1. **Working with basic C# and ASP .NET**

a. Create an application that obtains four int values from the user and displays the product

CODE:

```
using System;

namespace Vishu

{

class Program

{

    static void Main(string[] args)

    {

        int a,b,c,d,e;

        Console.WriteLine("Enter 4 numbers");

        a=Convert.ToInt32(Console.ReadLine());

        b=Convert.ToInt32(Console.ReadLine());

        c=Convert.ToInt32(Console.ReadLine());

        d=Convert.ToInt32(Console.ReadLine());

        e=a*b*c*d;

        Console.WriteLine("product="+e);

        Console.ReadKey();

    }

}

}
```

OUTPUT:

b**.** Create an application that receives the (Student Id, Student Name, Course Name, Date of Birth) information from a set of students. The application should also display the information of all the students once the data entered.

CODE:

```
using System;

namespace Vishu

{

class Student

{

    int stdid;

    string sname;

    string sclass;


    public void getinfo()

    {

        Console.WriteLine("Enter Student ID");

        stdid=Convert.ToInt32(Console.ReadLine());

        Console.WriteLine("Enter Student Name");

        sname=Console.ReadLine();

        Console.WriteLine("Enter Student Class");

        sclass=Console.ReadLine();

    }

    public void putinfo()

    {

        Console.WriteLine("Student ID="+stdid);

        Console.WriteLine("Student Name="+stdid);

        Console.WriteLine("Student Class="+stdid);

    }

}

    class Program

    {

        static void Main(string[] args)

        {
```

```
        Student[] s=new Student[5];
        for(int i=0; i<5; i++)
        s[i]= new Student();

        for(int i=0; i<5; i++)
        s[i].getinfo();

        for(int i=0; i<5; i++)
        s[i].putinfo();

        Console.ReadKey();
    }
  }
}
```

OUTPUT:

```
Enter Student ID
25
Enter Student Name
VISHU
Enter Student Class
TYIT
Enter Student ID
06
Enter Student Name
SV
Enter Student Class
TYIT
Enter Student ID
```

c. Create an application to demonstrate following operations

1. Generate Fibonacci series.

CODE:

```
using System;
namespace Vishu
{
class Program
{
    static void Main(string [] args)
    {
        int x;
        x=Convert.ToInt32(Console.ReadLine());
        int i,n1,n2,n3;
        n1=0;
        n2=1;
        i=2;
        Console.WriteLine(n1+""+n2);
        while(i<x)
        {
            n3=n1+n2;
        Console.Write(n3+"");
        n1=n2;
        n2=n3;
        i++;
    }
    Console.ReadKey();
}
}
}
```

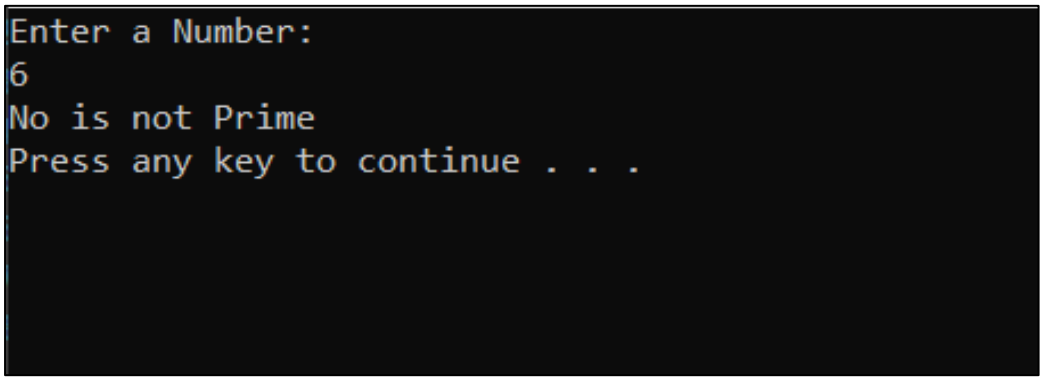
OUTPUT:

1. Test for prime numbers.

CODE:

```
using System;
namespace Vishu
{
   internal class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine("Enter a Number:");
         int x;
         x=Convert.ToInt32(Console.ReadLine());
         int f;
         f = 1;
         for (int i = 0; i <= x; i++)
          {
            f = 0;
            break;
         }
         if (f == 1)
            Console.WriteLine("No is Prime");
         else
            Console.WriteLine("No is not Prime");
      }
   }
}
```

OUTPUT:

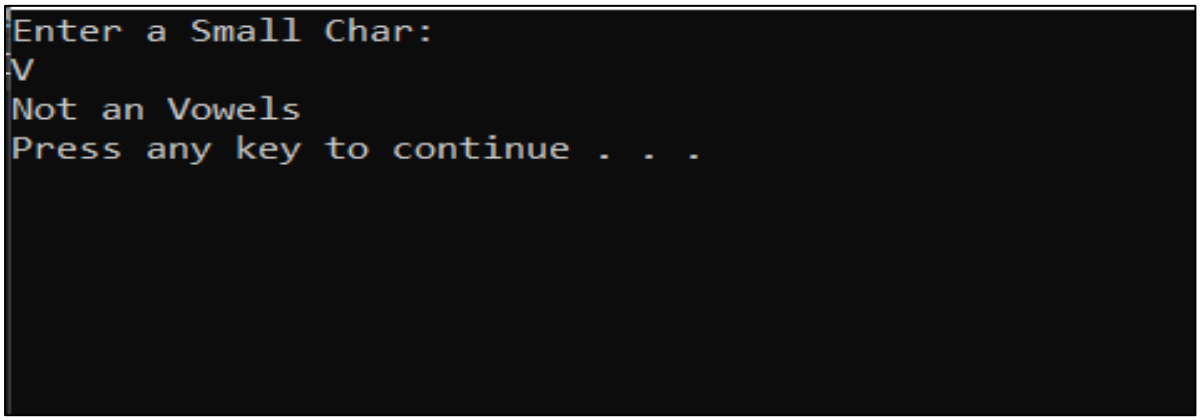


3.Test for vowels.

CODE:

```
using System;
namespace Vishu
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a Small Char:");
            char x;
            x = Convert.ToChar(Console.ReadLine());
            switch (x)
            {
                case 'a':
                case 'e':
                case 'i':
                case 'o':
                case 'u':
                    Console.WriteLine("Vowels");
                    break;
                default:
                    Console.WriteLine("Not an Vowels");
                    break;
            }
        }
    }
```

OUTPUT:

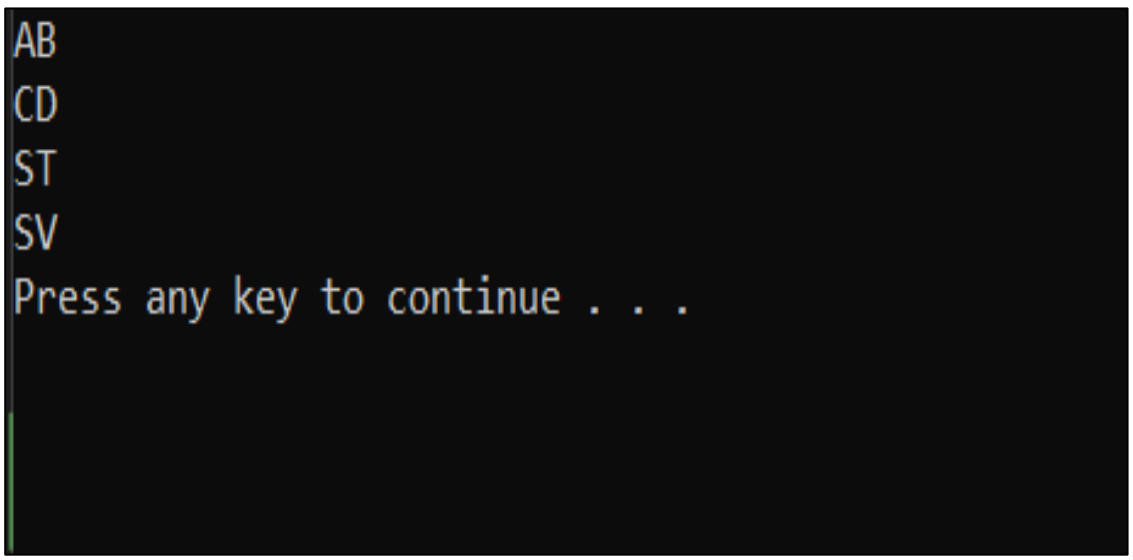


4.Use of foreach loop with arrays

CODE:

```
using System;
namespace Vishu
{
    internal class Program
    {
        static void Main(string[] args)
        {
            String[] s = { "AB", "CD", "ST", "SV" };
            foreach (string i in s)
            {
                Console.WriteLine(i);
            }
        }
    }
}
```

OUTPUT:

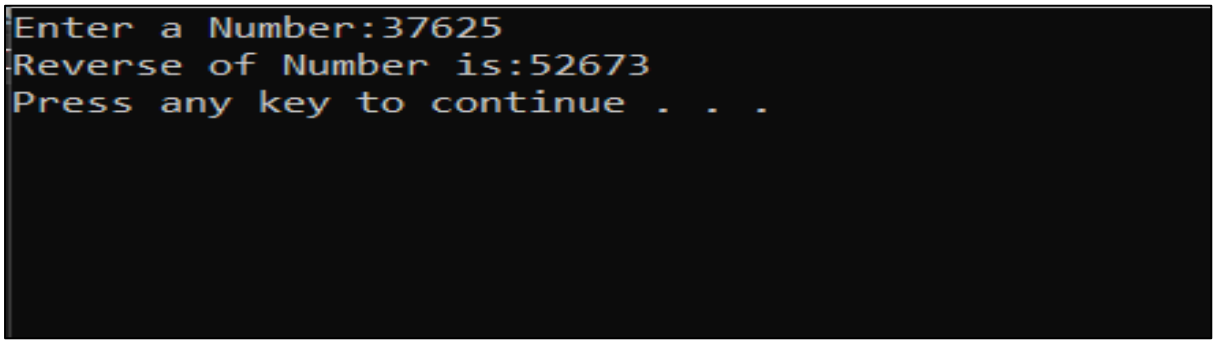


5. Reverse a number

CODE:

```
using System;
namespace Vishu
{
   class A
   {
      static void Main(string[] args)
      {
         Console.Write("Enter a Number:");
         int x, rev, d;
         rev = 0;
         x=Convert.ToInt32(Console.ReadLine());
         while(x>0)
         {
            d = x % 10;
            rev = rev * 10 + d;
            x = x / 10;
         }
         Console.Write("Reverse of Number is:");
         Console.WriteLine(rev);
      }
   }
}
```

OUTPUT:



d. Create an application to demonstrate string operations.

