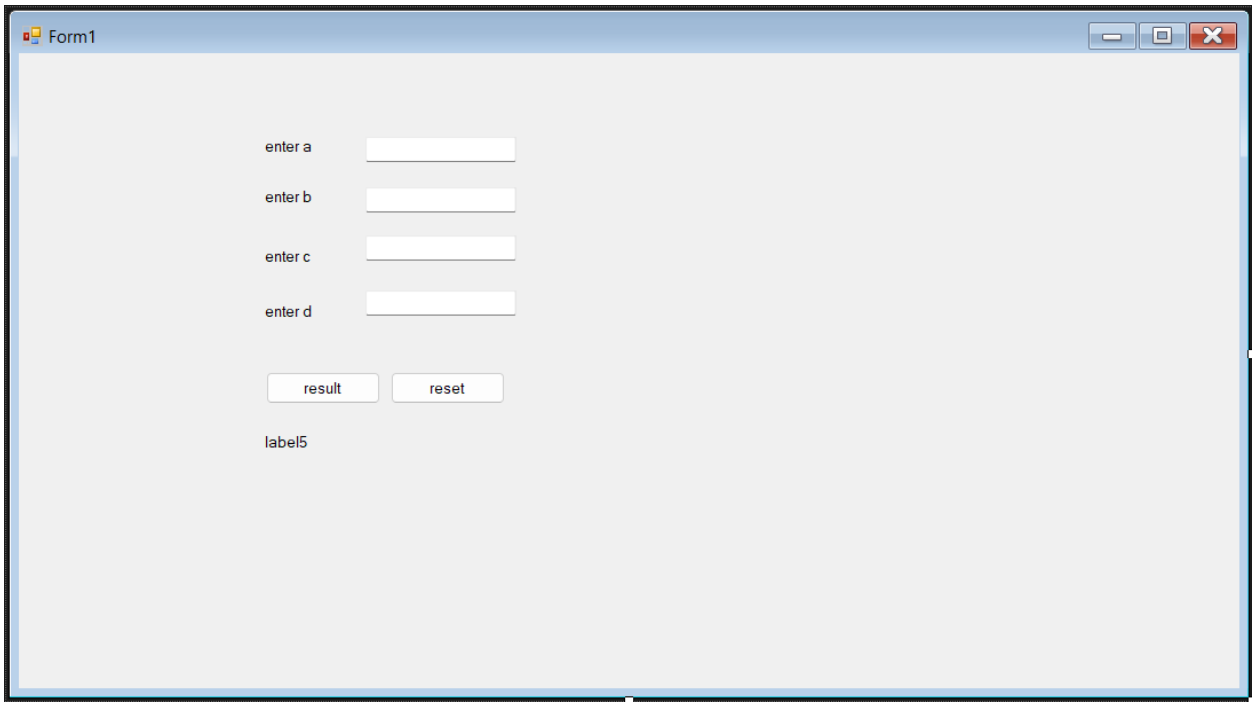
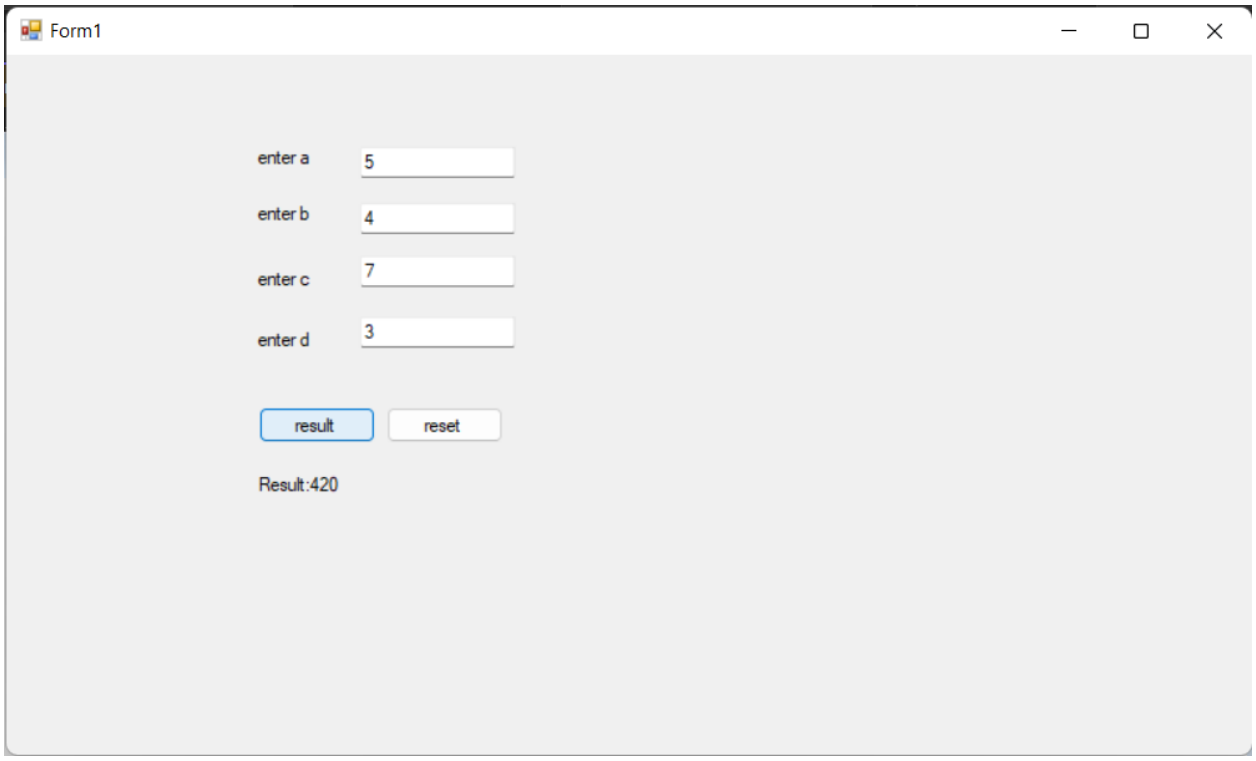
Practical 1: Working with basic C# and ASP.NET

Practical 1(a) : Creating an application that obtains four int values from the user and display the product.

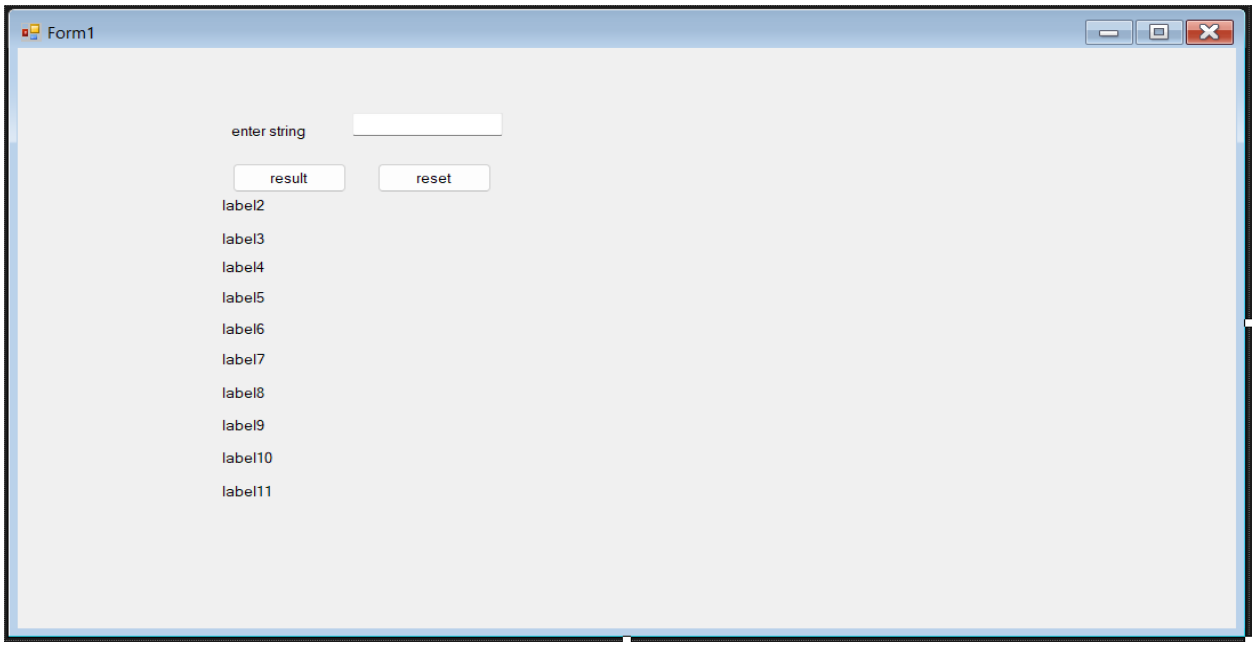



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Pra1a
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         int r;
```

```
r=Convert.ToInt32(textBox1.Text)*Convert.ToInt32(textBox2.Text)*Convert.ToInt32(textBox3.Text)*Co
nvert.ToInt32(textBox4.Text);
            label5.Text = "Result:" + r.ToString();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            textBox1.Text = "";
            textBox2.Text = "";
            textBox3.Text = "";
            textBox4.Text = "";
            label5.Text = "";
        }
    }
}
```



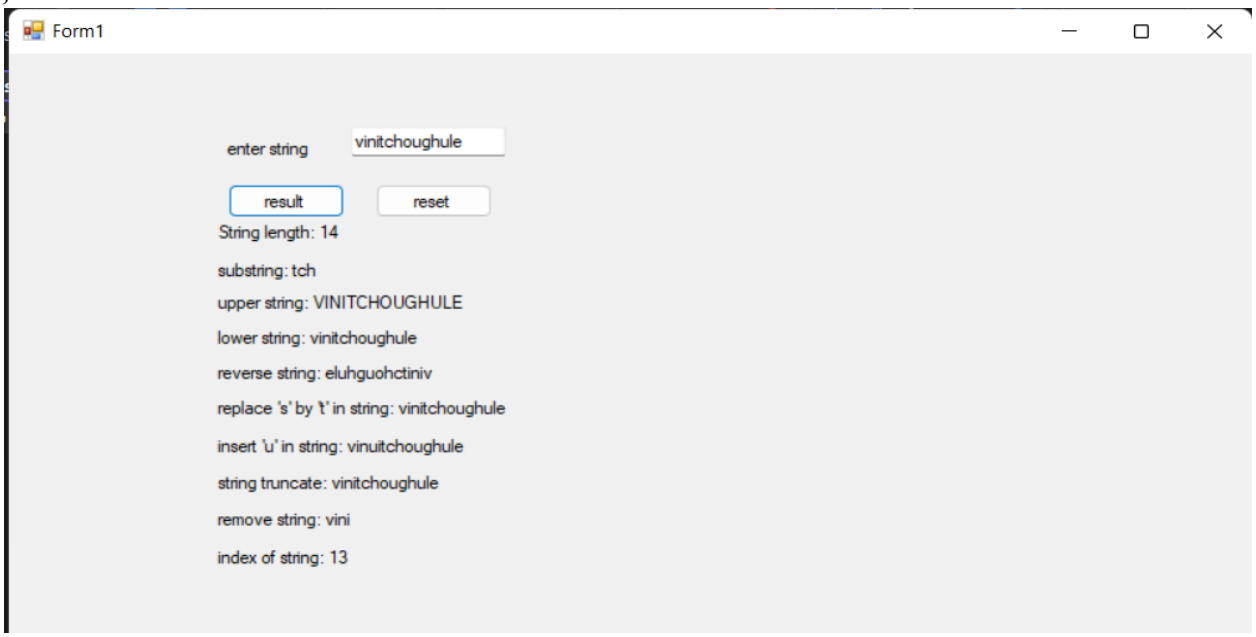
Practical 1(b) : Creating an application to demonstrate string operation.



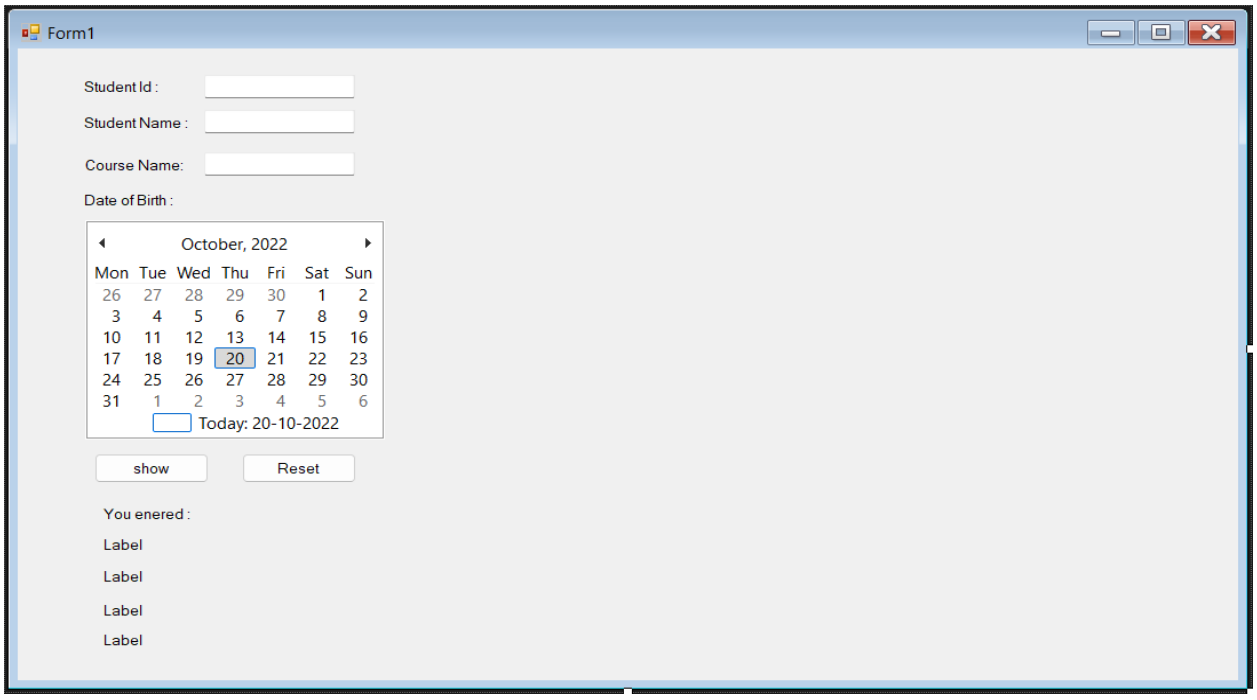

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Pra1b
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void label3_Click(object sender, EventArgs e)
      {

      }

      private void button1_Click(object sender, EventArgs e)
      {
         string s = textBox1.Text;
```

```
        label2.Text = "String length: " + s.Length;
        label3.Text = "substring: " + s.Substring(4, 3);
        label4.Text="upper string: "+s.ToUpper();
        label5.Text = "lower string: " + s.ToLower();
        string rev = "";
        for(int i = s.Length - 1; i >= 0; i--)
        {
           rev=rev+s[i];
        }
        label6.Text = "reverse string: " + rev.ToString();
        label7.Text = "replace 's' by 't' in string: " + s.Replace('s', 't');
        label8.Text = "insert 'u' in string: " + s.Insert(3, "u");
        label9.Text = "string truncate: "+s.Trim();
        label10.Text = "remove string: " + s.Remove(4);
        label11.Text = "index of string: " + s.IndexOf('e');
    }

    private void button2_Click(object sender, EventArgs e)
    {
        label2.Text = "";
        label3.Text = "";
        label4.Text = "";
        label5.Text = "";
        label6.Text = "";
        label7.Text = "";
        label8.Text = "";
        label9.Text = "";
        label10.Text = "";
        label11.Text = "";
        textBox1.Text = "";
    }
}
```

