp:TextBox ID="nameTextBox" runat="server" Text='<%# Bind("name")
%>' />
                <br />
                <asp:LinkButton ID="UpdateButton" runat="server"
CausesValidation="True" CommandName="Update" Text="Update" />
                 <asp:LinkButton ID="UpdateCancelButton" runat="server"
CausesValidation="False" CommandName="Cancel" Text="Cancel" />
            </EditItemTemplate>
            <InsertItemTemplate>
                Id:
```

```
                <asp:TextBox ID="IdTextBox" runat="server" Text='<%# Bind("Id") %>' />
                <br />
                name:
                <asp:TextBox ID="nameTextBox" runat="server" Text='<%# Bind("name")
%>' />
                <br />
                <asp:LinkButton ID="InsertButton" runat="server"
CausesValidation="True" CommandName="Insert" Text="Insert" />
                 <asp:LinkButton ID="InsertCancelButton" runat="server"
CausesValidation="False" CommandName="Cancel" Text="Cancel" />
            </InsertItemTemplate>
            <ItemTemplate>
                Id:
                <asp:Label ID="IdLabel" runat="server" Text='<%# Eval("Id") %>' />
                <br />
                name:
                <asp:Label ID="nameLabel" runat="server" Text='<%# Bind("name") %>' />
                <br />

            </ItemTemplate>
        </asp:FormView>
    </form>
</body>
</html>
```



Output :



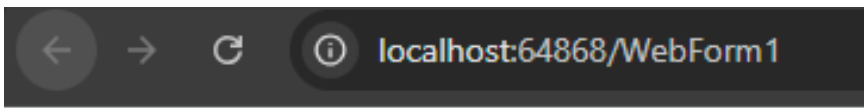
Practical no. 10

a. Create a web application to demonstrate JS Bootstrap Button.

aspx code :

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication35.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

 <div class="container">
   <h2>Button Sizes</h2>

        <p>The .btn class adds basic styling to a button:</p>
        <button type="button" class="btn">Basic Button</button>

      <button type="button" class="btn btn-primary btn-lg">Large</button>
  <button type="button" class="btn btn-primary">Normal</button>
  <button type="button" class="btn btn-primary btn-sm">Small</button>
  <button type="button" class="btn btn-primary btn-xs">XSmall</button>
</div>
    </div>
    </form>
</body>
    </html>
```

Output :



Button Sizes

The .btn class adds basic styling to a button:

Basic Button | Large | Normal | Small | XSmall

b. Create a web application to demonstrate use of various Ajax controls.

aspx code :

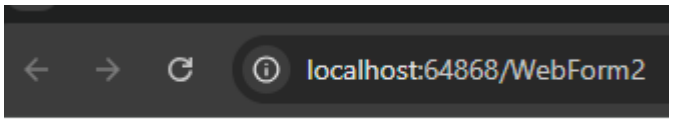
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="WebApplication35.WebForm2" %>

<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>

    </div>
        <asp:UpdatePanel ID="UpdatePanel1" runat="server">
            <ContentTemplate>
                <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
<br />
                <br />
                <asp:Timer ID="Timer1" runat="server" Interval="1000"
OnTick="Timer1_Tick">
                </asp:Timer>
                <br />
                <br />
                <asp:ScriptManager ID="ScriptManager1" runat="server">
                </asp:ScriptManager>
            </ContentTemplate>
        </asp:UpdatePanel>
    </form>
</body>
</html>
```

apsx.cs code :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication35
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Timer1_Tick(object sender, EventArgs e)
        {
            Label1.Text = DateTime.Now.ToLongTimeString();
        }
    }
}
```

Output :



11:33:02

c. Create a web application to demonstrate Installation and use of NuGet package.