.aspx File:

CODE:

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

.cs File:

CODE:

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

      }
         protected void Button1_Click(object sender, EventArgs e)
         {
            String S = "    TYIT AWP Practical";
            Response.Write("Trim:()" + S.Trim() + "<br/>");
            Response.Write(S.Substring(0, 4) + "<br/>");
            Response.Write(S.ToUpper() + "<br/>");
            Response.Write(S.ToLower() + "<br/>");
            Response.Write(S.Replace("TYIT", "SYIT") + "<br/>");
            Response.Write(S.PadLeft(4, '@') + "<br/>");
            Response.Write(S.Insert(5, "Bsc") + "<br/>");
            Response.Write(S.Remove(0, 4) + "<br/>");
            Response.Write(S.EndsWith("act") + "<br/>");
            Response.Write(S.IndexOf("t") + "<br/>");
```

```
            String[] S1 = S.Split(' ');
            foreach (String S2 in S1)
            {
               Response.Write("<br/>" + S2);
            }
            String S3 = String.Join("TYIT,AWP,Practical", S1);
            {
               Response.Write(S3);
            }
            DateTime obj = DateTime.Now;
            Response.Write(obj.Date);
            Response.Write(obj.Day);

        }
    }
}
```

OUTPUT:

Trim:()TYIT AWP Practical

TYIT AWP PRACTICAL
tyit awp practical
SYIT AWP Practical
TYIT AWP Practical
TBscYIT AWP Practical
TYIT AWP Practical
False
17

TYIT
AWP
PracticalTYIT,AWP,PracticalTYIT,AWP,PracticalTYIT,AWP,PracticalTYIT,AWP,PracticalTYITTYIT,AWP,PracticalAWPTYIT,AWP,PracticalPractical25-09-2022 00:00:0025
Button

2.Working with Object Oriented C# and ASP .NET

a. Create simple application to perform following operations

1. Finding factorial Value

.aspx FILE:

CODE:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            Enter a no:<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="Factorial" OnClick="Button1_Click"
/>
        </div>
    </form>
</body>
</html>
```

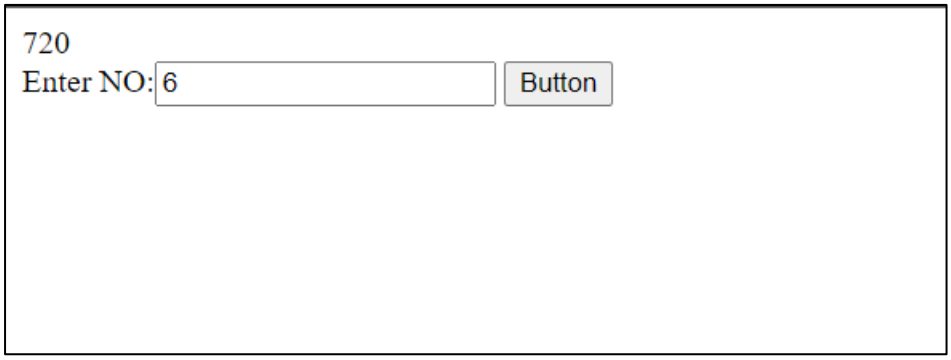
.cs FILE:

CODE:

```
using System;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Button1_Click(object sender, EventArgs e)
        {
```

```
            int x, i, f;
            f = 1;
            x=Convert.ToInt32(TextBox1.Text);
            for (i = 1; i <= x; i++)
            {
                f = f * i;
            }
            Response.Write(f);
        }
    }
}
```

OUTPUT:



1. Money Conversion

.aspx File:

CODE:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
 <form id="form1" runat="server">
  <div>
 Enter INR:<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
 <asp:Button ID="Button1" runat="server" Text="Dollar" OnClick="Button1_Click" />
 <asp:Button ID="Button2" runat="server" Text="Yen" OnClick="Button2_Click" />
        </div>
    </form>
</body>
</html>
```

.cs File:

CODE:

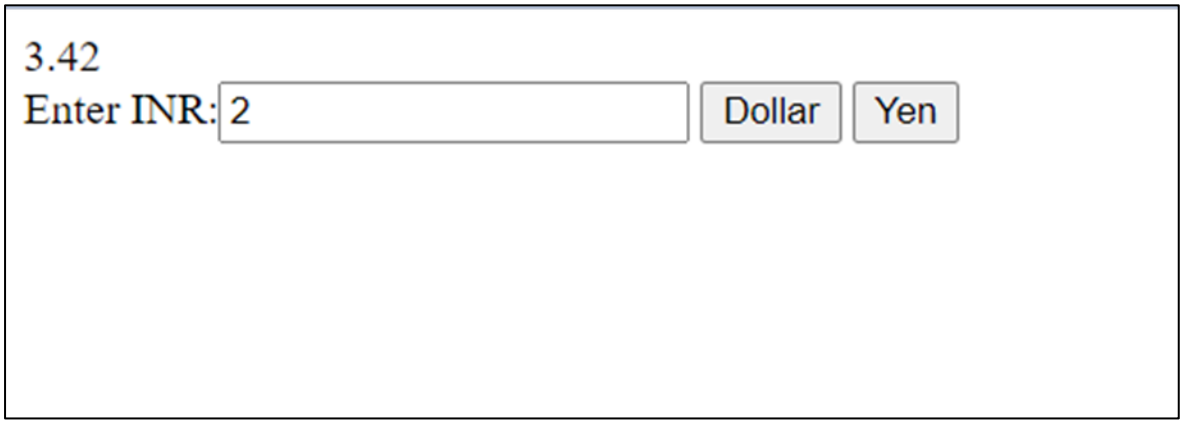
```
using System;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
 protected void Button1_Click(object sender, EventArgs e)
        {
            int d;
```

```
        d = Convert.ToInt32(TextBox1.Text);
        Response.Write(d / 78);
    }
protected void Button2_Click(object sender, EventArgs e)
    {
        int y;
        y = Convert.ToInt32(TextBox1.Text);
        Response.Write(y* 1.71);
    }
  }
}
```

OUTPUT:

INR TO DOLLAR

INR TO YEN:



2. Temperature Conversion

.aspx File:

CODE:

```
<!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" Text="Celsius" OnClick="Button1_Click" />
            <asp:Button ID="Button2" runat="server" Text="Fahrenheit" OnClick="Button2_Click"
/>
        </div>
    </form>
</body>
</html>
```

.cs File:

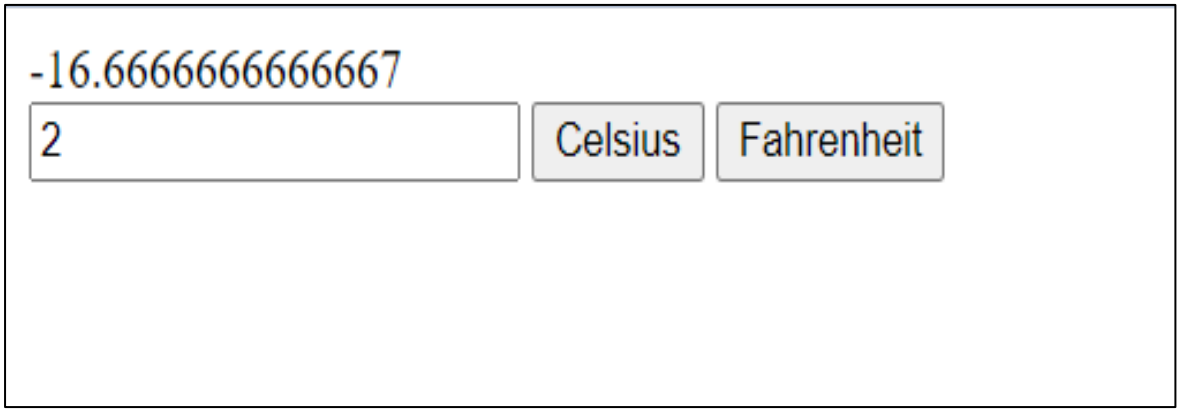
CODE:

```
using System;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Button1_Click(object sender, EventArgs e)
        {
            int c;
```

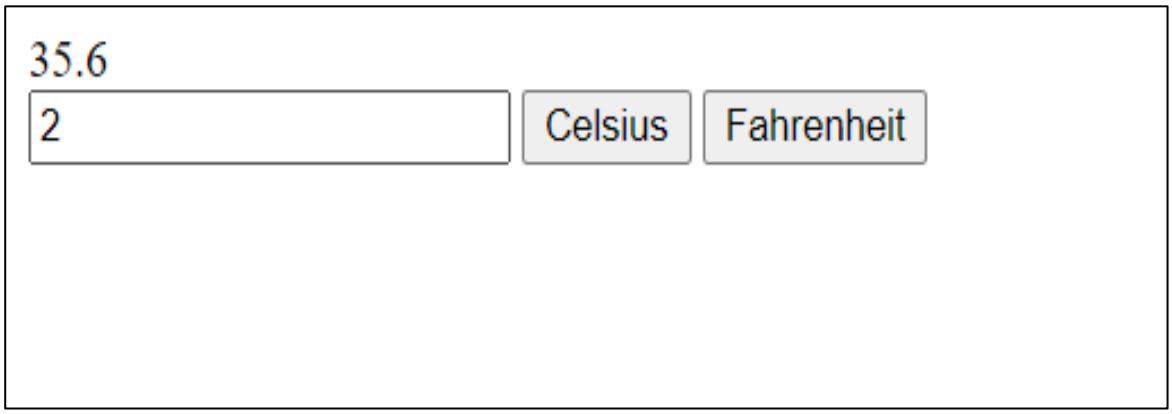
```
        c = Convert.ToInt32(TextBox1.Text);
        Response.Write((c-32)/1.8);
    }
    protected void Button2_Click(object sender, EventArgs e)
    {
        int f;
        f = Convert.ToInt32(TextBox1.Text);
        Response.Write((f*1.8)+32);
    }
  }
}
```

OUTPUT:

Celsius to Fahrenheit:



Fahrenheit to Celsius:



b. Create simple application to demonstrate use of following concepts

1. Function Overloading

.aspx File:

CODE:

```
<!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:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="Circle" OnClick="Button1_Click1" />
            <asp:Button ID="Button2" runat="server" Text="Rectangle" OnClick="Button2_Click"
/>
            <asp:Button ID="Button3" runat="server" Text="Square" OnClick="Button3_Click" />
        </div>
    </form>
</body>
</html>
```

.cs File

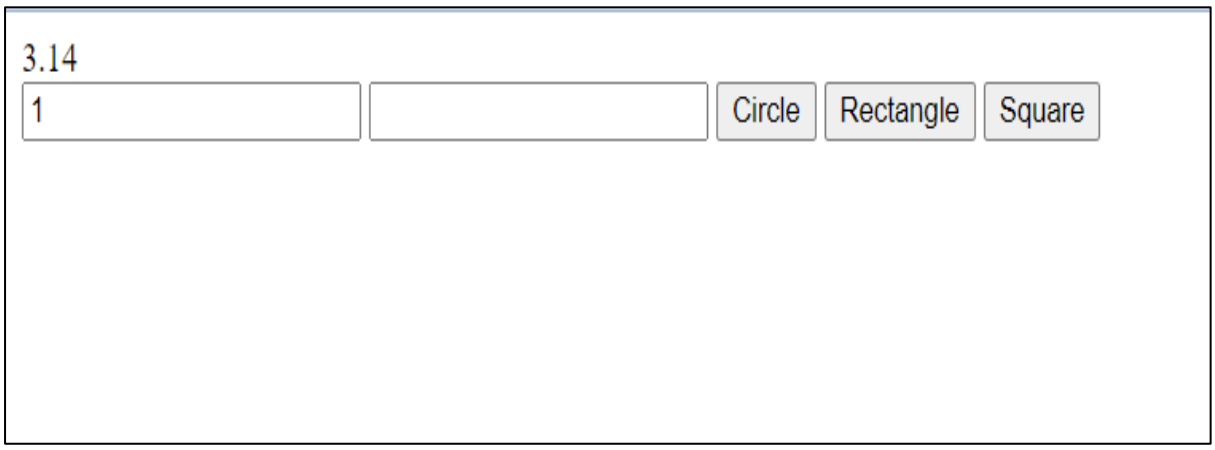
CODE:

```
using System;
namespace Vishu8
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        void area(int r)
        {
            Response.Write(3.14 * r *r);
```

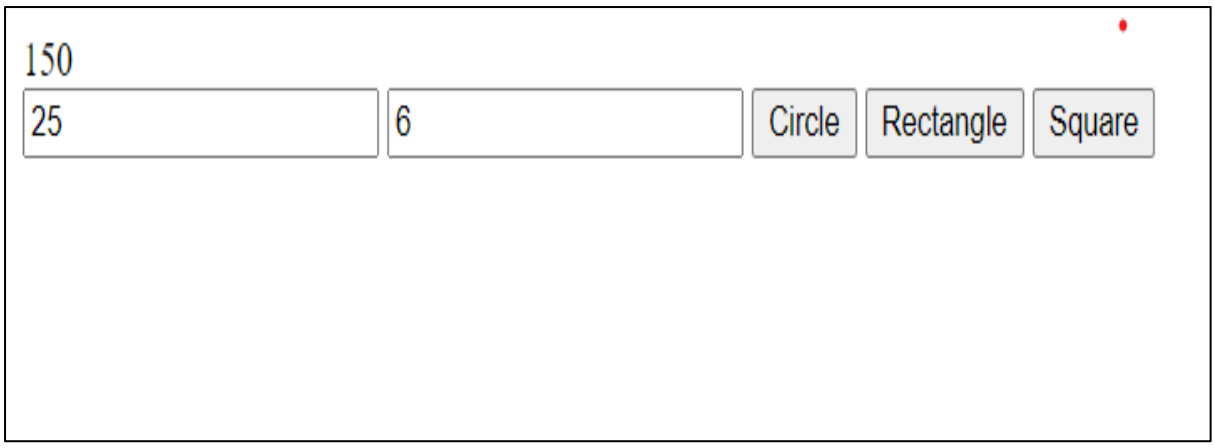
```
    }
    void area(int l,int b)
    {
        Response.Write(l*b);
    }
    void area(double s)
    {
        Response.Write(s*s);
    }
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click1(object sender, EventArgs e)
    {
        int a = Convert.ToInt32(TextBox1.Text);
        area(a);
    }
    protected void Button2_Click(object sender, EventArgs e)
    {
        int l = Convert.ToInt32(TextBox1.Text);
        int b = Convert.ToInt32(TextBox2.Text);
        area(l,b);
    }
    protected void Button3_Click(object sender, EventArgs e)
    {
        Double s = Convert.ToDouble(TextBox1.Text);
        area(s);
    }
  }
}
```

OUTPUT:

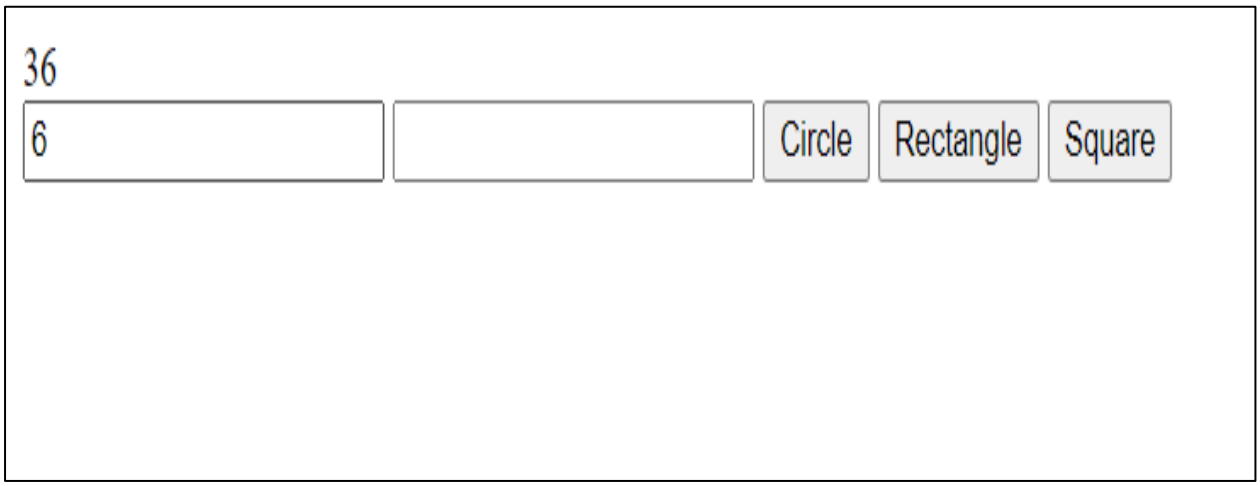
Area of Circle:



Area of Rectangle:



Area of Square:



2. Inheritance (all types)

a.Single Inheritance

.cs FILE:

CODE:

```
using System;
namespace Vishu
{
    class A
    {
        public String show()
        {
            return("Class A Method");
        }
    }
    class B:A
    {
public String disp()
        {
            return ("Class B Method");
        }
    }
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            B obj = new B();
            Response.Write(obj.show());
            Response.Write("<br>" + obj.disp());
        }
    }
}
```

OUTPUT:

```
class A method
class B method
```

b.Hierarchical inheritance

.cs File:

CODE:

```
using System;
namespace Vishu
{
    class A
    {
        public int a = 6;
    }
    class B:A
    {
        public int square()
        {
            return (a*a);
        }
    }
    class C:A
    {
        public int cube()
        {
            return (a * a * a);
        }
    }
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            B b = new B();
            C c = new C();
            Response.Write("Square=" + b.square());
            Response.Write("<br>" + "Cube=" + c.cube());
```

```
    }
  }
}
```

OUTPUT:

```
Square=36
Cube=216
```

C. Constructor Overloading

.cs File:

CODE:

```
using System;
namespace Vishu12
{
    public partial class WebForms1: System.Web.UI.Page
    {
        int x;
        public WebForms1()
        {
            x = 25;
        }
        public WebForms1(int y)
        {
            x = y;
        }
        public WebForms1(WebForms1 w)
        {
            x=w.x;
        }
        public int show()
        {
            return (x);
        }
        protected void Page_Load(object sender, EventArgs e)
        {
            WebForms1 w1 = new WebForms1();
            Response.Write(w1.show()+ "<br>");
            WebForms1 w2 = new WebForms1(6);
            Response.Write(w2.show() + "<br>");
            WebForms1 w3 = new WebForms1(w1);
```

```
            Response.Write(w3.show());
        }
    }
}
```

OUTPUT:

```
25
6
25
```

4. Interfaces

.CS File

CODE:

```
using System;

namespace Interface
{
    interface I1
    {
        String show();
    }
    interface I2
    {
        String show();
    }
    class A:I1,I2
    {
        String I1.show()
        {
            return ("I1.show");
        }
        String I2.show()
        {
            return ("I2.show");
        }
    }

    public partial class WebForm1: System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            I1 obj = new A();
```

```
            Response.Write(obj.show());
            I2 obj2 = new A();
            Response.Write(obj2.show());
        }
    }
}
```

OUTPUT:

```
I1.Show
I2.show
```

c. Create simple application to demonstrate use of following concepts

1. Using Delegates and events

CODE:

```
using System;
namespace Vishu
{
//1.Delegate Creation
    public delegate void del1(int x, int y );

//2.Method Definition
    class A
    {
        public void add(int a, int b)
        {
            Console.WriteLine("addition=" + (a + b));
        }
        public void sub(int a, int b)
        {
            Console.WriteLine("subtraction=" + (a - b));
        }
        public void multi(int a, int b)
        {
            Console.WriteLine("multiplication=" + (a * b));
        }
    }
    class B
    {
        static void Main(string[] args)
        {
//3.Delegate Instantiation
            A obj = new A();
            del1 d1 = new del1(obj.add);
```

```
            del1 d2 = new del1(obj.sub);
            del1 d3 = new del1(obj.multi);
//4. Delegate Inovaction
            d1(3, 7);
            d2(7, 3);
            d3(25, 6);
//   Delegate Multitasking
           d1 = d1 + d2 + d3;
            d1(0, 2);

            Console.ReadKey();
        }
    }
}
```

OUTPUT:

```
addition=10
subtraction=4
multiplication=150
addition=2
subtraction=-2
multiplication=0
```

2. Exception handling

CODE:

.aspx File

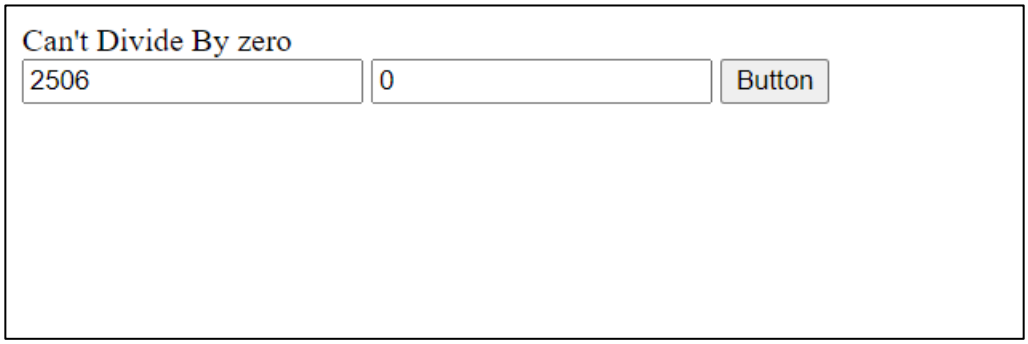
```
<!DOCTYPE html>