}

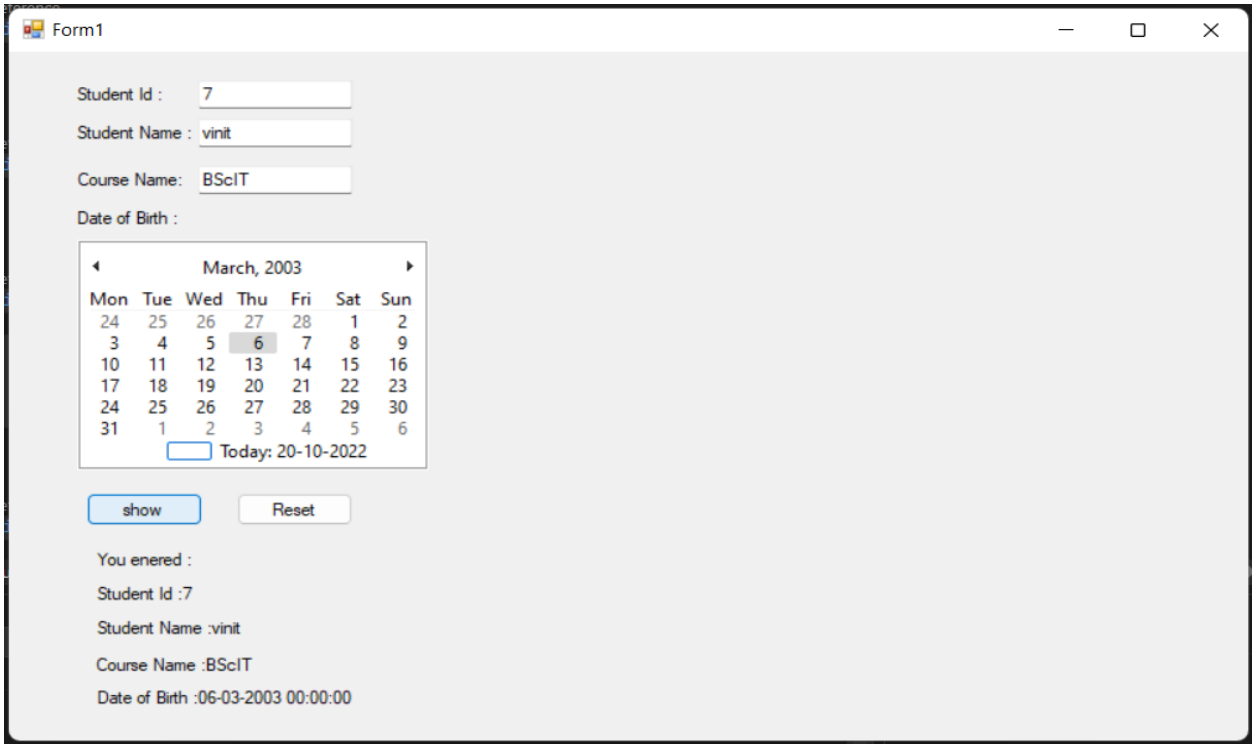


Practical 1(c): Create an application that receives the (student ID, Student Name, Course Name, Date of Birth) information from a set of students. The application should also display the information of all the students once the data entered.



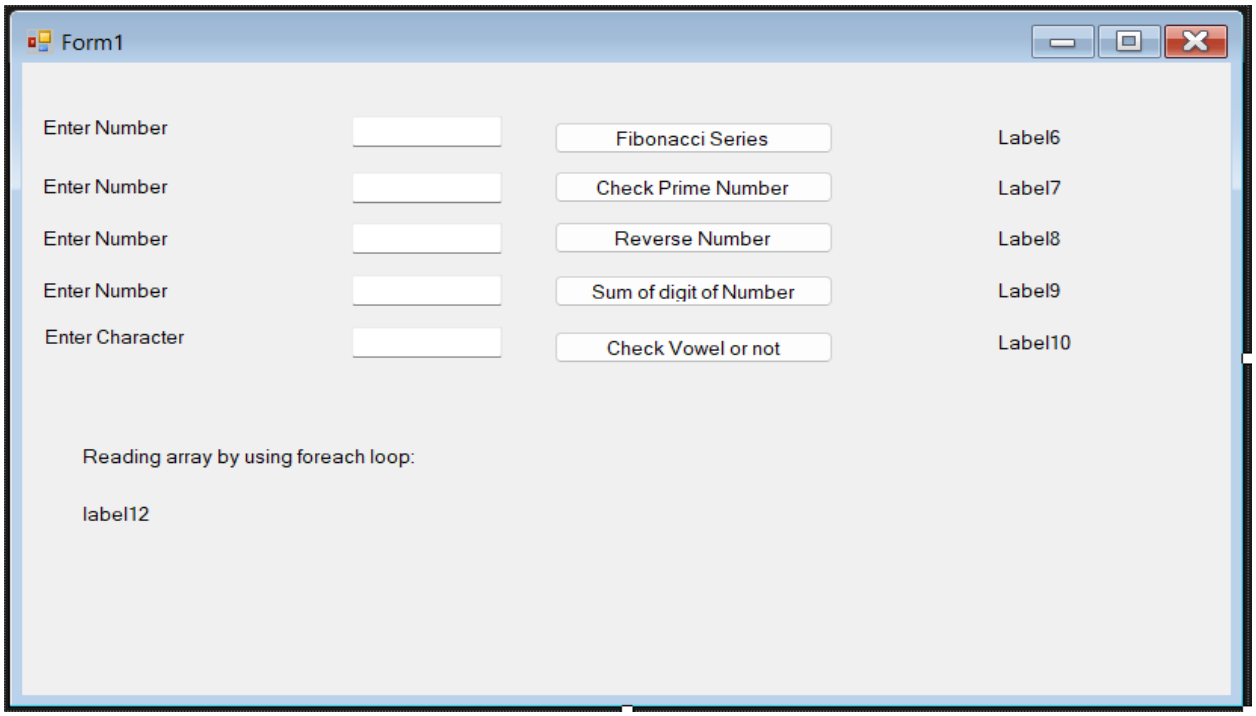

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
```

```
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp1
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void label2_Click(object sender, EventArgs e)
      {

      }

      private void label3_Click(object sender, EventArgs e)
      {

      }

      private void button1_Click(object sender, EventArgs e)
      {
         label6.Text = "Student Id :" + textBox1.Text;
         label7.Text = "Student Name :" + textBox2.Text;
         label8.Text = "Course Name :" + textBox3.Text;
         label9.Text = "Date of Birth :" + monthCalendar1.SelectionRange.Start.ToString();

      }

      private void button2_Click(object sender, EventArgs e)
      {
         label6.Text = "";
         label7.Text = "";
         label8.Text = "";
         label9.Text = "";
         textBox1.Text = "";
         textBox2.Text = "";
         textBox3.Text = "";
         monthCalendar1.SelectionRange.GetHashCode();
      }
   }
}
```



Practical 1(d): Create an application to demonstrate following operations:

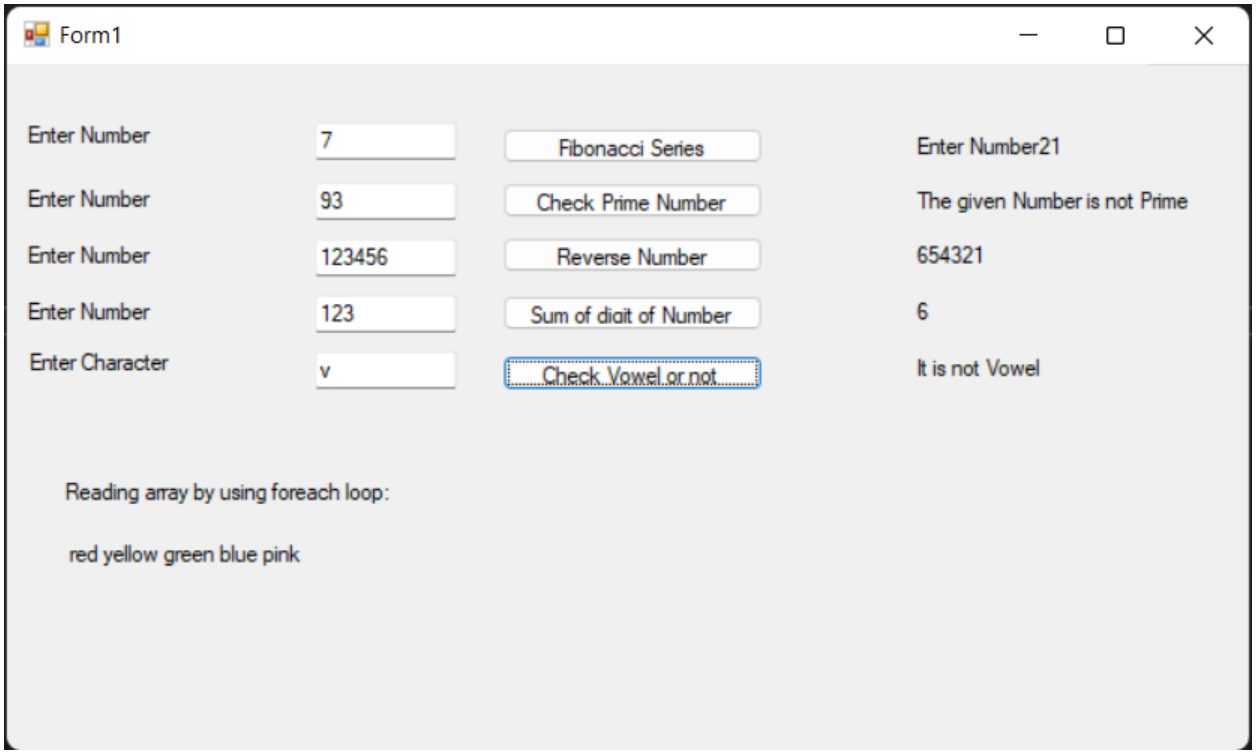
I. Generate Fibonacci series.
II. Test for prime numbers.
III. Test for vowels.
IV. Use of foreach loop with arrays.
V. Reverse a number and find the sum of digits of a number.
VI.