<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:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="Button" OnClick="Button1_Click" />
        </div>
    </form>
</body>
</html>
```

.cs File

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

            }
```

```
    protected void Button1_Click(object sender, EventArgs e)
    {

        int x, y;
        x = Convert.ToInt32(TextBox1.Text);
        y = Convert.ToInt32(TextBox2.Text);
      try
      {
        Response.Write(x / y);
      }

      catch (DivideByZeroException)
      {
        Response.Write("Can't Divide By zero");
      }
      finally
      {
        Response.Write(" ");
      }
    }
  }
}
```

OUTPUT:



3.Working with Web Forms and Controls

a. Create a simple web page with various sever controls to demonstrate setting and use of their properties. (Example: AutoPostBack)

CODE:

.aspx File

```
<!DOCTYPE html>

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

<head runat="server">

    <title></title>

</head>

<body>

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

        <div>

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

                <asp:ListItem Value="400706">Nerul</asp:ListItem>

                <asp:ListItem Value="400702">Uran</asp:ListItem>

                 <asp:ListItem Value="400601">Thane</asp:ListItem>

            </asp:DropDownList>

            <asp:Label ID="Label1" runat="server" Text=""></asp:Label>


            <br /> <asp:Label ID="Label2" runat="server" Text="AWP"></asp:Label>

            <br />Font Size: <asp:RadioButtonList ID="RadioButtonList1" runat="server"
AutoPostBack="true"
OnSelectedIndexChanged="RadioButtonList1_SelectedIndexChanged">

                <asp:ListItem>Small</asp:ListItem>

                <asp:ListItem>Medium</asp:ListItem>

                <asp:ListItem>Large</asp:ListItem>

            </asp:RadioButtonList>


            Font: <asp:RadioButtonList ID="RadioButtonList2" runat="server"
AutoPostBack="true"
OnSelectedIndexChanged="RadioButtonList2_SelectedIndexChanged">

                <asp:ListItem>Arial</asp:ListItem>
```

```
            <asp:ListItem>Times New Roman</asp:ListItem>
            <asp:ListItem>Jokerman</asp:ListItem>
        </asp:RadioButtonList>

        Color:<asp:RadioButtonList ID="RadioButtonList3" runat="server"
AutoPostBack="true"
OnSelectedIndexChanged="RadioButtonList3_SelectedIndexChanged">
            <asp:ListItem>Red</asp:ListItem>
            <asp:ListItem>Blue</asp:ListItem>
            <asp:ListItem>Green</asp:ListItem>
             </asp:RadioButtonList>

        FontStyle:
        <asp:CheckBox ID="CheckBox1" runat="server" Text="Bold"
OnCheckedChanged="CheckBox1_CheckedChanged" AutoPostBack="true"/>
         <asp:CheckBox ID="CheckBox2" runat="server" Text="Italic"
OnCheckedChanged="CheckBox2_CheckedChanged" AutoPostBack="true"/>
         <asp:CheckBox ID="CheckBox3" runat="server" Text="Underline"
OnCheckedChanged="CheckBox3_CheckedChanged" AutoPostBack="true"/>
      </div>
   </form>
</body>
</html>
```

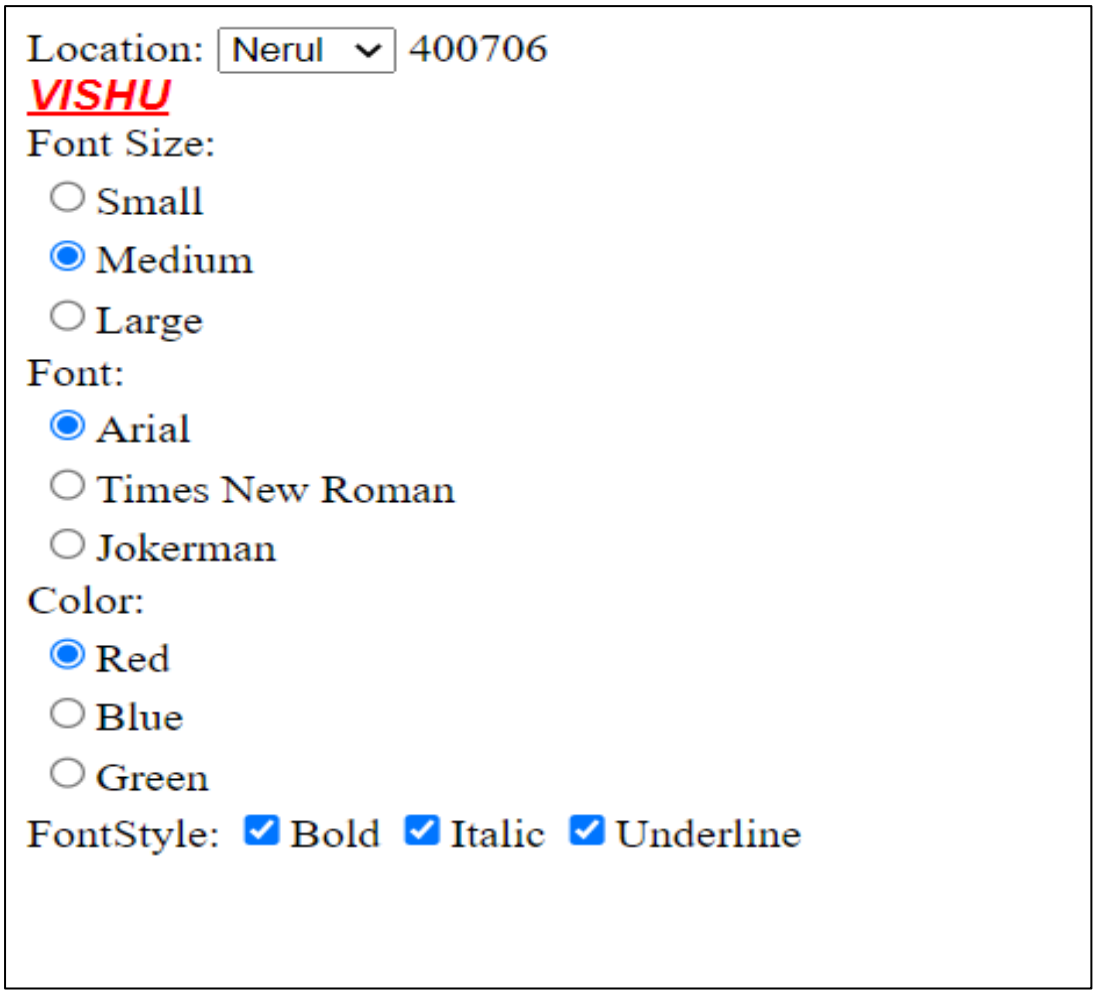
.cs File

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

      }
```

```
protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
{
    Label1.Text = DropDownList1.SelectedValue;
}

protected void RadioButtonList1_SelectedIndexChanged(object sender, EventArgs e)
{
    if (RadioButtonList1.SelectedIndex == 0)
        Label2.Font.Size = FontUnit.Small;
   else if (RadioButtonList1.SelectedIndex == 1)
        Label2.Font.Size = FontUnit.Medium;
   else if (RadioButtonList1.SelectedIndex == 2)
        Label2.Font.Size = FontUnit.Large;
}

protected void RadioButtonList2_SelectedIndexChanged(object sender, EventArgs e)
{
    Label2.Font.Name = RadioButtonList2.SelectedValue;
}

protected void RadioButtonList3_SelectedIndexChanged(object sender, EventArgs e)
{
    if (RadioButtonList3.SelectedIndex == 0)
        Label2.ForeColor = System.Drawing.Color.Red;
    else if (RadioButtonList3.SelectedIndex == 1)
        Label2.ForeColor = System.Drawing.Color.Blue;
    else if (RadioButtonList3.SelectedIndex == 2)
        Label2.ForeColor = System.Drawing.Color.Green;
}

protected void CheckBox1_CheckedChanged(object sender, EventArgs e)
{
```

```
            if(CheckBox1.Checked)
                Label2.Font.Bold = true;
            else
                Label2.Font.Bold = false;
        }

        protected void CheckBox2_CheckedChanged(object sender, EventArgs e)
        {
            if (CheckBox2.Checked)
                Label2.Font.Italic = true;
            else
                Label2.Font.Italic = false;
        }

        protected void CheckBox3_CheckedChanged(object sender, EventArgs e)
        {
            if (CheckBox3.Checked)
                Label2.Font.Underline = true;
            else
                Label2.Font.Underline = false;
        }
    }
}
```

OUTPUT:


Location: Nerul 400706
VISHU
Font Size:
Small
Medium
Large
Font:
Arial
Times New Roman
Jokerman
Color:
Red
Blue
Green
FontStyle: Bold Italic Underline

b. Demonstrate the use of Calendar control to perform following operations.

a. Display messages in a calendar control

CODE:

.aspx File:

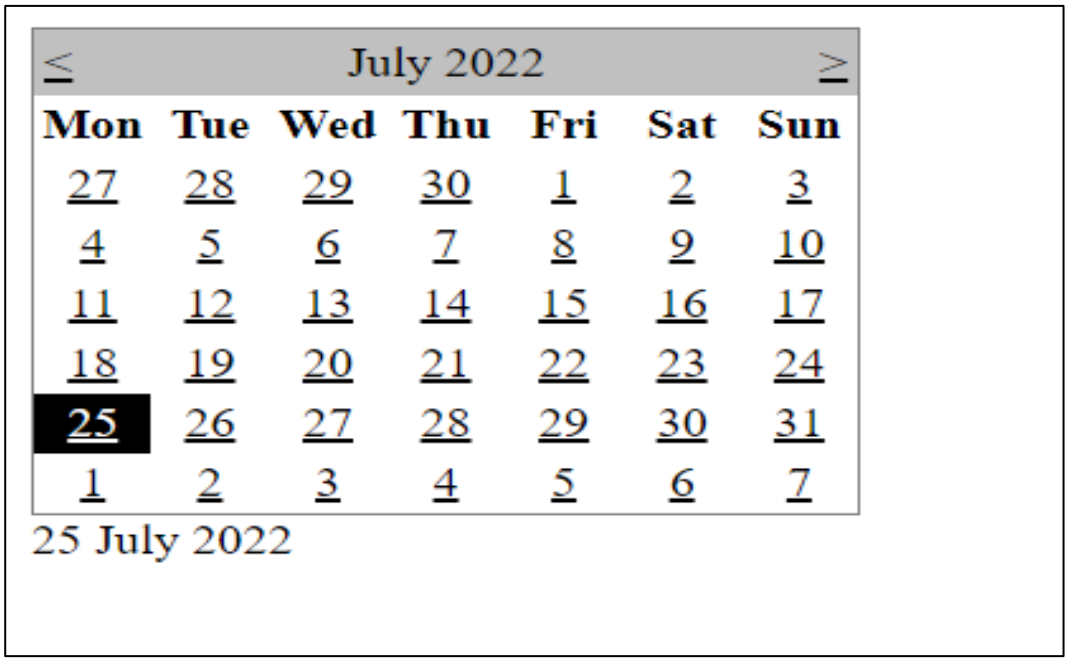
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Calendar ID="Calendar1" runat="server"
OnDayRender="Calendar1_DayRender"
OnSelectionChanged="Calendar1_SelectionChanged" SelectedDayStyle-
BackColor="Black"></asp:Calendar>
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Web.UI.WebControls;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
        { Label1.Text=Calendar1.SelectedDate.ToLongDateString();
```

```
        }
        protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
        {
        }
    }
}
```