```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace AnkPract_1d
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         int a, b, c, i, n;
         a = 0;
         b = 1;

         Label6.Text = a.ToString() + b.ToString();
         n = Convert.ToInt32(textBox1.Text);
         for (i=1; i<=n;++i)
```

```
    {
        c = a + b;
        Label6.Text = Label1.Text + c.ToString();
        a = b;
        b = c;


    }
}

private void button2_Click(object sender, EventArgs e)
{
    int i, c = 0, j, num;
    num = Convert.ToInt32(textBox2.Text);
    for(j=1;j<=num;j++)
    {
        i = num % j;
        if(i==0)
        {
            c = c + 1;
        }
    }
    if (c == 2)
        label7.Text = "The given Number is Prime";
    else
        label7.Text = "The given Number is not Prime";


}

private void button3_Click(object sender, EventArgs e)
{
    long num, i, sum = 0;
    num = Convert.ToInt32(textBox3.Text);
    while (num > 0)
    {
        i = num % 10;
        sum = i + sum * 10;
        num = num / 10;
    }
    label8.Text = sum.ToString();
}

private void button4_Click(object sender, EventArgs e)
{
    long num, i, sum = 0;
    num = Convert.ToInt32(textBox4.Text);
    while(num>0)
    {
```

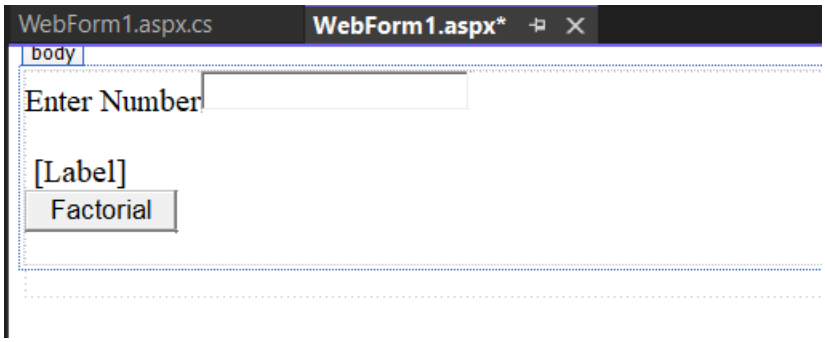
```
            i = num % 10;
            sum = i + sum;
            num = num / 10;
        }
        label9.Text = sum.ToString();
    }

    private void button5_Click(object sender, EventArgs e)
    {
        char c = Convert.ToChar(textBox5.Text);
        switch(c)
        {
            case 'a':
                label10.Text = "a is vowel";
                break;
            case 'e':
                label10.Text = "e is vowel";
                break;
            case 'i':
                label10.Text = "i is vowel";
                break;
            case 'o':
                label10.Text = "o is vowel";
                break;
            case 'u':
                label10.Text = "u is vowel";
                break;
            default:
                label10.Text = "It is not Vowel";
                break;


        }
    }

    private void label12_Click(object sender, EventArgs e)
    {

        label12.Text = "";
        string[] ColorNamer= new string[] { "Red", "Yellow", "Green", "Blue", "Pink" };
        foreach (string ColorName in ColorNamer)
        {
            label12.Text = label12.Text + " " + ColorName.ToString();
        }
    }
  }
}
```


Form1
Enter Number
7
Fibonacci Series
Enter Number21
Enter Number
93
Check Prime Number
The given Number is not Prime
Enter Number
123456
Reverse Number
654321
Enter Number
123
Sum of digit of Number
6
Enter Character
v
Check Vowel or not
It is not Vowel
Reading array by using foreach loop:
red yellow green blue pink

Practical 2: Working with object Oriented C# and ASP.NET

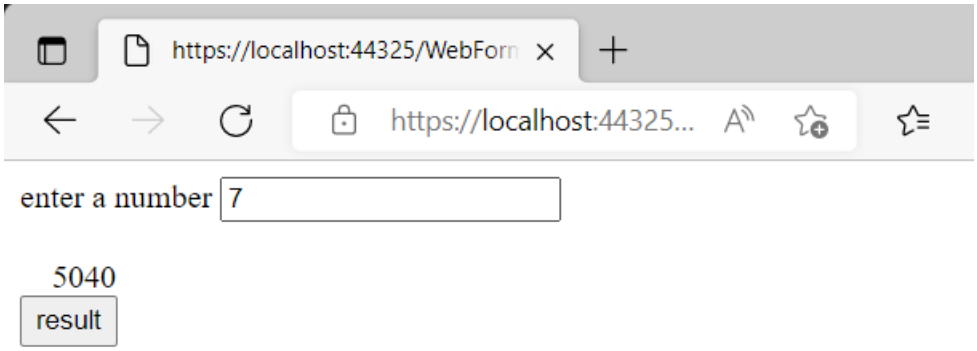
Practical 2(a): Create simple application to perform following operations:

i) Finding factorial Value

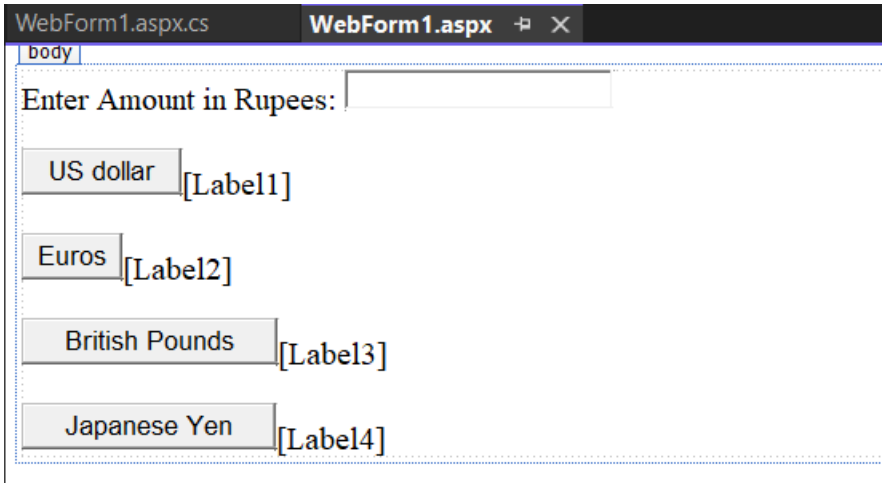



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class Fact
{
   public int n, f;
   public Fact()
   {
      f = 1;
   }
   public void cal()
   {
      int i;
      for(i=1;i<=n;i++)
      {
         f = f * i;
      }
   }
}
namespace Practical2ai
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         Fact f1=new Fact();
         f1.n=int.Parse(TextBox1.Text);
```

```
            f1.cal();
            Label2.Text=f1.f.ToString();
        }
    }
}
```



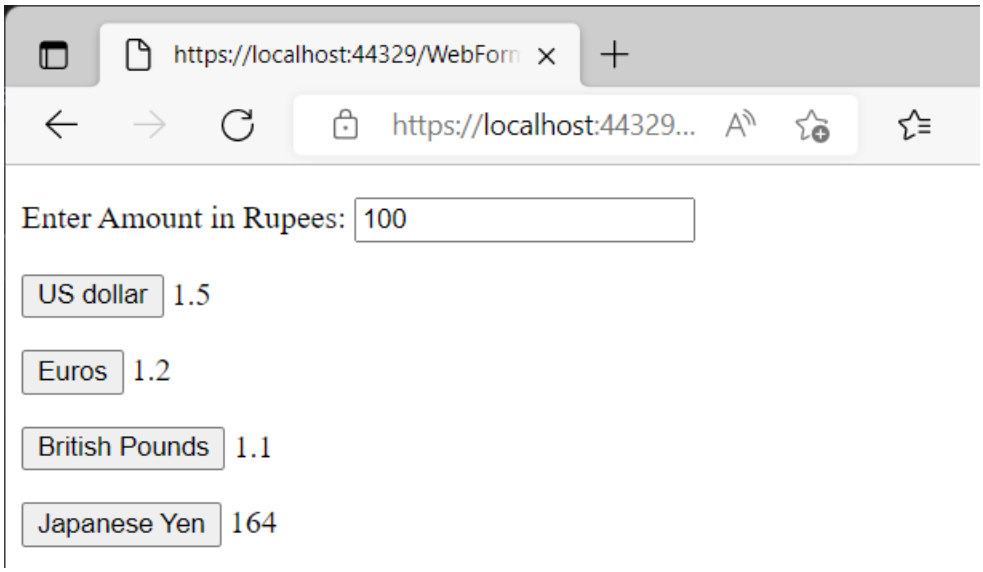
ii) Money conversion




```
using System;
using System.Collections.Generic;
using System.Drawing;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class curConv
{
    public double Dolr(Double r)
    {
        r = r * 0.015;
        return r;
    }
    public double Euros(double r)
    {
```

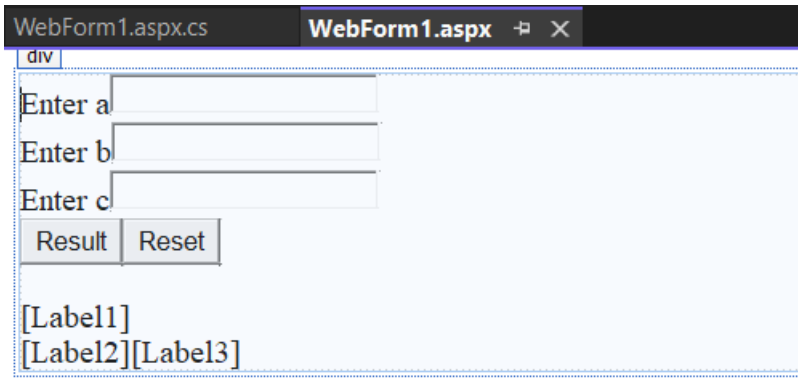
```
        r = r * 0.012;
        return r;
    }
    public double Pounds(double r)
    {
        r = r * 0.011;
        return r;
    }
    public double Yen(double r)
    {
        r = r * 1.64;
        return r;
    }

}

namespace Practical2aii
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            curConv s = new curConv();
            double r = Convert.ToDouble(TextBox1.Text);
            double rate = s.Pounds(r);
            Label3.Text = rate.ToString();
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            curConv s = new curConv();
            double r=Convert.ToDouble(TextBox1.Text);
            double rate=s.Dolr(r);
            Label1.Text=rate.ToString();
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            curConv s=new curConv();
            double r = Convert.ToDouble(TextBox1.Text);
            double rate=s.Euros(r);
            Label2.Text = rate.ToString();
        }

        protected void Button4_Click(object sender, EventArgs e)
        {
```

```
        curConv s = new curConv();
        double r = Convert.ToDouble(TextBox1.Text);
        double rate = s.Yen(r);
        Label4.Text = rate.ToString();
    }
  }
}
```



iii) Quadratic Equation

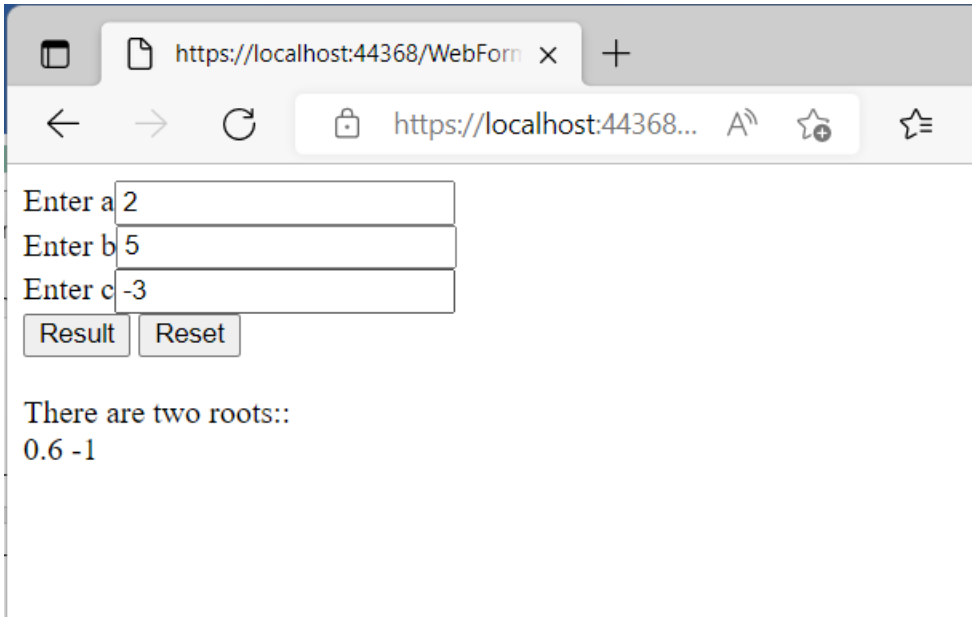
The Standard From of a Quadratic Equation looks like this:



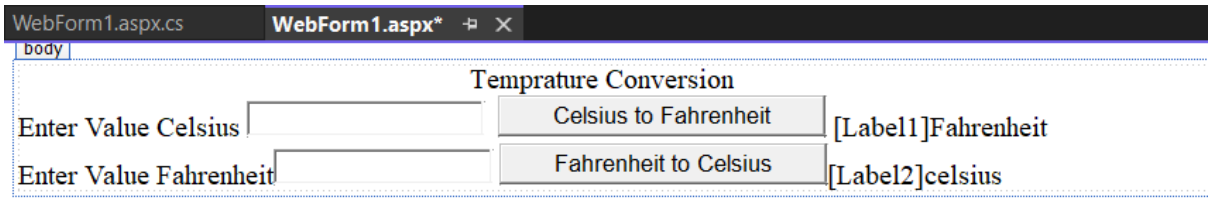

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Security.Cryptography;
using System.Web;
```

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

namespace Practical2aiii
{
  public partial class WebForm1 : System.Web.UI.Page
  {
    public void demo()
    {
      double a, b, c, r1, r2, x;
      double det;
      a = Convert.ToInt32(TextBox1.Text);
      b = Convert.ToInt32(TextBox2.Text);
      c = Convert.ToInt32(TextBox3.Text);
      det = (b * b) - (4 * a * c);
      if (det > 0)
      {
        x = Math.Sqrt(det);
        r1 = (-b + x) / (2 * a);
        r2 = (-b - x) / (2 * a);
        Label1.Text = "There are two roots::";
        Label2.Text = r1.ToString();
        Label3.Text = r2.ToString();
      }
      else if (det == 0)
      {
        x = Math.Sqrt(det);
        r1 = (-b + x) / (2 * a);
        Label1.Text = "There are only one root::";
        Label2.Text = r1.ToString();
      }
      else
      {
        Label1.Text = "There is no root!!";
      }
    }
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void TextBox1_TextChanged(object sender, EventArgs e)
    {

    }

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

}

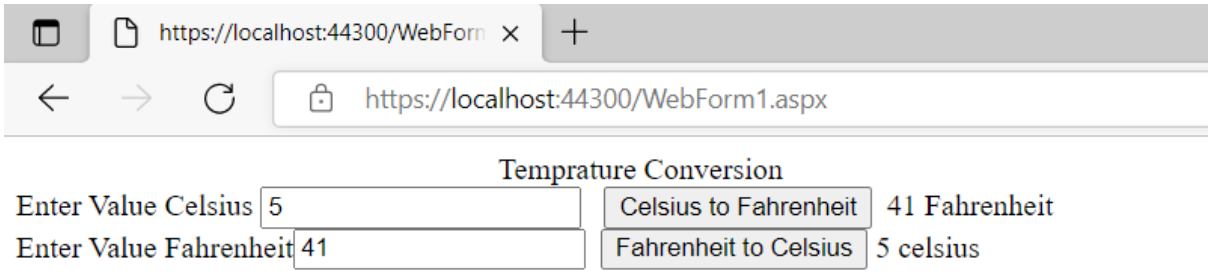


iv) Temperature Conversion



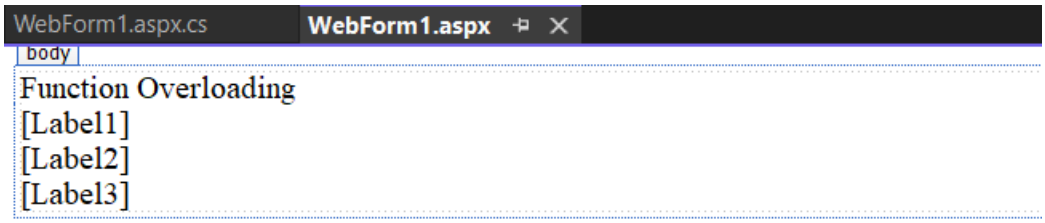

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class tempConv
{
   public double ctof(double temp)
   {
      temp = 9.0 / 5.0 * temp + 32;
      return temp;
   }
   public double ftoc(double temp)
   {
```

```
        temp = (temp-32)*5/9;
        return temp;
    }
}

namespace Practical2aiv
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            tempConv s=new tempConv();
            double n=Convert.ToDouble(TextBox2.Text);
            double x=s.ftoc(n);
            Label2.Text = x.ToString();
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            tempConv s=new tempConv();
            double n=Convert.ToDouble(TextBox1.Text);
            double x=s.ctof(n);
            Label1.Text = x.ToString();
        }
    }
}
```

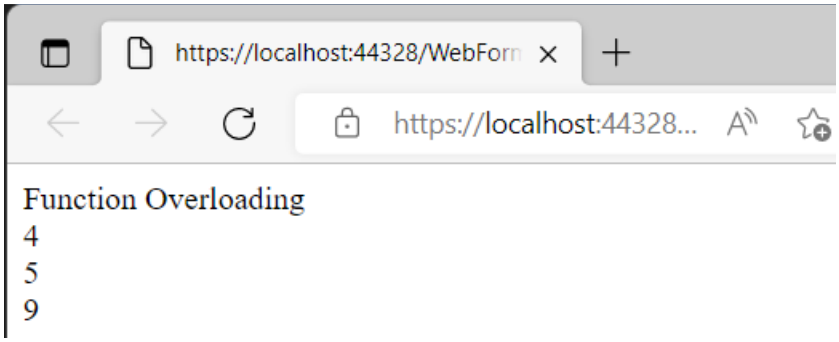


Practical 2(b): Create simple application to demonstrate use of following concepts:

i) Function Overloading

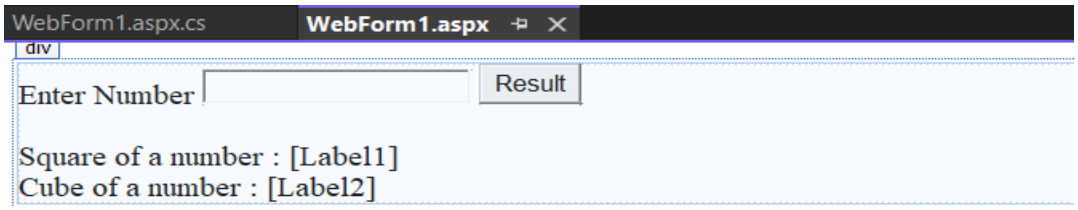



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace Practical2bi
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      public int add(int a)
      {
         return a + a;
      }
      public int add(int a,int b)
      {
         return a + b;
      }
      public int add(int a,int b,int c)
      {
         return a + b + c;
      }
      protected void Page_Load(object sender, EventArgs e)
      {
         int x, y, z;
         x = add(2);
         y = add(2,3);
         z = add(2,3,4);
         Label1.Text=x.ToString();
         Label2.Text=y.ToString();
         Label3.Text=z.ToString();
      }
   }
}
```



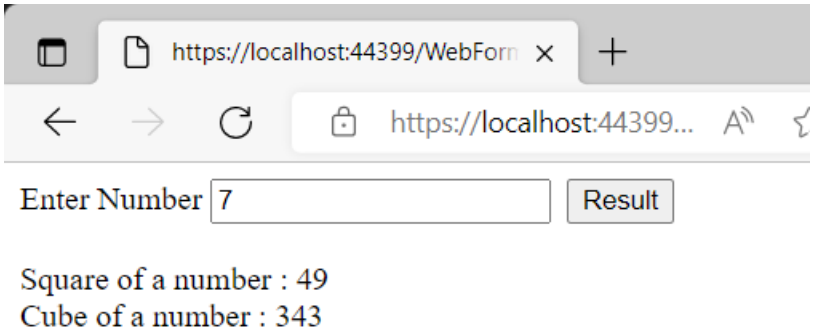
ii) Inheritance (all types)

1. Single Inheritance

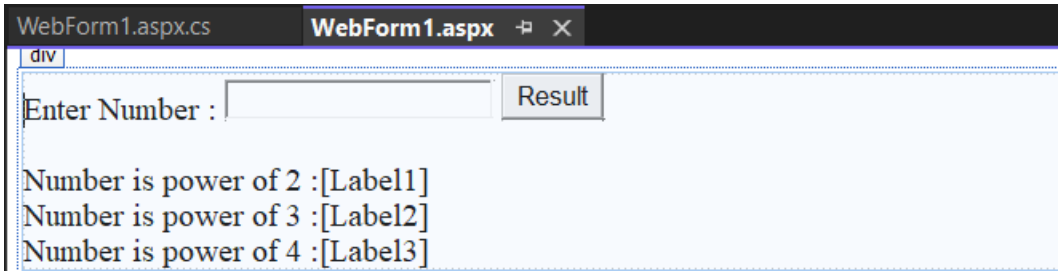



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class A
{
   public int sqr(int Val1)
   {
      return Val1 * Val1;
   }
}
public  class B : A
{
   public  int cub(int Val1)
   {
      int v1=sqr(Val1);
      return v1*Val1;
   }
}

namespace Practical2bii1
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
```

```
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        B s=new B();
        int n = Convert.ToInt32(TextBox1.Text);
        int x=s.sqr(n);
        int y=s.cub(n);
        Label1.Text= x.ToString();
        Label2.Text=y.ToString();
    }
  }
}
```

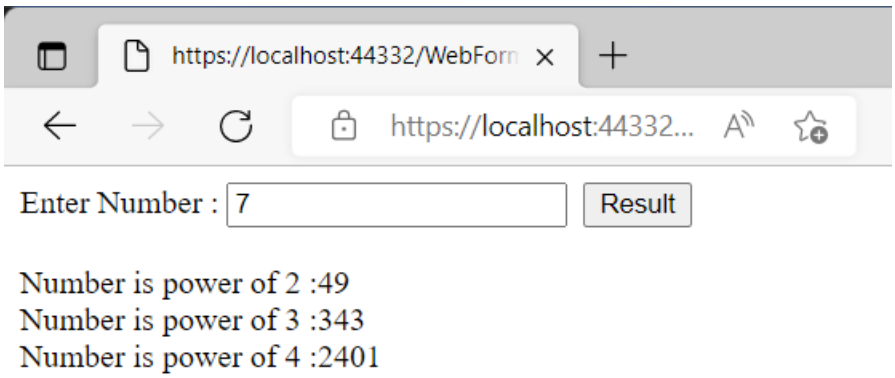


2. Multilevel Inheritance

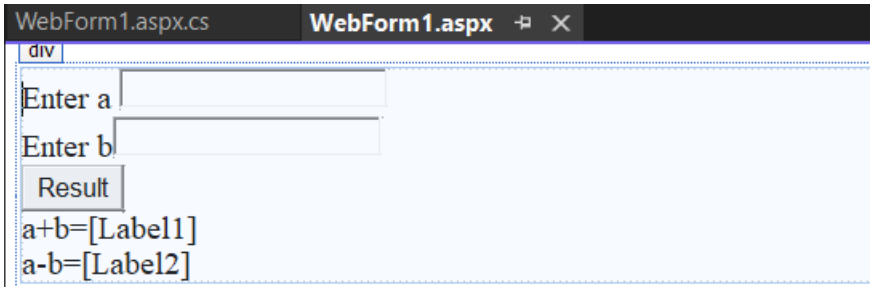



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class A
{
  public int pow2(int Val1)
  {
    return Val1 * Val1;
  }
}
```