OUTPUT:



b. Display vacation in a calendar control

CODE:

.aspx File

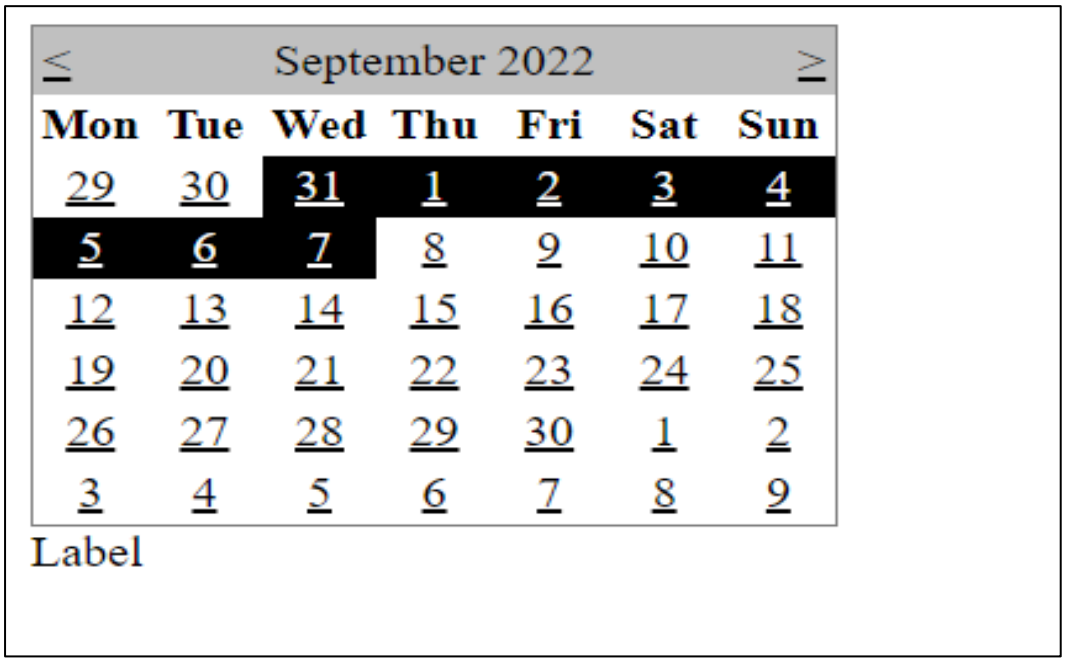
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Calendar ID="Calendar1" runat="server"
OnDayRender="Calendar1_DayRender"
OnSelectionChanged="Calendar1_SelectionChanged" SelectedDayStyle-
BackColor="Black"></asp:Calendar>
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

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

namespace Vishu23
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
        {
```

```
    }
    protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
    {
        DateTime t1 = new DateTime(2022, 08, 31);
        DateTime t2 = t1.AddDays(7);
        Calendar1.SelectedDates.SelectRange(t1, t2);

    }
}
}
```

OUTPUT:



c. Difference between two calendar dates

CODE:

.aspx File

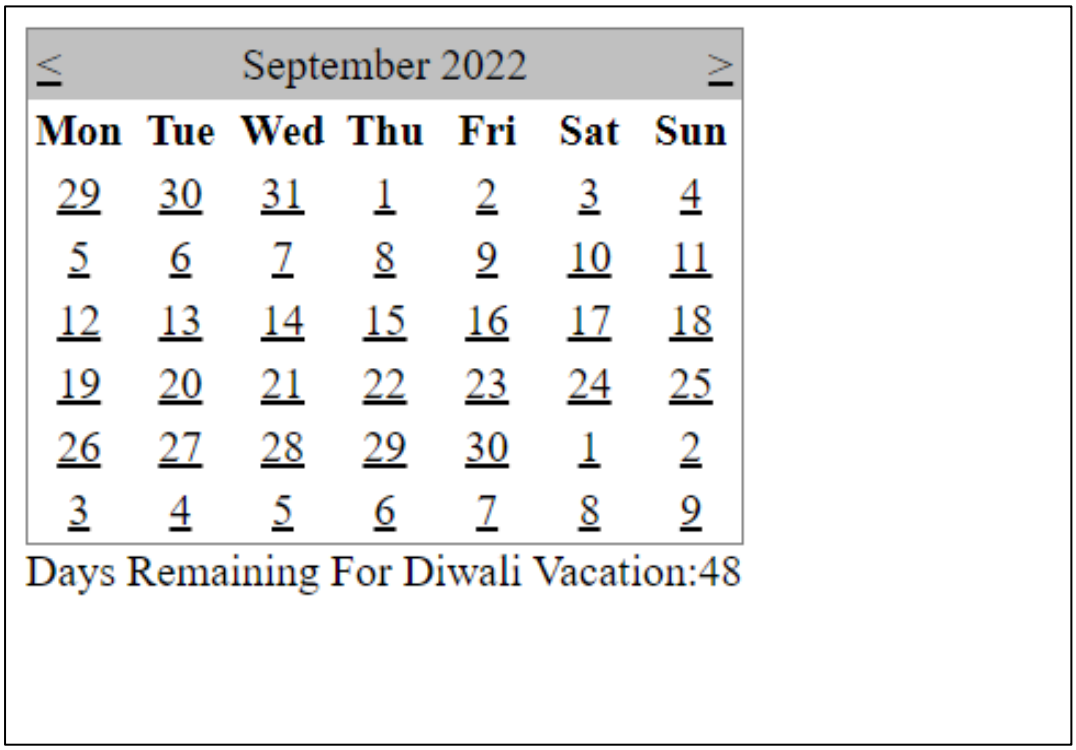
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Calendar ID="Calendar1" runat="server"
OnDayRender="Calendar1_DayRender"
OnSelectionChanged="Calendar1_SelectionChanged" SelectedDayStyle-
BackColor="Black"></asp:Calendar>
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Web.UI.WebControls;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
```

```
    {
    }
    protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
    {
        TimeSpan t = new DateTime(2022, 10, 24) - DateTime.Now;
        Label1.Text="Days Remaining For Diwali Vacation:"+t.Days.ToString();
    }
  }
}
```

OUTPUT:



c. Demonstrate the use of Treeview control perform following operations.

CODE:

Site1.Master:

```
<!DOCTYPE html>
<html>
<head runat="server">
    <title></title>

</head>
<body>
    <form id="form1" runat="server">
        <div>
            <table>
                <tr>
                    <td colspan="2">Header</td>
                </tr>
                <tr>
                    <td>
                        <asp:TreeView ID="TreeView1" runat="server">
                            <Nodes>
                                <asp:TreeNode Text="AWP" NavigateUrl="~/WebForm1.aspx">
                                <asp:TreeNode Text="SPM" NavigateUrl="~/WebForm2.aspx">
                                        <asp:TreeNode Text="IOT" NavigateUrl="~/WebForm3.aspx">
                                        <asp:TreeNode Text="NGT"
NavigateUrl="~/WebForm4.aspx"></asp:TreeNode>
                                            <asp:TreeNode Text="AI"
NavigateUrl="~/WebForm5.aspx"></asp:TreeNode>
                                            </asp:TreeNode>
                                    </asp:TreeNode>
                                </asp:TreeNode>
                            </Nodes>
                        </asp:TreeView>
                    </td>
```

```
            </tr>
            <tr>
                <td colspan="2">Footer
                </td>
            </tr>
        </table>
        <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
        </asp:ContentPlaceHolder>
    </div>
  </form>
</body>
</html>
```

WebForm1.aspx:

```
<asp:ContentID="Content1"ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
  AWP
</asp:Content>
```

WebForm2.aspx:

```
<asp:ContentID="Content1"ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
  SPM
</asp:Content>
```

WebForm3.aspx:

```
<asp:ContentID="Content1"ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
  IOT
</asp:Content>
```

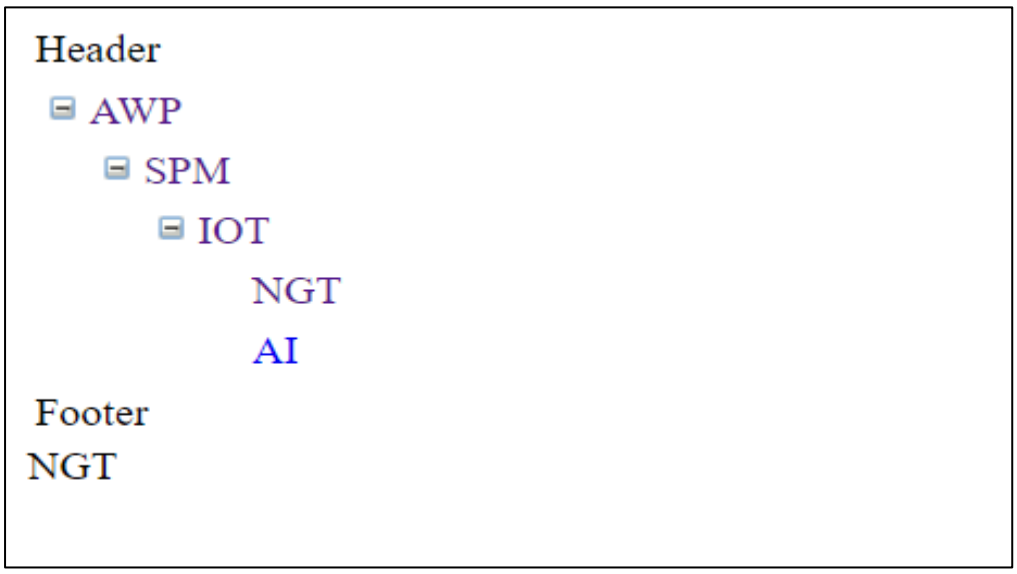
WebForm4.aspx:

```
<asp:ContentID="Content1"ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
  NGT
</asp:Content>
```

WebForm5.aspx:

```
<asp:ContentID="Content1"ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    AI
</asp:Content>
```

OUTPUT:



4. Working with Form Controls

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

CODE:

.aspx File

```
<!DOCTYPE html>

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

<head runat="server">

    <title></title>

</head>

<body>

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

        <div>

            Enter Name:<asp:TextBox ID="TextBox1" runat="server" style="margin-left:
59px"></asp:TextBox>

            <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ErrorMessage="RequiredFieldValidator" ControlToValidate="TextBox1"
></asp:RequiredFieldValidator>

            <asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ErrorMessage="Enter Valid Name" ControlToValidate="TextBox1"
ValidationExpression="\D{1,25}"></asp:RegularExpressionValidator>


            <br/>Enter Age:<asp:TextBox ID="TextBox2" runat="server" style="margin-left:
71px"></asp:TextBox>

            <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server"
ErrorMessage="RequiredFieldValidator"
ControlToValidate="TextBox2"></asp:RequiredFieldValidator>

            <asp:RangeValidator ID="RangeValidator1" runat="server" ErrorMessage="Enter
Valid Age" ControlToValidate="TextBox2" MinimumValue="18"
MaximumValue="25"></asp:RangeValidator>


            <br />Enter Phone No:

            <asp:TextBox ID="TextBox3" runat="server" style="margin-left:
23px"></asp:TextBox>

            <asp:RegularExpressionValidator ID="RegularExpressionValidator2" runat="server"
ErrorMessage="Enter Valid Phone No" ControlToValidate="TextBox3"
ValidationExpression="\d+"></asp:RegularExpressionValidator>
```

```
        <asp:CustomValidator ID="CustomValidator1" runat="server"
ErrorMessage="CustomValidator" ControlToValidate="TextBox3"
OnServerValidate="CustomValidator1_ServerValidate1"></asp:CustomValidator>


        <br/>Email ID:<asp:TextBox ID="TextBox4" runat="server" style="margin-left:
77px"></asp:TextBox>

        <asp:RequiredFieldValidator ID="RequiredFieldValidator3" runat="server"
ErrorMessage="RequiredFieldValidator"
ControlToValidate="TextBox4"></asp:RequiredFieldValidator>

        <asp:RegularExpressionValidator ID="RegularExpressionValidator3" runat="server"
ErrorMessage="Enter Valid Email" ControlToValidate="TextBox4"
ValidationExpression="\S+@\S+\.\S+"></asp:RegularExpressionValidator>


        <br />Password:<asp:TextBox ID="TextBox5" runat="server" style="margin-left:
69px"></asp:TextBox>

        <asp:RequiredFieldValidator ID="RequiredFieldValidator4" runat="server"
ErrorMessage="Invalid Password" ControlToValidate="TextBox5"
ValidationExpression="\w{4,10}"></asp:RequiredFieldValidator>


        <br />Confirm  Password:<asp:TextBox ID="TextBox6" runat="server" style="margin-
left: 6px"></asp:TextBox>

        <asp:RequiredFieldValidator ID="RequiredFieldValidator5" runat="server"
ErrorMessage="RequiredFieldValidator"
ControlToValidate="TextBox6"></asp:RequiredFieldValidator>

        <asp:CompareValidator ID="CompareValidator1" runat="server"
ErrorMessage="Password Doesn't Match" ControlToValidate="TextBox6"
ControlToCompare="TextBox5"></asp:CompareValidator>


          <br />

      </div>

      <p>

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

        <asp:Button ID="Button2" runat="server" Text="Clear" style="margin-left: 49px"
OnClick="Button2_Click" />

        <br /> <asp:Label ID="Label1" runat="server" Text=""></asp:Label>

      </p>

   </form>

</body>
```

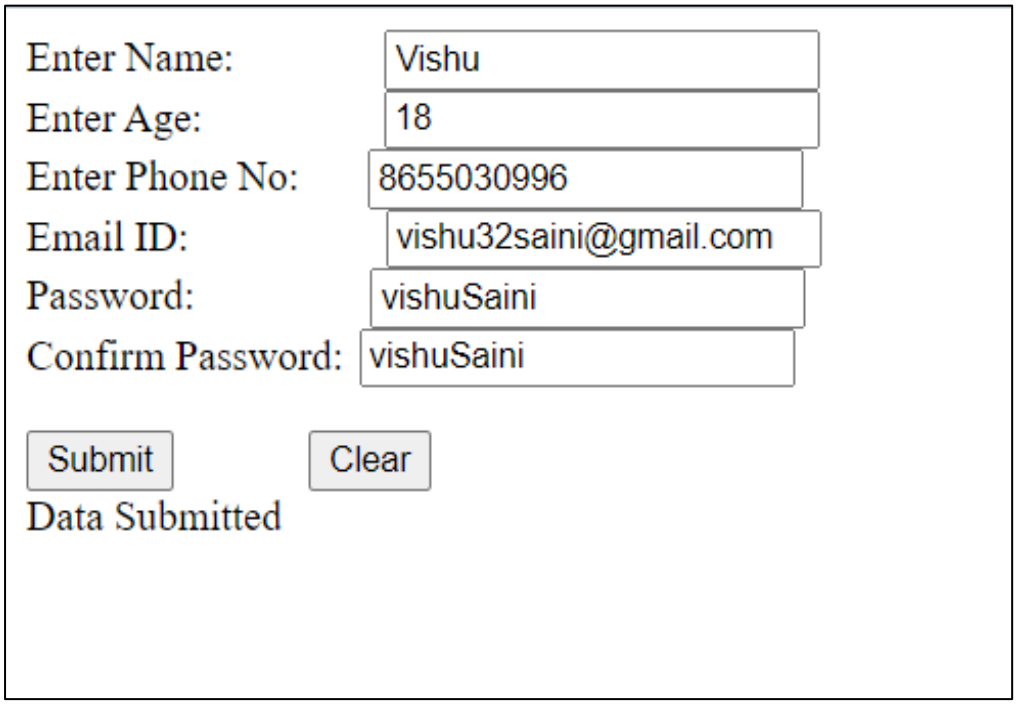
```
</html>
```

.cs File

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


        }
        protected void CustomValidator1_ServerValidate1(object source,
ServerValidateEventArgs args)
        {
            string s = args.Value.ToString();
            int l = s.Length;
            if (l == 10)
                args.IsValid = true;
            else args.IsValid = false;
        }


        protected void Button1_Click(object sender, EventArgs e)
        {
            if (Page.IsValid) Label1.Text = "Data Submitted";
            else Label1.Text = "";
        }


        protected void Button2_Click(object sender, EventArgs e)
        {
            TextBox1.Text = "";
```

```
            TextBox2.Text = "";
            TextBox3.Text = "";
            TextBox4.Text = "";
            TextBox5.Text = "";
            TextBox6.Text = "";
            Label1.Text = "";
        }
    }
}
```

OUTPUT:



b. Create Web Form to demonstrate use of Adrotator Control.

CODE:

.xml File:

```
?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
	<Ad>
		<ImageUrl>Insta.png</ImageUrl>
		<NavigateUrl>https://instagram.com</NavigateUrl>
		<AlternateText>INSTAGRAM</AlternateText>
		<Impression>20</Impression>
		<Keyword>Instagram</Keyword>
	</Ad>
	<Ad>
		<ImageUrl>Snapchat.png</ImageUrl>
		<NavigateUrl>https://snapchat.com</NavigateUrl>
		<AlternateText>SNAPCHAT</AlternateText>
		<Impression>15</Impression>
		<Keyword>SnapChat</Keyword>
	</Ad>
	<Ad>
		<ImageUrl>Twitter.png</ImageUrl>
		<NavigateUrl>https://goggle.com</NavigateUrl>
		<AlternateText>TWITTER</AlternateText>
		<Impression>10</Impression>
		<Keyword>twitter</Keyword>
	</Ad>
</Advertisements>
```

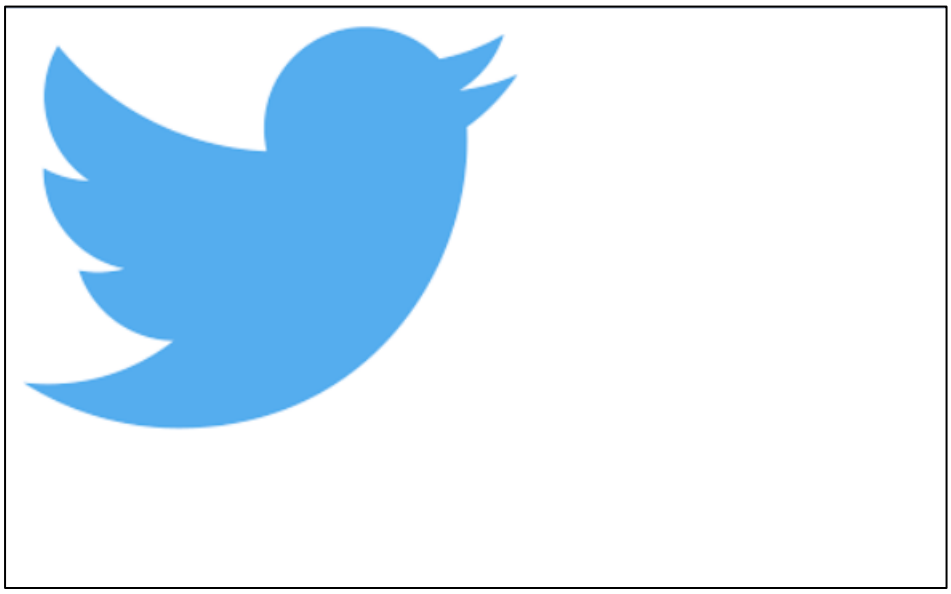
.aspx File:

CODE:

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

```
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:AdRotator ID="AdRotator1" runat="server" AdvertisementFile="~/addata.xml"
OnAdCreated="AdRotator1_AdCreated" />
        </div>
    </form>
</body>
</html>
```

OUTPUT:



c. Create Web Form to demonstrate use User Controls.

CODE:

.ascx File:

```
<asp:Calendar ID="Calendar1" runat="server"
OnSelectionChanged="Calendar1_SelectionChanged"></asp:Calendar>

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

<br />
```

.ascx.cs File:

```
using System;

namespace Vishu
{
    public partial class WebUserControl1 : System.Web.UI.UserControl
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }

        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
        {
            TextBox1.Text=Calendar1.SelectedDate.ToShortDateString();
        }
    }
}
```

WebForm1.aspx File:

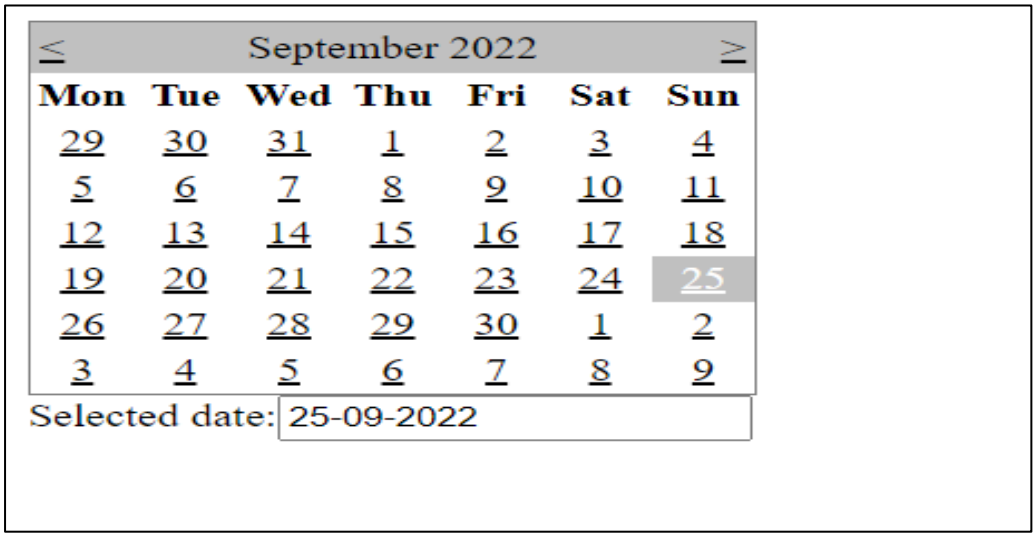
```
<!DOCTYPE html>

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

```
        <div>
            <uc1:WebUserControl1 ID="WebUserControl11" runat="server" />
        </div>
    </form>
</body>
</html>
```

WebForm2.aspx File:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <uc1:WebUserControl1 ID="WebUserControl11" runat="server" />
        </div>
    </form>
</body>
</html>
```

OUTPUT:



5. Working with Navigation, Beautification and Master page.

a. Create a web application to demonstrate use of Master Page with applying Styles and Themes for page beautification.

CODE:

.aspx File

```
<%@ Page Theme="Theme1" Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="Vishu42.WebForm1" %>


<!DOCTYPE html>

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

<head runat="server">

    <title></title>

</head>

<body>

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

        <div>

            VISHU<asp:Label ID="Label1" runat="server" Text="" SkinID="Skin1"></asp:Label>

        </div>

    </form>

</body>

</html>
```

.**css File:**

```
body {

    background-color:black;

    font-family:'Times New Roman';

    color:whitesmoke;

    font-size:x-large;

}
```

.skin File:

```
<asp:Label runat="server" Forecolor="blue" Text="SAINI" SkinId="Skin1" ></asp:Label>
```

OUTPUT:

b. Create a web application to demonstrate various states of ASP.NET Pages.

CODE:

.aspx File:

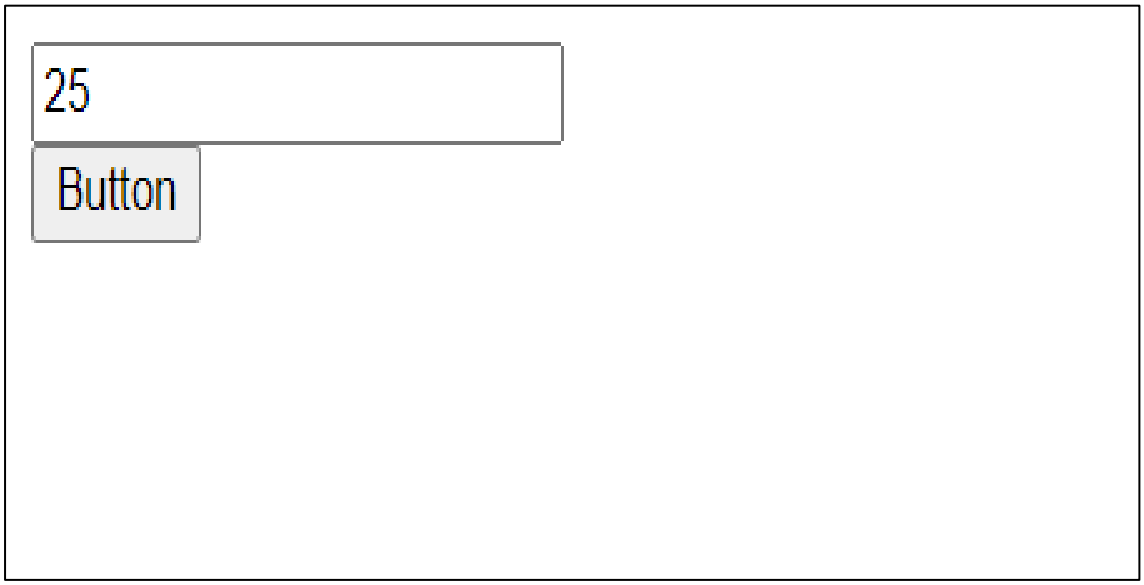
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br /><asp:Button ID="Button1" runat="server" Text="Button"
OnClick="Button1_Click" />
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        int x = 1;
        protected void Page_Load(object sender, EventArgs e)
        {
                if (!IsPostBack)
                {
                    TextBox1.Text = "0";
                }
```

```
        }
    protected void Button1_Click(object sender, EventArgs e)
    {
        if (ViewState["a"] != null)
        {
            x = Convert.ToInt32(ViewState["a"]) + 1;
        }
        TextBox1.Text = x.ToString();
        ViewState["a"] = x;
    }
  }
}
```

OUTPUT:



6. Working with Database

a. Create a web application bind data in a multiline textbox by querying in another textbox.

CODE:

.aspx File:

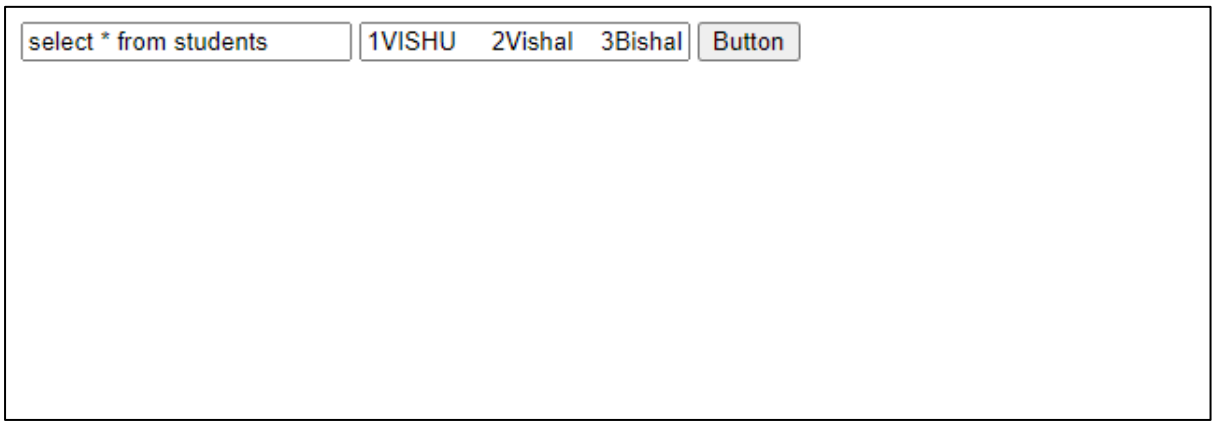
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="Button" OnClick="Button1_Click" />
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Data;
using System.Data.SqlClient;
namespace Vishu
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Button1_Click(object sender, EventArgs e)
```

```
        {
            SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYIT84;user ID=user1;password=user1");
            SqlCommand cmd = new SqlCommand(TextBox1.Text, con);
            con.Open();
            SqlDataReader rd=cmd.ExecuteReader();
            while (rd.Read())
            {
                TextBox2.Text += rd[0] + "" + rd[1] + "\n";
            }
            con.Close();
        }
    }
}
```

OUTPUT:



b. Create a web application to display records by using database.

CODE:

.aspx File:

```
<!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=""></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Data;
using System.Data.SqlClient;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYIT84;user ID=user1;password=user1");
            SqlCommand cmd = new SqlCommand("Select * from student", con);
            con.Open();
            SqlDataReader rd = cmd.ExecuteReader();
            while (rd.Read())
```

```
        {
            Label1.Text += rd[0] + "" + rd[1] + "\n";
        }
        con.Close();
    }
  }
}
```

OUTPUT:

```
1Vishu 2Bishal 3SV 4Vishal
```

7. **Working with Database**

a. Create a web application to display Databinding using dropdownlist control.

CODE:

.aspx File:

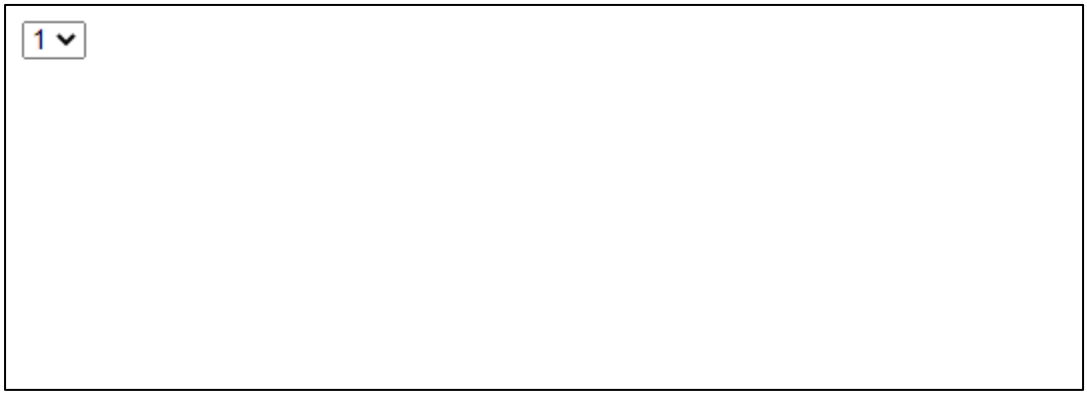
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="true"
OnSelectedIndexChanged="DropDownList1_SelectedIndexChanged"></asp:DropDownList>
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Data;
using System.Data.SqlClient;
namespace Vishu
{
    public partial class WebForm8 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYIT84;User ID=user1;Password=user1");
```

```
            SqlCommand cmd = new SqlCommand("select Id,name from students", con);
            con.Open();
            SqlDataReader rd = cmd.ExecuteReader();
            DropDownList1.DataSource = rd;
            DropDownList1.DataTextField = "Id";
            DropDownList1.DataValueField = "name";
            DropDownList1.DataBind();
            con.Close();
        }
    }
    protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
    {
        Response.Write(DropDownList1.SelectedValue);
    }
  }
}
```

OUTPUT:



b. Create a web application for to display the phone no of an author using database.