```
public class B : A
{
   public int pow3(int Val1)
   {
      int v1 = pow2(Val1);
      return v1*Val1;
   }
}
public  class C : B
{
   public int  pow4(int Val1)
   {
      int v1 = pow3(Val1);
      return v1 * Val1;
   }
}

namespace Practical2bii2
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         C s=new C();
         int n=Convert.ToInt32(TextBox2.Text);
         int x=s.pow2(n);
         int y=s.pow3(n);
         int z=s.pow4(n);
         Label1.Text = x.ToString();
         Label2.Text=y.ToString();
         Label3.Text=z.ToString();
      }
   }
}
```

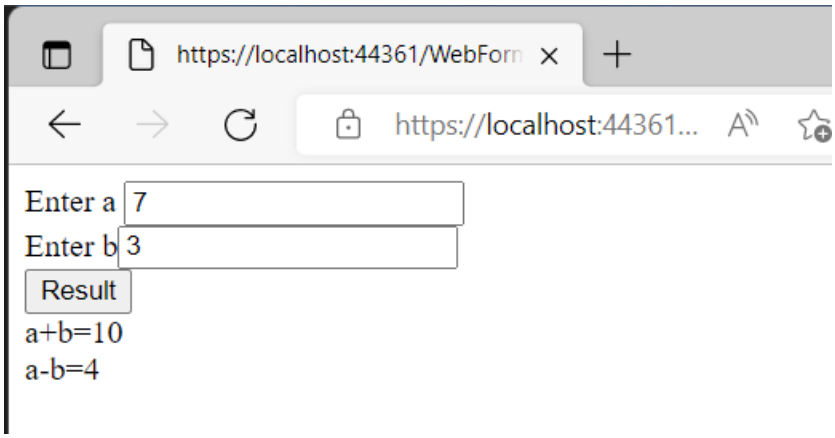


3. Hierarchical Inheritance

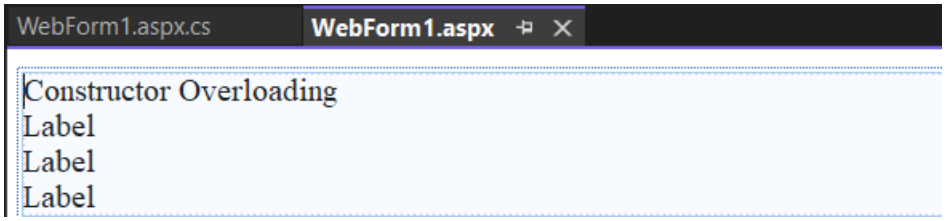



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class A
{
   public int a;
   public int b;
}
public class B:A
{
   public int add(int Val1,int Val2)
   {
      a = Val1;
      b = Val2;
      return a+b;
   }
}
public class C : A
{
   public int sub(int Val1, int Val2)
   {
      a = Val1;
      b = Val2;
      return a - b;
   }
}

namespace Practical2bii3
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

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

```
        {
            B s1=new B();
            C s2=new C();
            int m = Convert.ToInt32(TextBox1.Text);
            int n = Convert.ToInt32(TextBox2.Text);
            int x=s1.add(m, n);
            int y=s2.sub(m, n);
            Label1.Text = x.ToString();
            Label2.Text=y.ToString();
        }
    }
}
```

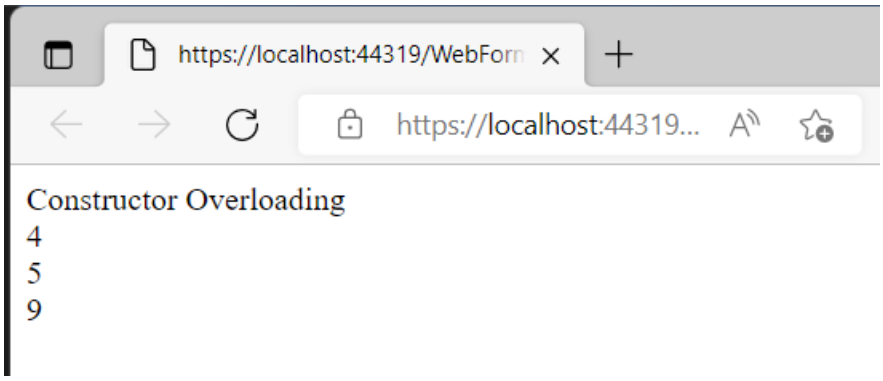


iii) constructor Overloading




```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class add
{
   public int r;
   public add(int a)
```

```
    {
        r = a + a;
    }
    public add(int a,int b)
    {
        r = a + b;
    }
    public add(int a,int b,int c)
    {
        r = a + b + c;
    }
}

namespace Practical2biii
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            add obj1 = new add(2);
            add obj2 = new add(2,3);
            add obj3 = new add(2,3,4);
            Label1.Text=obj1.r.ToString();
            Label2.Text=obj2.r.ToString();
            Label3.Text=obj3.r.ToString();
        }
    }
}
```

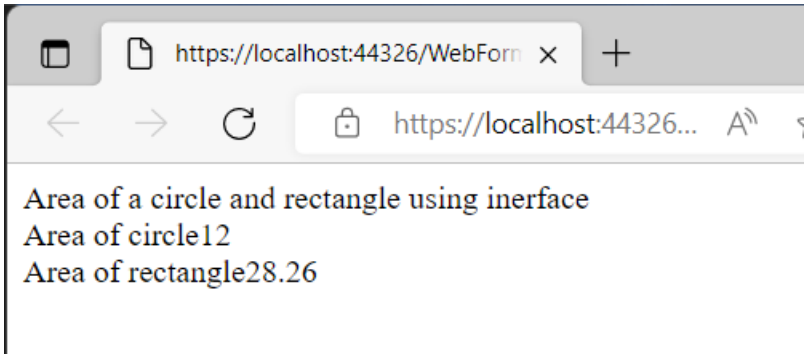


iv) Interfaces

WebForm1.aspx.cs WebForm1.aspx

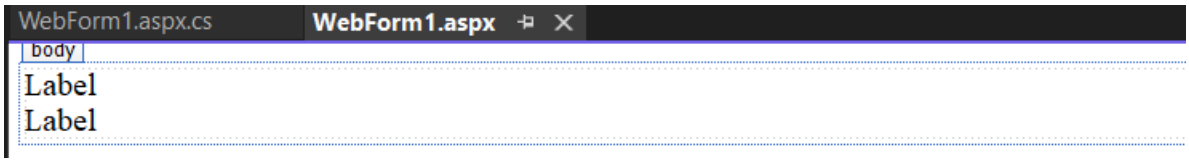
```
div
Area of a circle and rectangle using inerface
Area of circleLabel
Area of rectangleLabel
```

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

namespace Practical2biv
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      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);
         Label1.Text=x.ToString();
         Label2.Text=y.ToString();
      }
   }
}
```



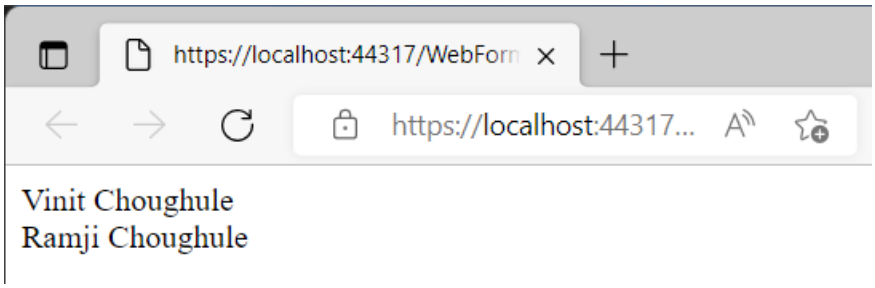
Practical 2(c): Create simple application to demonstrate use of following concepts.

i) Using Delegates and events

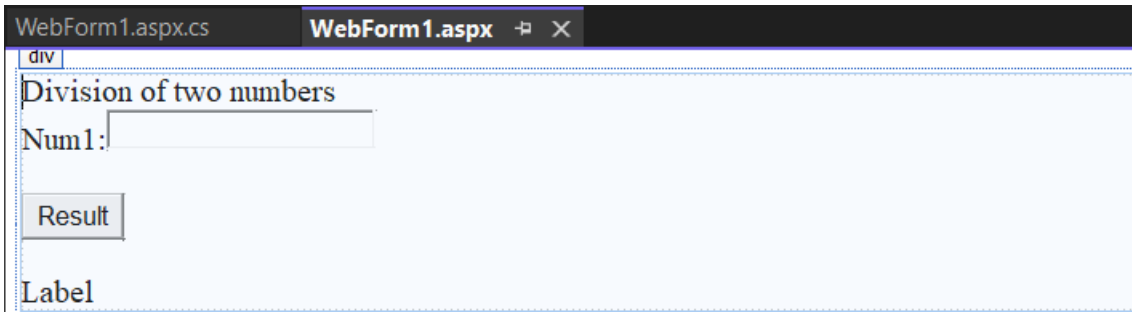



```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public delegate string dele();

namespace Practical2ci
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      public static string display1()
      {
         string s1 = "Vinit Choughule";
         return s1;
      }
      public static  string display2()
      {
         string s2 = "Ramji  Choughule";
         return s2;
      }
      protected void Page_Load(object sender, EventArgs e)
      {
         dele d1 = new dele(display1);
         d1();
         dele d2=new dele(display2);
         d2();
         Label1.Text = d1();
         Label2.Text = d2();
```

```
    }
  }
}
```

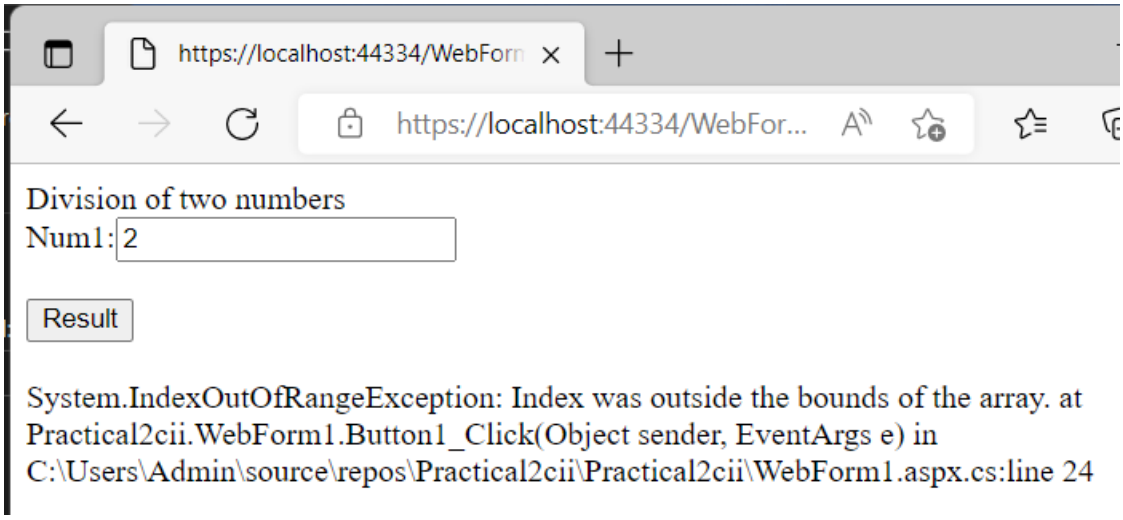


ii) Exception handling




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

namespace Practical2cii
{
  public partial class WebForm1 : System.Web.UI.Page
  {
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
      try
      {
        int a = Convert.ToInt32(TextBox1.Text);
        int[] b = { 12, 23, 33 };
        int resultVal;
        resultVal = (b[3] / a);
        Label2.Text="The result is"+resultVal.ToString();
      }
```

```
        catch(DivideByZeroException ex)
        {
            Label2.Text = ex.ToString();
        }
        catch(System.IndexOutOfRangeException ex)
        {
            Label2.Text = ex.ToString();
        }
    }
  }
}
```



Practical 3(a): Working with web Form and Controls

Practical 3(a): Create a simple web Page with various server controls to demonstrate setting and use of their properties.

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 practi3a
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (!IsPostBack)
         {
            string str = "vinit choughule";
            if (ViewState["name"]==null)
            {
               ViewState["name"] = str;
            }
         }
      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         Label1.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)
    {
        Label2.Text = DropDownList1.SelectedItem.Text;
    }

    protected void DropDownList2_SelectedIndexChanged(object sender, EventArgs e)
    {
        Label2.Font.Size = int.Parse(DropDownList2.SelectedItem.Text);
    }

    protected void RadioButton1_CheckedChanged(object sender, EventArgs e)
    {
        Label2.BackColor = System.Drawing.Color.Red;
    }

    protected void RadioButton2_CheckedChanged(object sender, EventArgs e)
    {
        Label2.BackColor=System.Drawing.Color.Green;
    }

    protected void RadioButton3_CheckedChanged(object sender, EventArgs e)
    {
        Label2.BackColor = System.Drawing.Color.Blue;
    }

    protected void CheckBox1_CheckedChanged(object sender, EventArgs e)
    {
        Label2.Font.Bold = true;
    }

    protected void CheckBox2_CheckedChanged(object sender, EventArgs e)
    {
        Label2.Font.Italic = true;
    }

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

OUTPUT:

Practical 4: Working with Form Controls

Practical 4(a): Create a Registration form a demonstrated use of various Validation controls.

ValidationPract.aspx

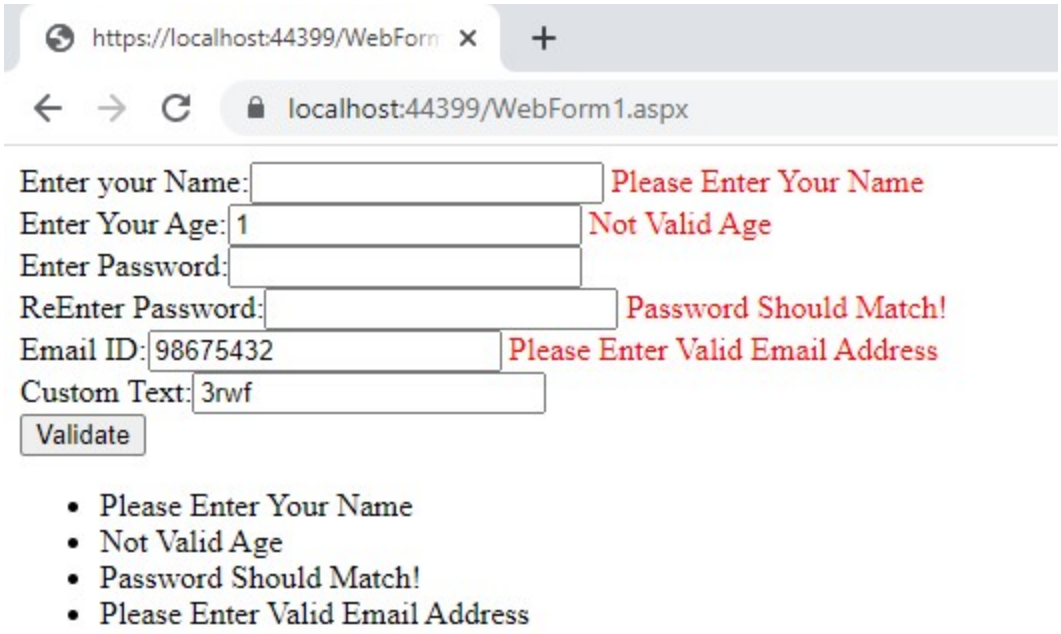
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical4a.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <script runat="server">
        void ValidateBtn_OnClick(object sender,EventArgs e)
        {
            if(Page.IsValid)
            {
                Label1.Text = "Thank You";
            }
            else
            {
                Label1.Text = "the text must be exactly 8 Character Long!";
            }
        }
        void ServerValidation(object source,ServerValidateEventArgs e)
        {
            if (e.Value.Length == 8)
                e.IsValid = true;
            else
                e.IsValid = false;
        }
    </script>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            Enter your Name:<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server" ErrorMessage="Please Enter
Your Name" ControlToValidate="TextBox1" ForeColor="Red"></asp:RequiredFieldValidator>
            <br />
            Enter Your Age:<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <asp:RangeValidator ID="RangeValidator1" runat="server" ControlToValidate="TextBox2"
ErrorMessage="Not Valid Age" ForeColor="Red" MaximumValue="100" MinimumValue="18"
Type="Integer"></asp:RangeValidator>
            <br />
            Enter Password:<asp:TextBox ID="TextBox3" runat="server" TextMode="Password"></asp:TextBox>
            <br />
            ReEnter Password:<asp:TextBox ID="TextBox4" runat="server" TextMode="Password"></asp:TextBox>
            <asp:CompareValidator ID="CompareValidator1" runat="server" ControlToCompare="TextBox3"
ControlToValidate="TextBox4" ErrorMessage="Password Should Match!" ForeColor="Red"
Operator="LessThan" Type="Integer"></asp:CompareValidator>
            <br />
            Email ID:<asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
```

```
        <asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ControlToValidate="TextBox5" ErrorMessage="Please Enter Valid Email Address" ForeColor="Red"
ValidationExpression="\w+([-+.']\w+)*@\w+([-.]\w+)*\.\w+([-.]\w+)*"></asp:RegularExpressionValidator>
        <br />
        Custom Text:<asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>
        <asp:CustomValidator ID="CustomValidator1" runat="server"
ClientValidationFunction="SeverValidation" ControlToValidate="TextBox6" ErrorMessage="CustomValidator"
ForeColor="Red"></asp:CustomValidator>
        <asp:Label ID="Label1" runat="server" ForeColor="Red"></asp:Label>
        <br />
        <asp:Button ID="Button1" runat="server" Text="Validate" />
        <br />
        <asp:ValidationSummary ID="ValidationSummary1" runat="server" />
      </div>
    </form>
</body>
</html>
```

Web.config

```
<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  https://go.microsoft.com/fwlink/?LinkId=169433
  -->
<configuration>
        <appSettings>
                <add key="ValidationSettings:UnobtrusiveValidationMode" value="None"/>
        </appSettings>
  <system.web>
    <compilation debug="true" targetFramework="4.7.2" />
    <httpRuntime targetFramework="4.7.2" />
  </system.web>
  <system.codedom>
    <compilers>
      <compiler language="c#;cs;csharp" extension=".cs"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.CSharpCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" warningLevel="4" compilerOptions="/langversion:default
/nowarn:1659;1699;1701" />
      <compiler language="vb;vbs;visualbasic;vbscript" extension=".vb"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.VBCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" warningLevel="4" compilerOptions="/langversion:default /nowarn:41008
/define:_MYTYPE=\&amp;quot;Web\&amp;quot; /optionInfer+" />
    </compilers>
  </system.codedom>
</configuration>
```

Output



Practical 4(b): Create Web Form to demonstrate use of Adrotator Control.

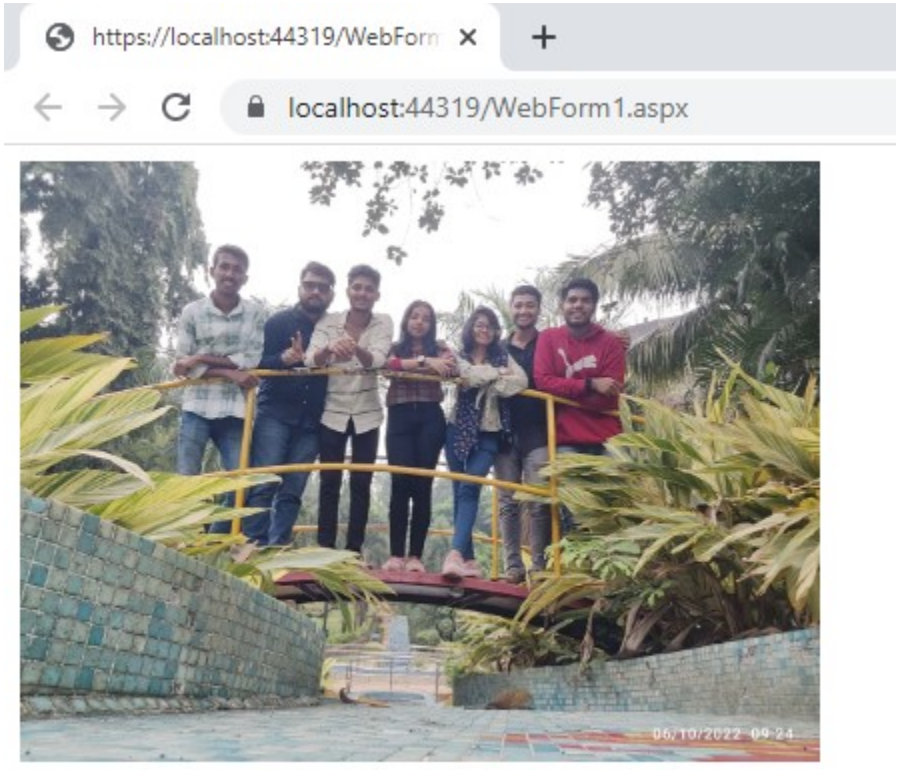
Default.aspx

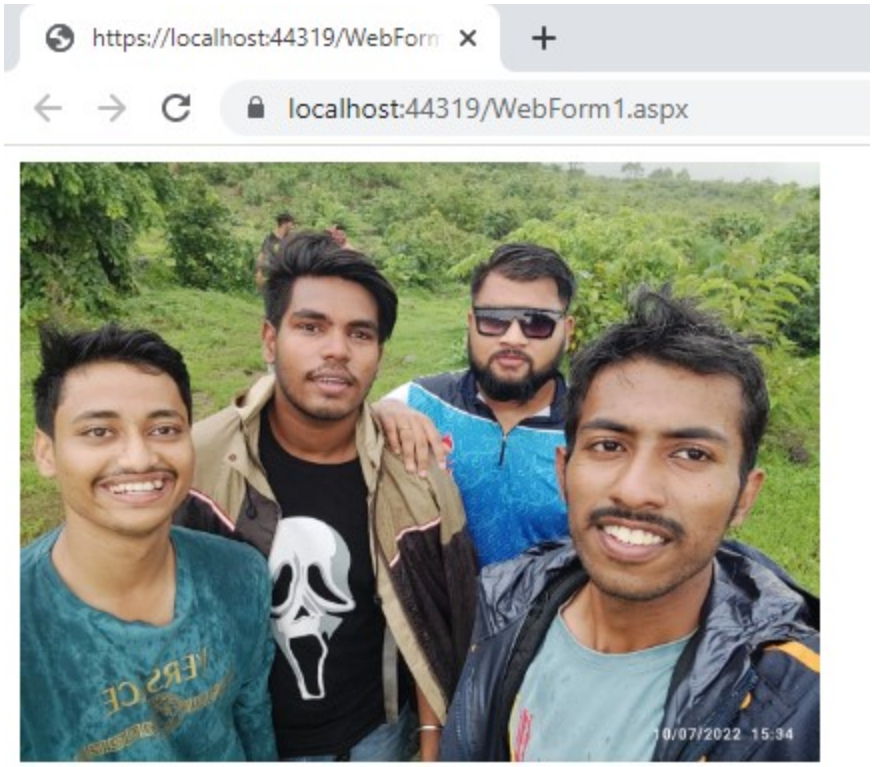
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract4b.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:AdRotator ID="AdRotator1" runat="server" DataSourceID="XmlDataSource1" Height="300px"
Width="400px" />
            <asp:XmlDataSource ID="XmlDataSource1" runat="server"
DataFile="~/XMLFile1.xml"></asp:XmlDataSource>
        </div>
    </form>
</body>
</html>
```

Web.config

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
        <Ad>
                <ImageUrl>v1.jpg</ImageUrl>
                <NavigateUrl>http://www.babybouquets.com.au</NavigateUrl>
```

```
        <AlternateText>Order roses and flowers</AlternateText>
        <Impressions>20</Impressions>
        <Keyword>gifts</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>v2.jpg</ImageUrl>
        <NavigateUrl>http://www.babybouquets.com.au</NavigateUrl>
        <AlternateText>Order</AlternateText>
        <Impressions>20</Impressions>
        <Keyword>gifts</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>v3.jpg</ImageUrl>
        <NavigateUrl>http://www.babybouquets.com.au</NavigateUrl>
        <AlternateText>flowers</AlternateText>
        <Impressions>20</Impressions>
        <Keyword>gifts</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>v4.jpg</ImageUrl>
        <NavigateUrl>http://www.babybouquets.com.au</NavigateUrl>
        <AlternateText>cars</AlternateText>
        <Impressions>20</Impressions>
        <Keyword>gifts</Keyword>
    </Ad>
</Advertisements>
```





Practical 4(c): Create Web Form to demonstrate user Controls.

footer.ascx

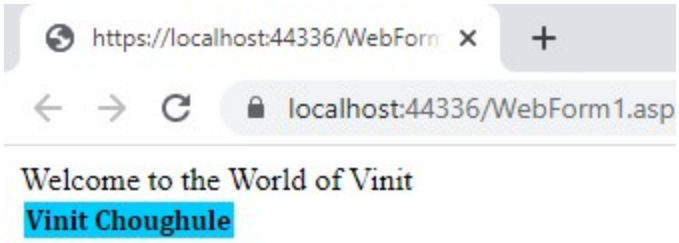
```
<%@ Control Language="C#" AutoEventWireup="true" CodeBehind="footer.ascx.cs" Inherits="Pract4c.footer"
%>
<table>
    <tr>
        <td align="center" style="font-family:Cambria;background-color:#00CCFF;
font-size:14px;text-decoration:blink color:#FF0000;font-weight:bold;">
        Vinit Choughule</td>
    </tr>
</table>
```

Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract4c.WebForm1" %>

<%@ Register src="footer.ascx" tagname="footer" tagprefix="uc1" %>

<!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="Welcome to the World of Vinit"></asp:Label>
        </div>
        <uc1:footer ID="footer1" runat="server" />
    </form>
</body>
</html>
```

OUTPUT:

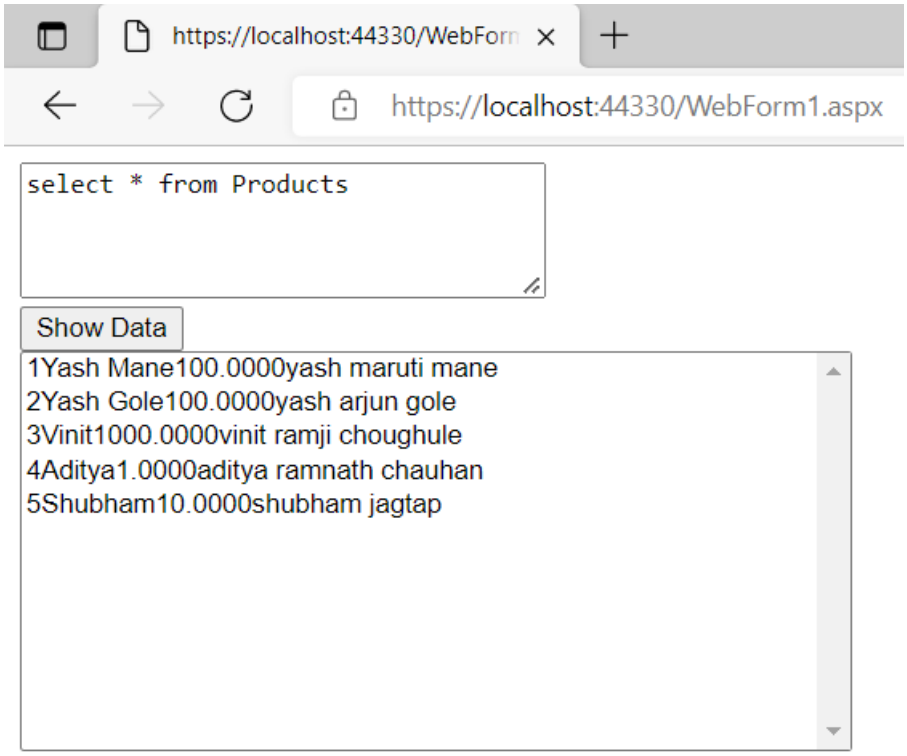


Practical 6a:Create a web application to bind data in a multiline textbox by querying in another textbox

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

namespace Practical6atrial1
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            try
            {
                //establishing connection
                String str = WebConfigurationManager.ConnectionStrings["c1"].ConnectionString;
                SqlConnection con=new SqlConnection(str);
```

```
            //open connection
            con.Open();
            //create sqlcommand
            SqlCommand cmd = new SqlCommand(TextBox1.Text, con);
            //execute query
            SqlDataReader dr = cmd.ExecuteReader();
            //clear a listbox
            ListBox1.Items.Clear();
            //adding result in listbox
            while (dr.Read())
            {
               String itemstr = "";
               for(int i = 0; i < dr.FieldCount; i++)
               {
                  itemstr=itemstr + dr[i].ToString();
               }
               ListBox1.Items.Add(itemstr);
            }
            //close connectkion
            con.Close();
         }
         catch(Exception ex)
         {
            ListBox1.Items.Clear();
            ListBox1.Items.Add("Invalid Query"+ex.Message);
         }
      }
   }
}
```

output

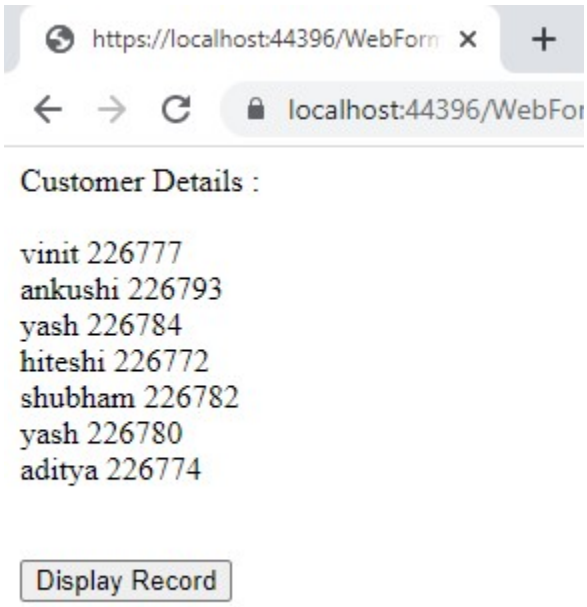


Practical6b: Create a web application to display records by using database.

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

namespace Pract6btrial
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         String connStr = ConfigurationManager.ConnectionStrings["connStr"].ConnectionString;
         SqlConnection con = new SqlConnection(connStr);
         SqlCommand cmd = new SqlCommand("Select FirstName,Phone from Customer", con);
         con.Open();
         SqlDataReader reader = cmd.ExecuteReader();
         while (reader.Read())
         {
```

```
            Label2.Text += reader["FirstName"].ToString() + " " + reader["Phone"].ToString() + "<br>";
        }
        reader.Close();
        con.Close();
    }
  }
}
```

output

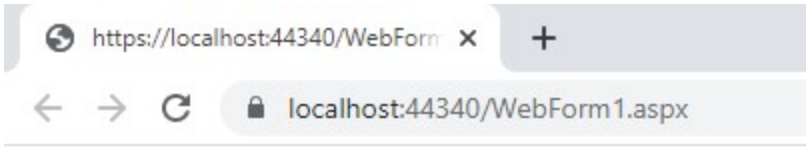


Practical 6c:Demonstrate the use of datalist link control

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract6c.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:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:you2ConnectionString %>" SelectCommand="SELECT * FROM
[Customer]"></asp:SqlDataSource>
      <br />
      <asp:DataList ID="DataList1" runat="server" BackColor="LightGoldenrodYellow" BorderColor="Tan"
BorderWidth="1px" CellPadding="2" DataKeyField="Id" DataSourceID="SqlDataSource1" ForeColor="Black">
        <AlternatingItemStyle BackColor="PaleGoldenrod" />
        <FooterStyle BackColor="Tan" />
        <HeaderStyle BackColor="Tan" Font-Bold="True" />
        <ItemTemplate>
```

```
                Id:
                <asp:Label ID="IdLabel" runat="server" Text='<%# Eval("Id") %>' />
                <br />
                FirstName:
                <asp:Label ID="FirstNameLabel" runat="server" Text='<%# Eval("FirstName") %>' />
                <br />
                LastName:
                <asp:Label ID="LastNameLabel" runat="server" Text='<%# Eval("LastName") %>' />
                <br />
                City:
                <asp:Label ID="CityLabel" runat="server" Text='<%# Eval("City") %>' />
                <br />
                Country:
                <asp:Label ID="CountryLabel" runat="server" Text='<%# Eval("Country") %>' />
                <br />
                Phone:
                <asp:Label ID="PhoneLabel" runat="server" Text='<%# Eval("Phone") %>' />
                <br />
<br />
            </ItemTemplate>
            <SelectedItemStyle BackColor="DarkSlateBlue" ForeColor="GhostWhite" />
        </asp:DataList>
    </div>
  </form>
</body>
</html>
```

output



Id: 1
FirstName: vinit
LastName: choughule
City: kailas nagar
Country: india
Phone: 226777

Id: 2
FirstName: ankushi
LastName: sachan
City: model college
Country: india
Phone: 226793

Id: 3
FirstName: yash
LastName: mane
City: chinchpada
Country: india
Phone: 226784

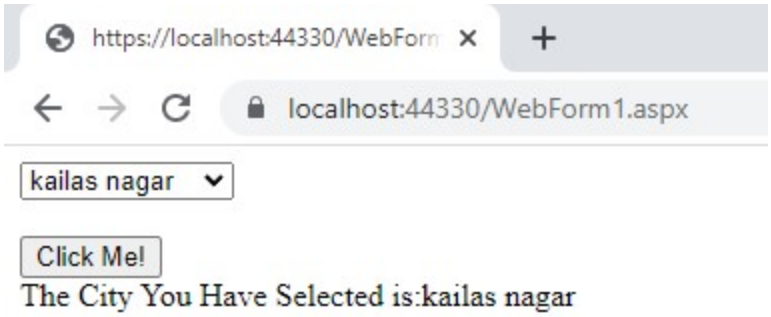
Id: 4
FirstName: hiteshi
LastName: bhajani
City: vijay nagar
Country: india
Phone: 226772

Id: 5
FirstName: shubham
LastName: jagtap
City: murbad
Country: india
Phone: 226782

PRACTICAL7A: create a web application to display databinding using dropdownlist control.

CODE OF C# CODE BEHIND FILE

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

namespace practical7a
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if(!IsPostBack)
         {
            try
            {
               string conStr = WebConfigurationManager.ConnectionStrings["c1"].ConnectionString;
               SqlConnection con = new SqlConnection(conStr);
               con.Open();
               SqlCommand cmd =new SqlCommand("select * from Customer",con);
               SqlDataReader dr = cmd.ExecuteReader();
               DropDownList1.DataSource = dr;
               DropDownList1.DataTextField = "City";
               this.DataBind();
            }catch(Exception ex)
            {
               Label1.Text = ex.Message;
            }
         }
      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         Label1.Text="The City You Have Selected is:"+DropDownList1.SelectedValue;
      }
   }
}
```

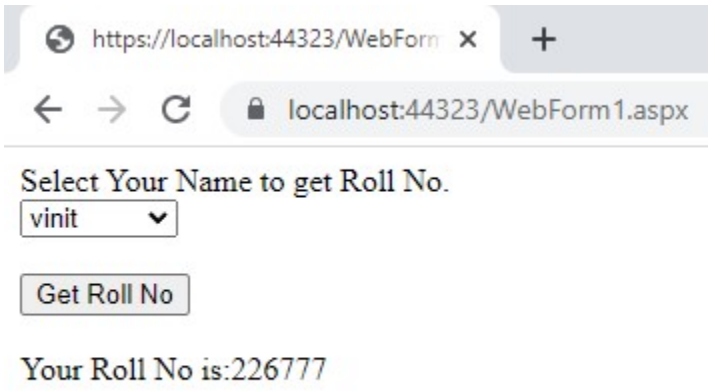


Practical7b:create a web application for to display no of customer using database.

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

namespace Pract7b
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (!IsPostBack)
         {
            try
            {
               string conStr = WebConfigurationManager.ConnectionStrings["c1"].ConnectionString;
               SqlConnection con = new SqlConnection(conStr);
               con.Open();
               SqlCommand cmd = new SqlCommand("select * from Customer", con);
               SqlDataReader dr = cmd.ExecuteReader();
               DropDownList1.DataSource = dr;
               DropDownList1.DataTextField = "FirstName";
               DropDownList1.DataValueField = "Phone";
               this.DataBind();
            }
            catch (Exception ex)
            {
               Label1.Text = ex.Message;
            }
         }

      }

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

```
        Label1.Text = "Your Roll No is:" + DropDownList1.SelectedValue;
    }
  }
}
```

output

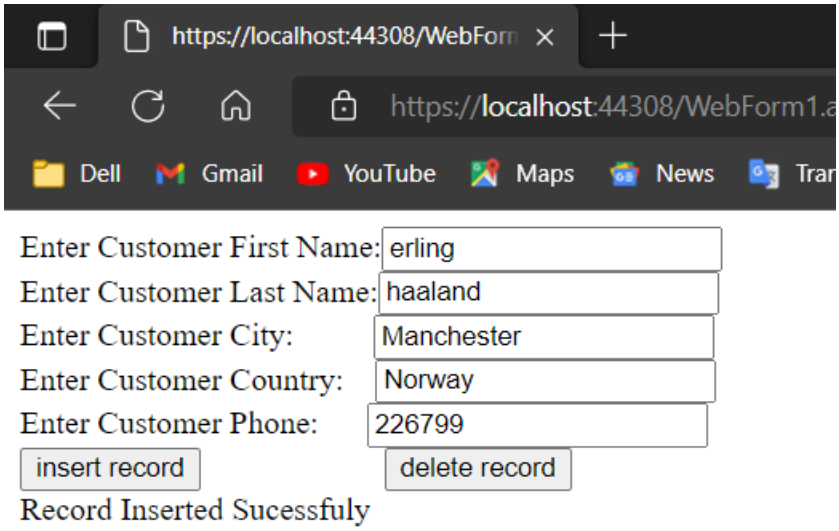


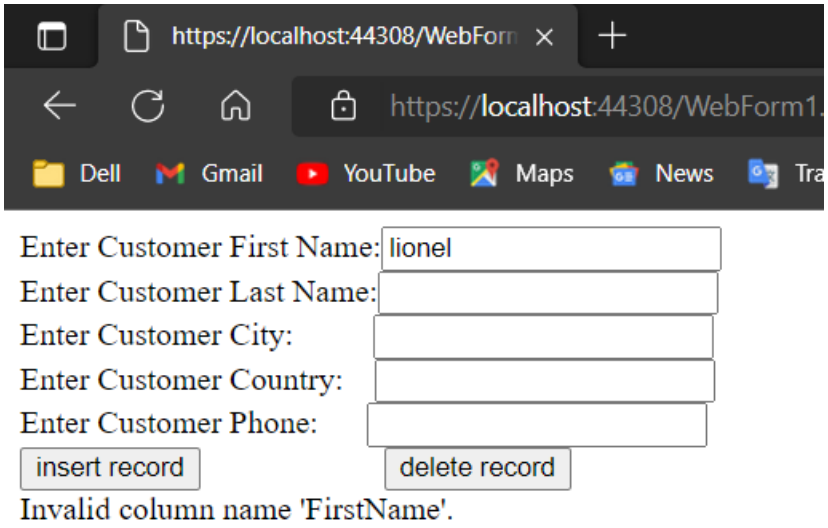
Practical 7c:Create a web application for inserting and deleting record from a database.

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

namespace Practocal7c
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            try
            {
                string c1 =
WebConfigurationManager.ConnectionStrings["c1"].ConnectionString;
                SqlConnection con = new SqlConnection(c1);
                string InsertQuery = "insert into customer
values(@fname,@lname,@city,@country,@phone)";
                SqlCommand cmd = new SqlCommand(InsertQuery, con);
                cmd.Parameters.AddWithValue("@fname", TextBox1.Text);
                cmd.Parameters.AddWithValue("@lname", TextBox2.Text);
                cmd.Parameters.AddWithValue("@city", TextBox3.Text);
```

```
                cmd.Parameters.AddWithValue("@country", TextBox4.Text);
                cmd.Parameters.AddWithValue("@phone", TextBox5.Text);
                con.Open();
                cmd.ExecuteNonQuery();
                Label1.Text = "Record Inserted Sucessfuly";
                con.Close();

            }
            catch (Exception ex)
            {
                Label1.Text = ex.Message;
            }
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            try
            {
                string c1 =
WebConfigurationManager.ConnectionStrings["c1"].ConnectionString;
                SqlConnection con = new SqlConnection(c1);
                SqlCommand cmd = new SqlCommand("delete from customer where
FirstName=@fname", con);
                cmd.Parameters.AddWithValue("@fname", TextBox1.Text);
                con.Open();
                cmd.ExecuteNonQuery();
                Label1.Text = "Record Deleted Succesfuly";
                con.Close();
            }
            catch(Exception ex)
            {
                Label1.Text = ex.Message;
            }
        }
    }
}
```

output



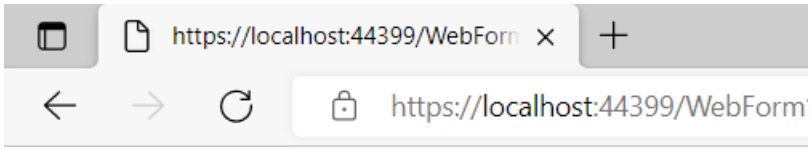


Practical8(c):Create a web application to display using Disconnected Data Access and databinding using Gridview.

```
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 Practical8c
{
```

```
    public partial class WebForm1 : System.Web.UI.Page
    {
        SqlConnection con=new SqlConnection("Data Source=LAPTOP-NIQ8RJ1U\\SQLEXPRESS;Initial
Catalog=you2;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 Products", con);
            da.Fill(ds, "Name");
            GridView1.DataSource=ds;
            GridView1.DataBind();
        }
    }
}
```

Output:



Show Disconnected Fetch Data

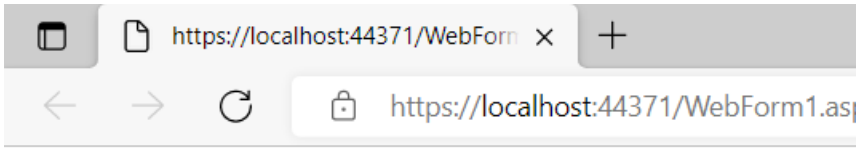
ProductId	Name	Price	Description
1	Yash Mane	100.0000	yash maruti mane
2	Yash Gole	100.0000	yash arjun gole
3	Vinit	1000.0000	vinit ramji choughule
4	Aditya	1.0000	aditya ramnath chauhan
5	Shubham	10.0000	shubham jagtap

Practical 9a:Create a web application to demonstrate use of GridView control template and GridView hyperlink

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical9a.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" AutoGenerateColumns="False"
DataKeyNames="ProductId" DataSourceID="SqlDataSource1">
                <Columns>
                    <asp:HyperLinkField DataNavigateUrlFields="ProductId"
DataNavigateUrlFormatString="~/WebForm2.aspx?Productid={0}" DataTextField="ProductId"
DataTextFormatString="{0}" HeaderText="Product Id" NavigateUrl="~/WebForm2.aspx" />
                    <asp:BoundField DataField="Name" HeaderText="Name" SortExpression="Name" />
                    <asp:BoundField DataField="Price" HeaderText="Price" SortExpression="Price" />
                    <asp:BoundField DataField="Description" HeaderText="full name" SortExpression="Description" />
                </Columns>
                <EmptyDataTemplate>
                    no record found
                </EmptyDataTemplate>
            </asp:GridView>
            <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:you2ConnectionString %>" SelectCommand="SELECT * FROM
[Products]"></asp:SqlDataSource>
        </div>
    </form>
</body>
</html>
```

output



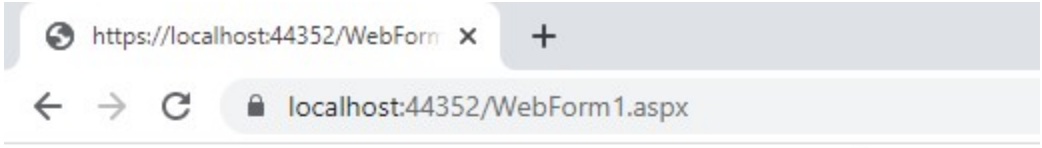
Product Id	Name	Price	full name
1	Yash Mane	100.0000	yash maruti mane
2	Yash Gole	100.0000	yash arjun gole
3	Vinit	1000.0000	vinit ramji choughule
4	Aditya	1.0000	aditya ramnath chauhan
5	Shubham	10.0000	shubham jagtap

Practical 9B:Create web application to demonstrate use of Gridview button and GridView events.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical9b.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" AutoGenerateColumns="False" DataKeyNames="Id"
DataSourceID="SqlDataSource1" OnRowCommand="GridView1_RowCommand">
                <Columns>
                    <asp:BoundField DataField="Id" HeaderText="Id" ReadOnly="True" SortExpression="Id" />
                    <asp:BoundField DataField="FirstName" HeaderText="FirstName" SortExpression="FirstName" />
                    <asp:BoundField DataField="LastName" HeaderText="LastName" SortExpression="LastName" />
                    <asp:BoundField DataField="City" HeaderText="City" SortExpression="City" />
                    <asp:BoundField DataField="Country" HeaderText="Country" SortExpression="Country" />
                    <asp:BoundField DataField="Phone" HeaderText="Phone" SortExpression="Phone" />
                    <asp:ButtonField CommandName="b1" Text="Button" />
                </Columns>
            </asp:GridView>
            <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:you2ConnectionString %>" SelectCommand="SELECT * FROM
[Customer]"></asp:SqlDataSource>
        </div>
    </form>
</body>
</html>
```

output

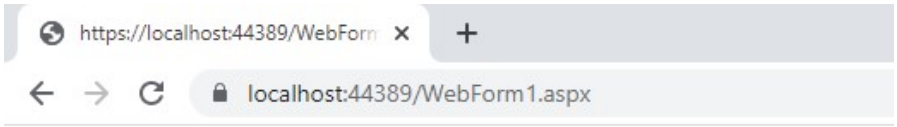


Id	FirstName	LastName	City	Country	Phone	
1	[illegible]	choughule	kailas nagar	india	226777	
2	ankushi	sachan	model college	india	226793	Button
3	yash	mane	chinchpada	india	226784	Button
4	hiteshi	bhajani	vijay nagar	india	226772	Button
5	shubham	jagtap	murbad	india	226782	Button
6	yash	gole	saket college	india	226780	Button
7	aditya	chauhan	nandivali	india	226774	Button

Practical 9C

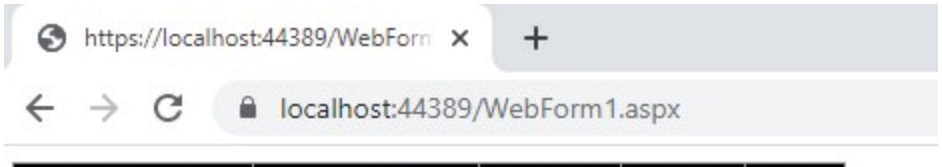
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical9c.WebForm11" %>

<!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" AllowPaging="True" AutoGenerateColumns="False"
BackColor="White" BorderColor="#999999" BorderStyle="Solid" BorderWidth="1px" CellPadding="3"
DataKeyNames="Name" DataSourceID="SqlDataSource1" ForeColor="Black" GridLines="Vertical">
                <AlternatingRowStyle BackColor="#CCCCCC" />
                <Columns>
                    <asp:BoundField DataField="Name" HeaderText="Name" ReadOnly="True"
SortExpression="Name" />
                    <asp:BoundField DataField="Club" HeaderText="Club" SortExpression="Club" />
                    <asp:BoundField DataField="Country" HeaderText="Country" SortExpression="Country" />
                    <asp:BoundField DataField="Position" HeaderText="Position" SortExpression="Position" />
                    <asp:BoundField DataField="Points" HeaderText="Points" SortExpression="Points" />
                </Columns>
                <FooterStyle BackColor="#CCCCCC" />
                <HeaderStyle BackColor="Black" Font-Bold="True" ForeColor="White" />
                <PagerStyle BackColor="#999999" ForeColor="Black" HorizontalAlign="Center" />
                <SelectedRowStyle BackColor="#000099" Font-Bold="True" ForeColor="White" />
                <SortedAscendingCellStyle BackColor="#F1F1F1" />
                <SortedAscendingHeaderStyle BackColor="#808080" />
                <SortedDescendingCellStyle BackColor="#CAC9C9" />
                <SortedDescendingHeaderStyle BackColor="#383838" />
            </asp:GridView>
            <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:you2ConnectionString %>" SelectCommand="SELECT * FROM
[football]"></asp:SqlDataSource>
        </div>
    </form>
</body>
</html>
```



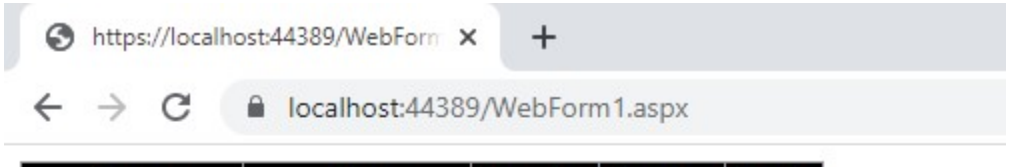
Name	Club	Country	Position	Points
Alphonoso Davies	Bayern Munich	Canneda	LB	94
Antony Matheus	Manchester United	Brazil	RW	98
Benjamin Pavard	Bayern Munich	France	RB	92
Bukayo Saka	Arsenal	England	RM	99
Erling Haaland	Manchester City	norway	ST	100
Fedrico Valverde	Real Madrid	Urgury	RM	92
Gabriel Martinelli	Arsenal	Brazil	CAM	96
Granit Xhaka	Arsenal	Switzerland	CM	95
Jack Grealish	Manchester City	England	LW	97
Jamal Musiala	Bayern Munich	Germany	CAM	96

1 2 3



Name	Club	Country	Position	Points
Joao Cancelo	Manchester City	Portugal	RB	99
Joshua Kimich	Bayern Munich	Germany	CDM	95
Junior Neymar	PSG	Brazil	LW	96
Karim Benzema	Real Madrid	France	ST	92
Kevin De Bruyne	Manchester City	Belgium	CAM	99
Kylian Mbappe	PSG	France	ST	93
Leroy Sane	Bayern Munich	Germany	LW	94
Lionel Messi	PSG	Argentina	RW	97
Marco Verratti	PSG	Argentina	CM	92
Martin Odegard	Arsenal	Norway	CAM	92

1 2 3



Name	Club	Country	Position	Points
Mohamed Salah	Liverpool	Egypt	LW	93
Rodri	Manchester City	Portugal	CDM	97
Sergio Busquets	FC Barcelona	Spain	CDM	93
Vinicius Junior	Real Madrid	Brazil	LW	96

1 2 3