CODE:

aspx File:

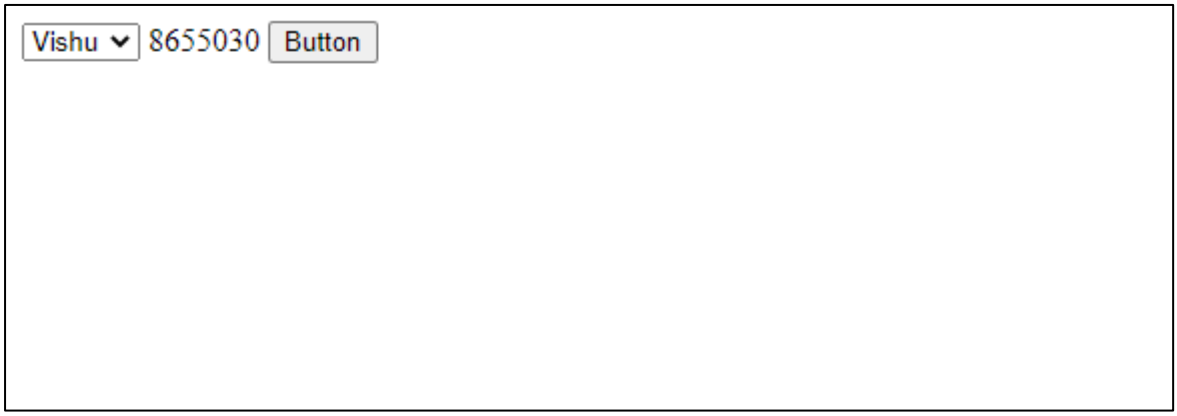
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:DropDownList ID="DropDownList1" runat="server"></asp:DropDownList>
            <asp:Button ID="Button1" runat="server" Text="Button" OnClick="Button1_Click" />
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

```
using System;
using System.Data.SqlClient;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYIT84;user id=user1;password=user1");
                SqlCommand cmd = new SqlCommand("select * from student", con);
```

```
            con.Open();
            SqlDataReader rd = cmd.ExecuteReader();
            DropDownList1.DataSource = rd;
            DropDownList1.DataTextField = "name";
            DropDownList1.DataValueField = "phone no";
            DropDownList1.DataBind();
            con.Close();
            rd.Close();
        }
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        Label1.Text = DropDownList1.SelectedValue;
    }
  }
}
```

OUTPUT:



a. Create a web application for inserting and deleting record from a database. (Using Execute-Non-Query).

CODE:

aspx File:

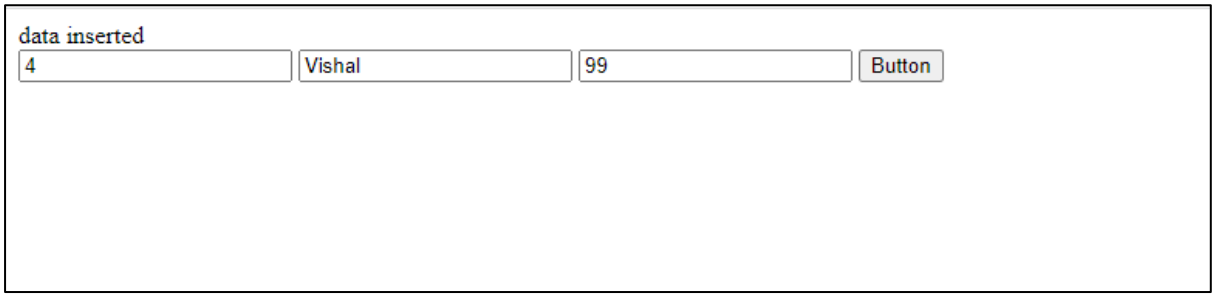
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="Button" OnClick="Button1_Click"
/>
        </div>
    </form>
</body>
</html>
```

.cs File:

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

```
    protected void Button1_Click(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYIT84;user id=user1;password=user1");
        SqlCommand cmd = new SqlCommand("insert into studentS
values(@id,@name,@marks)", con);
        cmd.Parameters.AddWithValue("@id", TextBox1.Text);
        cmd.Parameters.AddWithValue("@name", TextBox2.Text);
        cmd.Parameters.AddWithValue("@marks", TextBox3.Text);
        con.Open();
        cmd.ExecuteNonQuery();
        Response.Write("data inserted");
        con.Close();
    }
  }
}
```

OUTPUT:



8. Working with data controls

a. Create a web application to demonstrate various uses and properties of SqlDataSource.

CODE:

aspx File:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$ ConnectionStrings:TYIT84ConnectionString %>" SelectCommand="SELECT * FROM [student]"></asp:SqlDataSource>
            <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataKeyNames="Id" DataSourceID="SqlDataSource1" EnableModelValidation="True">
                <Columns>
                    <asp:BoundField DataField="Id" HeaderText="Id" ReadOnly="true" SortExpression="Id" />
                    <asp:BoundField DataField="name" HeaderText="name" SortExpression="name" />
                </Columns>
            </asp:GridView>

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

OUTPUT:

Id	name	marks
1	Vishu	90
2	Bishal	85
3	VS	99

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

CODE:

.aspx File:

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

.cs File:

```
using System;
using System.Data;
using System.Data.SqlClient;
namespace Vishu
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("data source=SQL;initial
catalog=TYITVS;User ID=user1;Password=user1");
            SqlDataAdapter da = new SqlDataAdapter();
            DataSet ds = new DataSet();
```

```
            da.Fill(ds);
            GridView1.DataSource = ds;
            GridView1.DataBind();
        }
    }
}
```

OUTPUT:

Id	name
1	VISHU
2	Vishal
3	Bishal

9.Working with AJAX

a. Create a web application to demonstrate reading and writing operation with XML.

CODE:

aspx File:

```
<!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"
OnSelectedIndexChanged="GridView1_SelectedIndexChanged"></asp:GridView>

        </div>

    </form>

</body>

</html>
```

Xml File:

```
<?xml version="1.0" encoding="utf-8" ?>

<students>

        <std>
                <stdid>1</stdid>
                <name>Vishu</name>
        </std>
        <std>
                <stdid>2</stdid>
                <name>Bishal</name>
        </std>
        <std>
                <stdid>3</stdid>
                <name>Vishal</name>
        </std>
</students>
```

.cs File:

```
using System;
```

```
using System.Xml;
using System.Data;
namespace Vishu
{
    public partial class WebForm3 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                XmlTextReader rd =new XmlTextReader
                (Server.MapPath("~/XMLFile1.xml"));
                DataSet ds = new DataSet();
                ds.ReadXml(rd);
                GridView1.DataSource = ds;
                GridView1.DataBind();
            }
        }
        protected void GridView1_SelectedIndexChanged(object sender, EventArgs e)
        {
        }
    }
}
```

OUTPUT:

stdid	name
1	Vishu
2	Bishal
3	Vishal

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

CODE:

.aspx File:

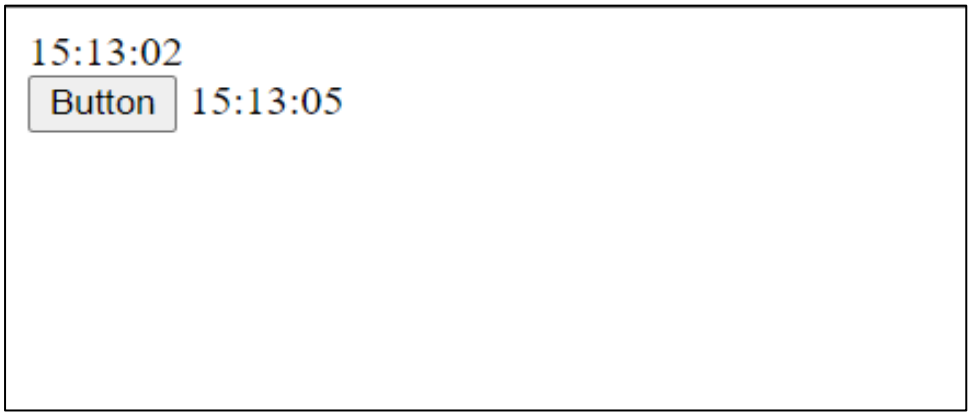
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
            <asp:ScriptManager ID="ScriptManager1" runat="server"></asp:ScriptManager>
            <asp:UpdatePanel ID="UpdatePanel1" runat="server">
                <ContentTemplate>
                    <asp:Button ID="Button1" runat="server" Text="Button"
OnClick="Button1_Click" />
                    <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
                </ContentTemplate>
            </asp:UpdatePanel>
        </div>
    </form>
</body>
</html>
```

.cs File:

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

```
            Label1.Text = DateTime.Now.ToLongTimeString();
        }
        protected void Button1_Click(object sender, EventArgs e)
        {
            Label1.Text = DateTime.Now.ToLongTimeString();
        }
    }
}
```

OUTPUT:



10.Programs to create and use DLL

CODE:

Classlibrary:

```
namespace ClassLibrary1
{
    public class DLL
    {
        public int add(int a,int b)
        {
            return(a + b);
        }
        public int sub(int a, int b)
        {
            return (a - b);
        }
        public int mul(int a, int b)
        {
            return (a * b);
        }
        public int div(int a, int b)
        {
            return (a / b);
        }
    }
}
```

.**aspx File:**

CODE:

```
<!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:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" Text="ADD" OnClick="Button1_Click" />
            <asp:Button ID="Button2" runat="server" Text="SUB" OnClick="Button2_Click" />
            <asp:Button ID="Button3" runat="server" Text="MUL" OnClick="Button3_Click" />
            <asp:Button ID="Button4" runat="server" Text="DIV" OnClick="Button4_Click" />
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```

.cs File:

CODE:

```
using System;
using ClassLibrary1;
namespace Vishu
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        int x, y;
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void Button1_Click(object sender, EventArgs e)
        {
            x=Convert.ToInt32(TextBox1.Text);
            y=Convert.ToInt32(TextBox2.Text);
            DLL obj=new DLL();
```

```
        Label1.Text=obj.add(x,y).ToString();
    }
    protected void Button2_Click(object sender, EventArgs e)
    {
        x = Convert.ToInt32(TextBox1.Text);
        y = Convert.ToInt32(TextBox2.Text);
        DLL obj = new DLL();
        Label1.Text = obj.sub(x, y).ToString();
    }

    protected void Button3_Click(object sender, EventArgs e)
    {
        x = Convert.ToInt32(TextBox1.Text);
        y = Convert.ToInt32(TextBox2.Text);
        DLL obj = new DLL();
        Label1.Text = obj.mul(x, y).ToString();
    }
    protected void Button4_Click(object sender, EventArgs e)
    {
        x = Convert.ToInt32(TextBox1.Text);
        y = Convert.ToInt32(TextBox2.Text);
        DLL obj = new DLL();
        Label1.Text = obj.div(x, y).ToString();
    }
  }
}
```

OUTPUT: