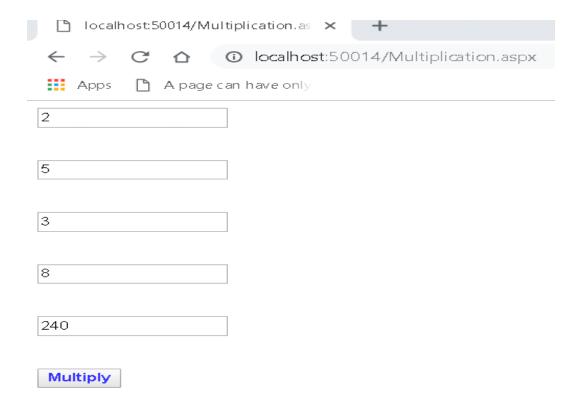
### 1. Working with Basic C# and ASP.NET

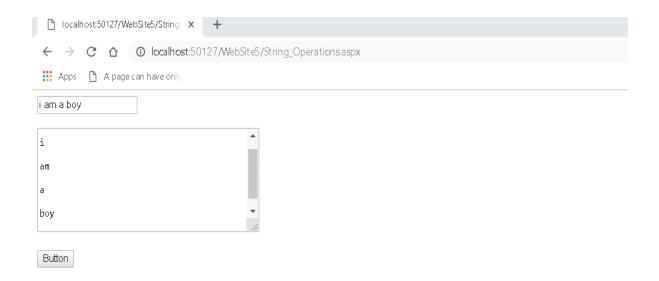
1(a). create an application that obtain four int values from the users and displays the product.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Practical_1a
{
    public partial class Multiplication : System.Web.UI.Page
    {
        protected void Button1_Click(object sender, EventArgs e)
        {
            int num1, num2, num3, num4, prod;
            num1 = Convert.ToInt32(TextBox1.Text);
            num2 = Convert.ToInt32(TextBox2.Text);
            num3 = Convert.ToInt32(TextBox3.Text);
            num4 = Convert.ToInt32(TextBox4.Text);
            prod = num1 * num2 * num3 * num4;
            TextBox5.Text = Convert.ToString(prod);
        }
    }
}
```



### 1(b). Create an application to demonstrate string operations.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class String_Operations : System.Web.UI.Page
{
    protected void Button1_Click(object sender, EventArgs e)
    {
      string str1 = TextBox1.Text;
       string[] words = str1.Split();
       for(int i=0;i<words.Length;i++)</pre>
       {
           TextBox2.Text =TextBox2.Text+words[i]+"\n\r";
       }
    }
}
```



1(c). Create an application that receive the (Student Id, Student Name, Course Name, Date of Birth) information from a set of students. The application should also dislplay the information of all the students once the data entered.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
struct Student
{
    public string studid, name, cname;
    public string dob;
}
public partial class Student_Information : System.Web.UI.Page
{
    Student[] s = new Student[1];
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
       int i;
```

```
for (i = 0; i < 1; i++)
        {
            s[i].studid = TextBox2.Text;
            s[i].name = TextBox3.Text;
            s[i].cname = TextBox4.Text;
            s[i].dob = TextBox5.Text;
        }
        for (i = 0; i < 1; i++)
        {
            Response.Write("\nStudent ID:" + s[i].studid+"<br>");
            Response.Write("\nStudent name:" + s[i].name + "<br>");
            Response.Write("\nCourse name:" + s[i].cname + "<br>");
            Response.Write("\nDate of Birth(dd-mm-yy):" + s[i].dob + "<br>");
            Response.Write("<br>");
            Response.Write("<br>");
        }
    }
}
```

Ocalhost 50413/WebSite6/Studer X +
$\leftarrow$ $\rightarrow$ $\bigcirc$ $\bigcirc$ localhost:50413/WebSite6/Student_Information.aspx
Apps A page can have only
Student ID:1 Student name:abc Course name:c# Date of Birth(dd-mm-yy):1998-07-01
Student Id 1
Student Name abc
Course Name c#
Date Of Birth 01-07-1998
Button

# 1.(d) Create an application to demonstrate following operations.

(i) Generate Fibonacci series.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Fibonacci : System.Web.UI.Page
{
    protected void Button1_Click(object sender, EventArgs e)
    {
        int num1 = 0, num2 = 1, num3, num4, num;
        num4= int.Parse(TextBox1.Text);
        num = 3;
        Response.Write("Fiboncci sereis.");
        Response.Write(num1 + "\t" + num2);
        while (num<= num4)</pre>
        {
            num3 = num1 + num2;
            if (num>= num4)
                break;
            Response.Write("\t" + num3);
            num1 = num2;
```

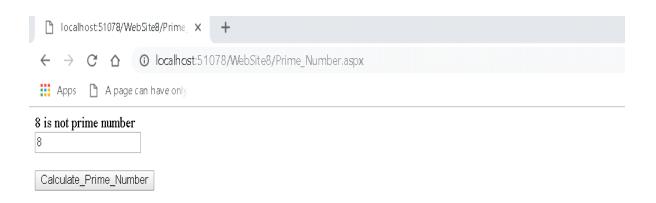
```
num2 = num3;
num++;
}
```

localhost:50947/Wi	ebSite7/Fibona X +
$\leftarrow$ $\rightarrow$ G $\triangledown$	① localhost:50947/WebSite7/Fibonacci.aspx
Apps 🖰 A page	can have only
Fiboncci sereis.0 1 1	2 3 5 8
Button	

# (ii) Test for prime numbers.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Prime_Number : System.Web.UI.Page
{
  protected void Button1_Click(object sender, EventArgs e)
    {
        int n, i, c;
        n = int.Parse(TextBox1.Text);
        for (c = 2; c <= n; c++)
        {
            if ((n % c) == 0)
                break;
        }
        if (n == 1)
            Response.Write(n + " is neither prime nor composite");
        else if (c < n - 1)
            Response.Write(n + " is not prime number");
        else
            Response.Write(n + "is prime number");
    } }
```

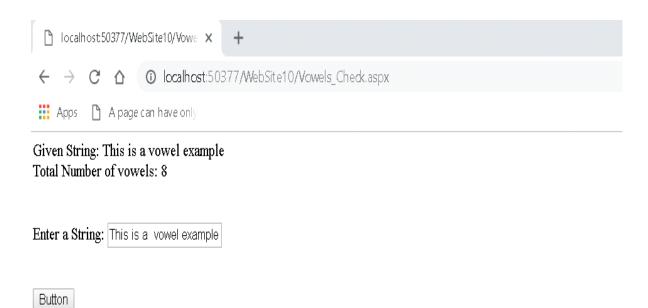




#### (iii) Test for vowels.

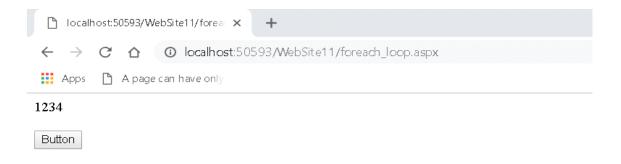
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class Vowels_Check : System.Web.UI.Page
{
    protected void Button1_Click(object sender, EventArgs e)
    {
        String ch;
        int count = 0;
        ch = TextBox1.Text;
        for (int i = 0; i < ch.Length; i++)</pre>
        {
       if ((ch.Substring(i, 1) == "a") || (ch.Substring(i, 1) == "e") ||
(ch.Substring(i, 1) == "i") \mid (ch.Substring(i, 1) == "o") \mid (ch.Substring(i, 1) ==
"u"))
            {
                count++;
            }
    }
        Response.Write("Given String:\n" + ch+"<br>");
        Response.Write("Total Number of vowels:\n" + count+"<br>");
        Response.Write("<br>");
```

```
Response.Write("<br>");
}
```



### (iv) Use foreach loop with arrays.

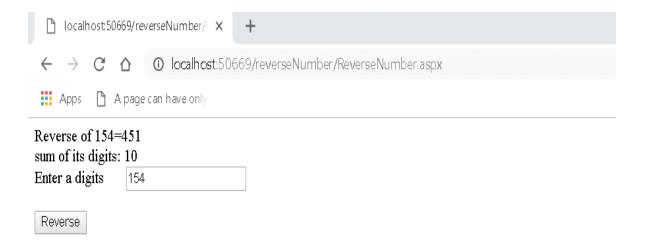
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class foreach_loop : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        int[] a = { 1, 2, 3, 4 };
        foreach (int x in a)
            Response.Write(x);
    }
}
```



#### (v). Reverse a number and find sum of digits of a number.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class ReverseNumber : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        int num, actualnumber, revnum = 0, digit, sumDigits = 0;
        num = int.Parse(TextBox1.Text);
        actualnumber = num;
        while (num > 0)
        {
            digit = num % 10;
            revnum = revnum * 10 + digit;
            sumDigits = sumDigits + digit;
            num = num / 10;
        }
        Response.Write("Reverse of\n" + actualnumber + "=" + revnum+"<br>");
```

```
Response.Write("sum of its digits:\n" + sumDigits + "<br>");
}
```

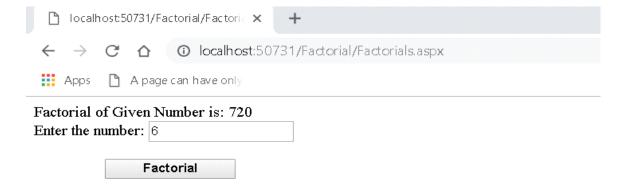


## 2. Working With Object Oriented C# And ASP.NET.

# 2(a) Create simple application to perform follwoing 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;
public partial class Factorials : System.Web.UI.Page
{
    protected void Button1_Click(object sender, EventArgs e)
    {
        int i, f=1, num;
        num =Convert.ToInt32(TextBox1.Text);
        for (i = 1; i <=num; i++)</pre>
            f= f * i;
        Response.Write("\nFactorial of Given Number is:\n"+ f);
        Response.Write("<br>");
    }}
```



# (ii) Money Conversion.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class Class1
{
    public double r, e, d;
    public Class1()
    {
        r = 0; e = 0; d = 0;
    }
    public void convertdtor()
    {
        double ev = 60;
        r = d * ev;
    }
    public void convertetor()
    {
        double ev = 80;
        r = e * ev;
    }
    public void convertrtod()
```

```
{
        double ev = 65;
        d = r / ev;
    }
    public void convertrtoe()
    {
        double ev = 80;
        e = r / ev;
    }
}
public partial class Currency_Converter : System.Web.UI.Page
{
    Class1 f1;
    protected void Page_Load(object sender, EventArgs e)
    {
        f1 = new Class1();
    }
    protected void RadioButton2_CheckedChanged(object sender, EventArgs e)
    {
        if (RadioButton2.Checked == true)
        {
            f1.r = Convert.ToInt16(TextBox1.Text);
            f1.convertrtod();
            Response.Write(f1.r + "Rupee" + "=$" + f1.d);
```

```
}
   }
protected void RadioButton1_CheckedChanged(object sender, EventArgs e)
   {
       if (RadioButton1.Checked == true)
       {
           f1.d = Convert.ToInt16(TextBox1.Text);
           f1.convertdtor();
           Response.Write(f1.d + "Dollar" + "=Rs." + f1.r);
       }
   }
   protected void RadioButton3_CheckedChanged(object sender, EventArgs e)
   {
       if (RadioButton3.Checked == true)
       {
           f1.e = Convert.ToInt16(TextBox1.Text);
           f1.convertetor();
           Response.Write(f1.e + "Euro" + "=Rs." + f1.r);
       }
   }
   protected void RadioButton4_CheckedChanged(object sender, EventArgs e)
   {
       if (RadioButton4.Checked == true)
       {
           f1.r = Convert.ToInt16(TextBox1.Text);
```

```
f1.convertrtoe();
    Response.Write(f1.r + "=Rs. to Euro" + f1.e);
}
}
```



# (iii) Quadratic Equation

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class Quadraticroots
    public double a, b, c, r1, r2;
    public double compute()
    {
        int m;
        double d1;
        d1 = b * b - 4 * a * c;
        if (d1 == 0)
        {
            r1 = r2 = (-b) / (2 * a);
            return d1;
        else if (d1 > 0)
            r1 = (-b + Math.Sqrt(d1)) / (2 * a);
            r2 = (-b - Math.Sqrt(d1)) / (2 * a);
            return d1;
        }
        else
            r1 = (-b) / (2 * a);
            r2 = Math.Sqrt(-d1) / (2 * a);
            return d1;
        }
    }
}
namespace practical
{
    public partial class Qudratic_equation : System.Web.UI.Page
    {
        Quadraticroots q;
        protected void Page_Load(object sender, EventArgs e)
        {
            q = new Quadraticroots();
```

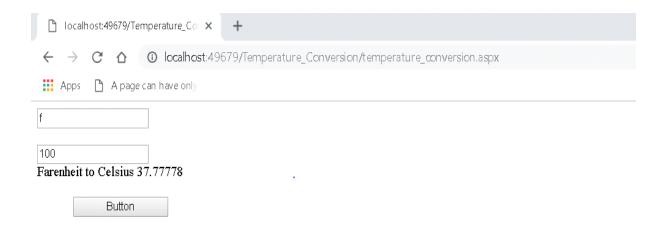
```
}
        protected void Button1_Click(object sender, EventArgs e)
            q.a = Convert.ToInt16(TextBox1.Text);
            q.b = Convert.ToInt16(TextBox2.Text);
            q.c = Convert.ToInt16(TextBox3.Text);
            double d = q.compute();
            if (d == 0)
            {
                Response.Write("\n Roots are Real and Equal<br>>");
                Response.Write("First root and second root is" + q.r1);
            else if (d > 0)
                Response.Write("\nRoots are Real and Distinct<br>");
                Response.Write("\nFirst Root is" + q.r1 + "<br>");
                Response.Write("\nSecond Root is" + q.r2 + "<br>");
            }
            else
            {
                Response.Write("\nRoots are Imaginary <br>");
                Response.Write("\nFirst Roots is"+q.r1+"<br>");
                 Response.Write("\nSecond Roots is"+q.r2+"<br>");
            }
        }
   }
}
```



## (iv) Temperature Conversion.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class converttemp
{
    public float celsius, faren;
    public converttemp()
    {
        celsius = 0;
        faren = 0;
    }
    public void converttofaren()
    {
        faren = ((celsius * 9.0f / 5.0f) + 32.0f);
    }
    public void converttocel()
    {
        celsius = (faren - 32) * (5.0f / 9.0f);
    }
}
public partial class temperature_conversion : System.Web.UI.Page
```

```
{
    converttemp c;
    protected void Page_Load(object sender, EventArgs e)
    {
        c = new converttemp();
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        char ch;
        ch = Convert.ToChar(TextBox1.Text);
        if (ch == 'c')
        {
            c.celsius = float.Parse(TextBox2.Text);
            c.converttofaren();
            Label1.Text = "Celsius to Farenheit\n" + c.faren;
        }
        else
        {
            c.faren = float.Parse(TextBox2.Text);
            c.converttocel();
            Label1.Text="Farenheit to Celsius\n"+c.celsius;
        }
    }
}
```

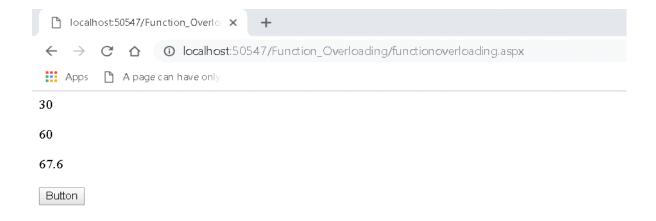


# 2 Woriking With Object Oriented C# and ASP.NET.

- (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;
class overloading
{
    public int sum(int a, int b)
    {
        int x;
        return x = a + b;
    }
    public int sum(int a, int b, int c)
    {
        int y;
        return y = a + b + c;
    }
    public float sum(float a, float b)
    {
        float u;
```

```
return u = a + b;
    }
    public float sum(float a, float b, float c)
    {
        float v;
        return v = a + b + c;
    }
}
public partial class functionoverloading : System.Web.UI.Page
{
    overloading o;
    protected void Page_Load(object sender, EventArgs e)
    {
        o = new overloading();
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        Label1.Text = Convert.ToString(o.sum(10, 20));
        Label2.Text = Convert.ToString(o.sum(10, 20, 30));
        Label3.Text = Convert.ToString(o.sum(12.0f, 23.1f, 32.5f));
    }
}
```



# (ii) Inheritance (All Types)

### **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 basec
{
    public int d;
    public string basemethod()
        string p = "This is baseclass method";
        return p;
    }
}
public class Derived : basec
{
    public string derivedmethod()
    {
        string s = "This is derivedclassmethod";
        return s;
    }
```



Calling from base class object: This is baseclass method

Calling from derived class object:

This is baseclass method

This is derived class method

### **Multi Level Inheritance**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class A
{
    public string show()
    {
        return ("First base Class");
    }
}
class B : A
{
    public string display()
    {
        return ("Second base Class");
    }
}
class C : B
{
    public string show1()
    {
```

```
return "Child Class";
    }
}
public partial class MultiLevelInheritance : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        C obj = new C();
        Response.Write(obj.show() + "<br>");
        Response.Write(obj.display() + "<br>");
        Response.Write(obj.show1() + "<br>");
    }
}
```



# **Multiple Inheritance**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class Shape
{
    public int side;
    public void setSide(int s)
    {
        side = s;
    }
}
public interface Cost
{
    int getCost(int area);
}
class square : Shape, Cost
{
    public int getArea()
    {
        return (side * side);
    }
```

```
public int getCost(int area)
    {
        return area * 10;
    }
}
public partial class MULTIPLE_INHERITANCE : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        square sq = new square();
        int area;
        sq.setSide(15);
        area = sq.getArea();
        Label1.Text = "Area:" + area;
        int c = sq.getCost(area);
        Label2.Text = "Cost is Rs:" + c;
    }
}
```

C	local	host:5	50671/mi	ultipleinheritar × +		
$\leftarrow$	$\rightarrow$	C	$\triangle$			
Apps A page can have only						
	a:225 t is Rs	s:225	0			

### **Hierarchical Inheritance**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class A
{
    public string show()
    {
        return "Welcome";
    }
}
class B : A
{
    public string display()
    {
        return "to the World";
    }
}
class C : A
{
    public string show1()
    {
```

```
return "Of Programming";
    }
}
public partial class HIERARCHICAL_INHERITANCE : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        C c1 = new C();
        B b1 = new B();
        string s = "";
        s += c1.show();
        s += b1.display();
        s += c1.show1();
        Label1.Text=s;
    }
}
```

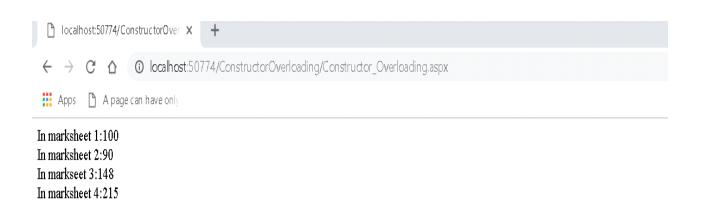


# (iii) Constructor overloading

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class MarkSheet
{
    private float m1, m2, m3;
    string name;
    public MarkSheet()
    {
        m1 = 20;
        m2 = 40;
        m3 = 40;
    }
    public MarkSheet(float ms)
    {
        m1 = ms;
    }
    public MarkSheet(float ms1, float ms2)
    {
        m1 = ms1;
        m2 = ms2;
```

```
}
    public MarkSheet(float ms1, float ms2, float ms3)
    {
        m1 = ms1;
        m2 = ms2;
        m3 = ms3;
    }
    public float tot()
    {
        float t = m1 + m2 + m3;
        return t;
    }
}
public partial class Constructor_Overloading : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        MarkSheet a = new MarkSheet();
        MarkSheet b = new MarkSheet(90);
        MarkSheet c = new MarkSheet(88, 60);
        MarkSheet d = new MarkSheet(70, 90, 55);
        Response.Write("In marksheet 1:");
```

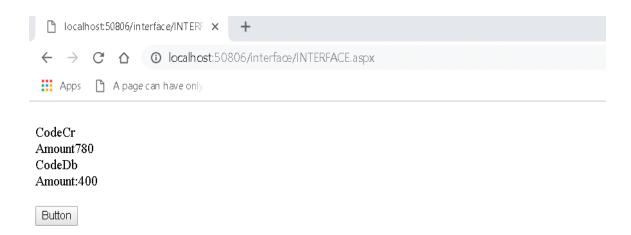
```
Response.Write(a.tot() + "<br>");
Response.Write("In marksheet 2:");
Response.Write(b.tot() + "<br>");
Response.Write("In markseet 3:");
Response.Write(c.tot() + "<br>");
Response.Write("In marksheet 4:");
Response.Write(d.tot() + "<br>");
}
```



## (iv) Interface

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public interface ITransactions
{
    string retcode();
    double amtfunc();
}
public class Transaction : ITransactions
{
    private string tCode;
    private double amount;
    public Transaction()
    {
        tCode = "";
        amount = 0.0;
    }
    public Transaction(string c, double a)
    {
        tCode = c;
        amount = a;
```

```
}
    public double amtfunc()
    {
        return amount;
    }
    public string retcode()
    {
        return tCode;
    }
}
public partial class INTERFACE : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        Transaction t1 = new Transaction("Cr", 780.00);
        Transaction t2 = new Transaction("Db", 400.00);
        Response.Write("<br>Code" + t1.retcode());
        Response.Write("<br>Amount" + t1.amtfunc());
        Response.Write("<br>Code" + t2.retcode());
        Response.Write("<br>Amount:" + t2.amtfunc());
    }
}
```



# 2(c). Create simple applicaion 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 partial class Delegates_Events : System.Web.UI.Page
{
    public delegate void SimpleDelegate();
    public void callingFunction()
    {
        Response.Write("First Function Called....<br>");
    }
    public void secfunction()
{
    Response.Write("Second Function Called...<br>");
}
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
```

```
{
    SimpleDelegate sd = new SimpleDelegate(callingFunction);
    sd();
    sd += new SimpleDelegate(secfunction);
    sd();
}
```



First Function Called....

First Function Called....

Second Function Called...

# (ii) Exception Handling

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
class NegativeException : Exception
{
    public NegativeException(string msg)
        : base(msg)
    {
    }
}
public partial class Exception_Handling : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Button1_Click(object sender, EventArgs e)
    {
        int num;
        try
        {
            num = int.Parse(TextBox1.Text);
```

Negative Number							
	Apps A page can have only						
(	<del>(</del> →	C	$\triangle$	① localhost:50860/ExceptionHandling/Exception_Handling.aspx			
	loca	alhost:	50 <b>8</b> 60/Ex	reptionHandlin <b>X</b> +			

Treguitre Trumber

-20

Practical No:	Date:

# Practical 3(b).Demonstrate the use of Calendar control to perform following operations.

- a) Display messages in a calendar control.
- b) Display vacation in a calendar control
- c) Select Day in calendar control using style.
- d) Difference between two calendar dates.

Calndrctrl.	aspx
-------------	------

Your selected date : Label Today's Date : Label

Ganpati Vacation Start: Label

Days Remaining For Ganpati Vacation: Label

Days remeaning for new year : Label

Result Reset

Practical No:

# Calender properties set for this example:

<asp:Calendar ID="Calendar1" runat="server"
BackColor="#FFFFCC"</pre>

BorderColor="#FFCC66" BorderWidth="1px" DayNameFormat="Shortest"

Font-Names="Verdana" Font-Size="8pt" ForeColor="#663399" Height="200px"

NextPrevFormat="ShortMonth"
OnDayRender="Calendar1\_DayRender"

ShowGridLines="True" Width="300px"

OnSelectionChanged="Calendar1\_SelectionChanged" >

<DayHeaderStyle BackColor="#FFCC66" Font-Bold="True"
Height="1px" /> <NextPrevStyle BorderStyle="Solid"
BorderWidth="2px" Font-Size="9pt"
ForeColor="#FFFFCC"/>

<OtherMonthDayStyle BackColor="#FFCC99" BorderStyle="Solid"</pre>

ForeColor="#CC9966" />

<SelectedDayStyle BackColor="Red" Font-Bold="True" /> <SelectorStyle BackColor="#FFCC66" /> Date:

#### calndrCtrl.aspx.cs

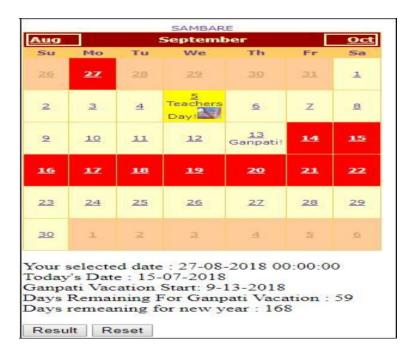
```
protected void btnResult_Click(object sender, EventArgs e)
 {
  Calendar1.Caption = "SAMBARE";
  Calendar1.FirstDayOfWeek =
   FirstDayOfWeek.Sunday;
  Calendar1.NextPrevFormat =
  NextPrevFormat.ShortMonth;
  Calendar1.TitleFormat = TitleFormat.Month;
  Label2.Text = "Todays
   Date"+Calendar1.TodaysDate.ToShortDateString();
  Label3.Text = "Ganpati Vacation Start: 9-13-2018";
  TimeSpan d = new DateTime(2018, 9, 13) -
  DateTime.Now:
  Label4.Text = "Days Remaining For Ganpati
  Vacation:"+d.Days.ToString(); TimeSpan d1 = new
  DateTime(2018, 12, 31) - DateTime.Now; Label5.Text
   = "Days Remaining for New Year:"+d1.Days.ToString();
   if (Calendar1.SelectedDate.ToShortDateString() == "9-13-
    2018")
    Label3.Text = "<b>Ganpati Festival Start</b>";
    if (Calendar1.SelectedDate.ToShortDateString() == "9-23-
    2018")
```

```
Label3.Text = "<b>Ganpati Festival End</b>";
}
protected void Calendar1_DayRender(object sender,
System.Web.UI.WebControls.DayRenderEventArgs e)
{
 if (e.Day.Date.Day == 5 && e.Day.Date.Month == 9)
 {
   e.Cell.BackColor = System.Drawing.Color.Yellow;
   Label lbl = new Label();
   lbl.Text = "<br>>Teachers Day!";
   e.Cell.Controls.Add(lbl);
   Image g1 = new Image();
   g1.ImageUrl = "td.jpg";
   g1.Height = 20;
   g1.Width = 20;
   e.Cell.Controls.Add(g1);
```

```
}
   if (e.Day.Date.Day == 13 && e.Day.Date.Month == 9)
   {
    Calendar 1. Selected Date = new
    DateTime(2018, 9, 12);
    Calendar 1. Selected Dates. Select Range (Calenda
    r1.SelectedDate,
Calendar1.SelectedDate.AddDays(10));
    Label lbl1 = new Label();
    lbl1.Text = "<br>Ganpati!";
    e.Cell.Controls.Add(lbl1);
   }
 }
 protected void btnReset_Click(object sender, EventArgs e)
 {
   Label1.Text = "";
   Label2.Text = "";
   Label3.Text = "";
   Label4.Text = "";
   Label5.Text = "";
   Calendar1.SelectedDates.Clear();
 }
```

```
protected void Calendar1_SelectionChanged(object sender,
EventArgs e)
{
   Label1.Text = "Your Selected Date:" +
   Calendar1.SelectedDate.Date.ToString();
}
```

# **OUTPUT**



# Practical 3(c). Demonstrate the use of Treeview control perform following operations.

### a) Treeview control and datalist b) Treeview operations

Add XML File

Website -> Add -> XML File and Name it 'stdetail'.

#### stdetail.xml

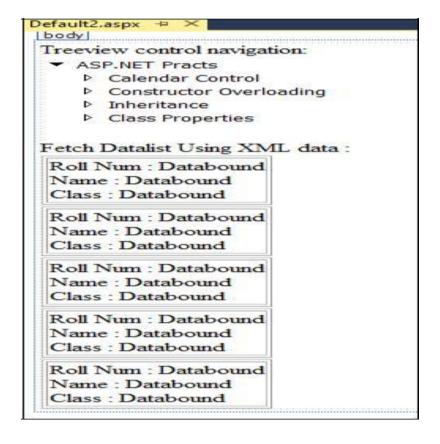
```
<?xml version="1.0" encoding="utf-8" ?>
<studentdetail>
<student>
 <sid>1</sid>
 <sname>Tushar</sname>
 <sclass>TYIT</sclass>
</student>
<student>
 <sid>2</sid>
 <sname>Sonali
 <sclass>TYCS</sclass>
</student>
<student>
 <sid>3</sid>
 <sname>Yashashree</sname>
 <sclass>TYIT</sclass>
</student>
<student>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

```
<sid>4</sid>
<sname>Vedshree</sname>
<sclass>TYCS</sclass>
</student>
</studentdetail>
```

#### **Default2.aspx**

```
<form id="form1" runat="server">
<div>
Treeview control navigation:<asp:TreeView ID = "TreeView1" runat
= "server" Width = "150px" ImageSet="Arrows">
<HoverNodeStyle Font-Underline="True"</pre>
ForeColor="#5555DD" /> <Nodes>
<asp:TreeNode Text = "ASP.NET Practs" Value = "New Node">
<asp:TreeNode Text = "Calendar Control" Value = "RED"</pre>
NavigateUrl="~/calndrCtrl.aspx"> </asp:TreeNode>
<asp:TreeNode Text = "Constructor Overloading" Value = "GREEN"</pre>
NavigateUrl="~/clsconstrc.aspx"> </asp:TreeNode>
<asp:TreeNode NavigateUrl="~/singleInh.aspx" Text="Inheritance"</pre>
Value="BLUE"></asp:TreeNode>
<asp:TreeNode NavigateUrl="~/clsProp.aspx" Text="Class</pre>
Properties" Value="Class Properties"></asp:TreeNode>
</asp:TreeNode>
</Nodes>
```

```
<NodeStyle Font-Names="Tahoma" Font-Size="10pt"
ForeColor="Black" HorizontalPadding="5px"
NodeSpacing="0px" VerticalPadding="0px" />
  <ParentNodeStyle Font-Bold="False" />
  <SelectedNodeStyle Font-Underline="True"</pre>
ForeColor="#5555DD" HorizontalPadding="0px"
VerticalPadding="0px" /> </asp:TreeView>
<br />
Fetch Datalist Using XML data:
</div> <asp:DataList
ID="DataList1" runat="server">
    <ItemTemplate>
Roll Num : <%# Eval("sid") %><br />
      Name : <%# Eval("sname") %><br />
      Class: <%# Eval("sclass")%>
     </ItemTemplate>
</asp:DataList>
```

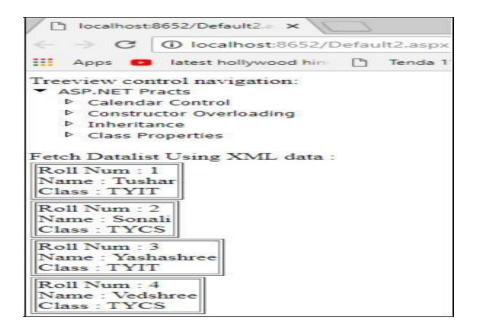


## **Default2.aspx.cs**

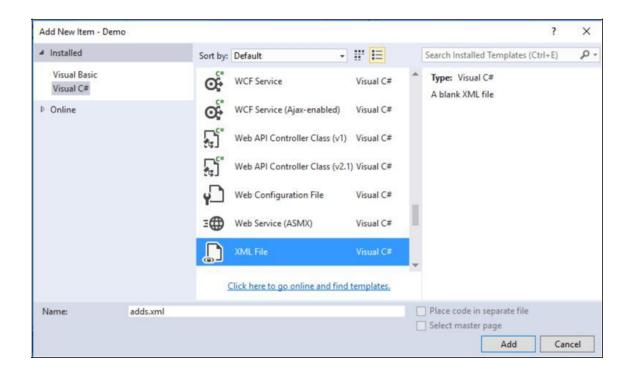
```
using System.Data;
public partial class _Default :
System.Web.UI.Page {
 protected void Page_Load(object sender, EventArgs e)
   if (!IsPostBack)
   {
    BindData();
 }
 protected void BindData()
   DataSet ds = new DataSet();
   ds.ReadXml(Server.MapPath("stdetail.xml"));
   if (ds != null && ds.HasChanges())
   {
      DataList1.DataSource = ds;
      DataList1.DataBind();
   }
   else
     DataList1.DataBind();
```

}

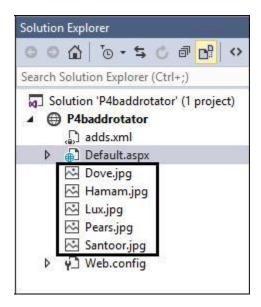
### **OUTPUT**



# Practical 4(b).Create Web Form to demonstrate use of Adrotator Control. Add a XML file, name it "adds.xml"



Add images to test out the adrotator functionality.



#### **XML File**

```
<Advertisements>
<Ad>
<ImageUrl>rose1.jpg</ImageUrl>
<NavigateUrl>http://www.1800flowers.com/NavigateUrl>
<AlternateText>
Order flowers, roses, gifts and more
</AlternateText>
<Impressions>20</Impressions>
<Keyword>flowers</Keyword>
</Ad>
<Ad>
<ImageUrl>rose2.jpg</ImageUrl>
<NavigateUrl>http://www.babybouquets.com.a
u</NavigateUrl> <AlternateText>Order roses
and flowers</AlternateText>
<Impressions>20</Impressions>
<Keyword>gifts</Keyword>
</Ad>
```

```
<Ad>
<ImageUrl>rose3.jpeg</ImageUrl>
<NavigateUrl>http://www.flowers2moscow.co
m</NavigateUrl> <AlternateText>Send flowers
to Russia</AlternateText>
<Impressions>20</Impressions>
```

<Keyword>russia</Keyword>

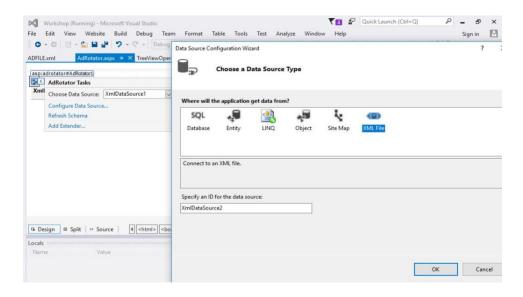
</Ad>

</Advertisements>

### **Default.aspx**

<asp:AdRotator ID="AdRotator1" runat="server"
DataSourceID="XmlDataSource1" />

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



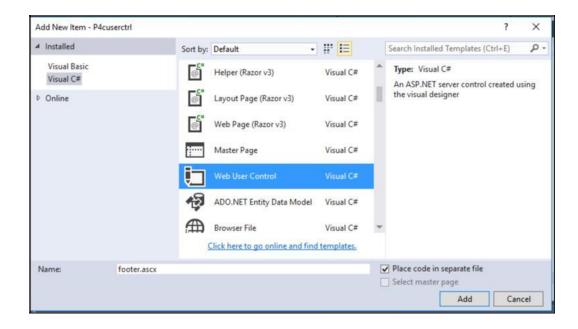
# **OUTPUT:**



# Practical 4(c).Create Web Form to demonstrate use User Controls.

Add Web User Control

Website -> Add -> Web User Control and Name it 'MyUserControl.



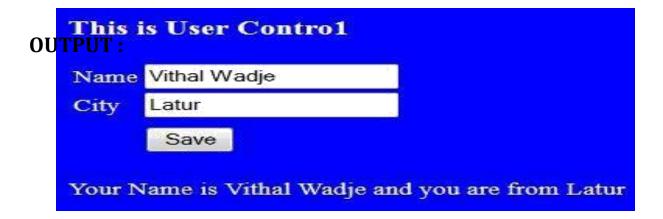
### MyUserControl.ascx

```
<%@ Control Language="C#"
AutoEventWireup="true"
CodeFile="MyUserControl.ascx.cs"
Inherits="MyUserControl" %> <h3>This is User
Contro1 </h3> 
Name
<asp:TextBox ID="txtName"
runat="server"></asp:TextBox> 
City
="txtcity"
runat="server"></asp:TextBox>
```

## MyUserControl.ascx.cs

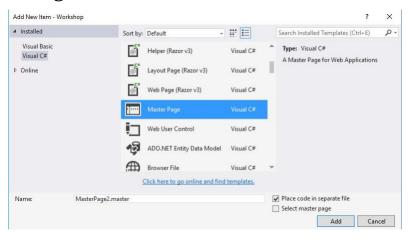
```
protected void txtSave_Click(object sender, EventArgs e)
  Label1.Text = "Your Name is " + txtName.Text + " and
you are from " + txtcity.Text;
 }
UserControlDisplay.aspx
<@ Page Language="C#" AutoEventWireup="true"
CodeFile="UserControlDisplay.aspx.cs"
Inherits="UserControlDisplay" %>
<@@ Register Src="~/MyUserControl.asc TagPrefix="uc"
TagName="Student"%>
<!DOCTYPE html>
<html
xmlns="http://www.w3.org/1999/x
html"> <head runat="server">
 <title></title>
</head>
<body>
 <form id="form1" runat="server">
 <div>
 <uc:Student ID="studentcontrol" runat="server" />
```

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

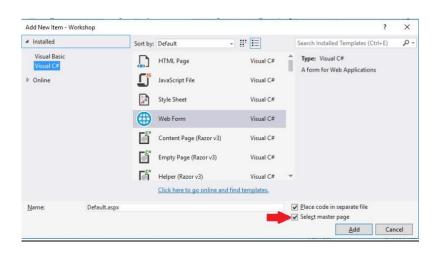


# Practical 5(b). Create a web application to demonstrate use of Master Page with applying Styles and Themes for page beautification.

### **Adding Master Page**



## Adding Web page For Master page



### **MasterPage.master**

```
<%@ Master Language="C#"</pre>
AutoEventWireup="true"
CodeFile="MasterPage.master.cs"
Inherits="MasterPage" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>Master Page Demo</title>
  <link href="css/my.css" rel="stylesheet" />
  <asp:ContentPlaceHolder ID="head" runat="server">
  </asp:ContentPlaceHolder>
  <style type="text/css">
     .auto-style1 {
       position: absolute;
       top: 373px;
       left: 1028px;
       bottom: 303px;
     }
     .auto-style2 {
       position: absolute;
```

```
top: 537px;
left: 1016px;
z-index: 1;
}
</style>
</head>
```

```
<body>
  <!DOCTYPE html>
  <form id="form1" runat="server">
<html>
<head>
  <title>Master</title>
  <link rel="stylesheet" type="text/css"</pre>
  href="StyleSheet.css">
</head>
<body>
<header id="header">
<h1>Demo Of Master Page</h1>
</header>
<nav id="nav">
  <l
    <a href="home.aspx">Insight</a>
    <a href="#">Products</a>
    <a href="#">Downloads</a>
    <a href="#">Contact Us</a>
  </nav>
```

```
<aside
id="side">
<h1>Info</
       h1>
  <a href="#">Product Type 1</a>
  <a href="#">Product Type 2</a>
  <a href="#">Product Type 3<a
href="#"><asp:ScriptManager ID="ScriptManager1"</pre>
runat="server">
    </asp:ScriptManager>
    </a>
  <asp:Button ID="Button2" runat="server"</pre>
CssClass="auto-style1" style="z-index: 1"
Text="Button" />
  <asp:Button ID="Button1" runat="server"</pre>
  CssClass="auto-style2" Text="Button" />
</aside>
  <div id="con">
```

### MasterDisplay.aspx

```
<%@ Page Title="" Language="C#"</pre>
MasterPageFile="~/MasterPage.master"
AutoEventWireup="true"
CodeFile="MasterDisplay.aspx.cs"
Inherits="MasterDisplay" %>
<asp:Content ID="Content1"</pre>
ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2"
  ContentPlaceHolderID="ContentPlaceHolder1"
  runat="server"> <h1>Home page</h1>
</asp:Content>
StyleSheet.css
#header{
  color: blueviolet;
  text-align: center;
  font-size: 20px;
}
#nav{
  background-color:darkseagreen;
```

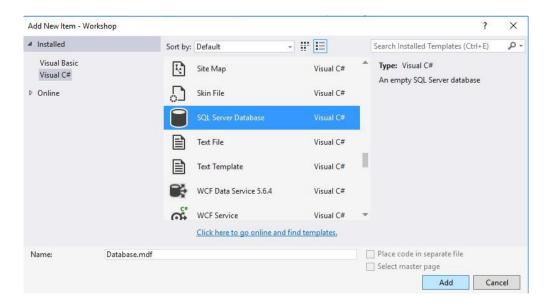
```
padding: 5px;
}
ul{
  list-style-type: none;
li a {
  color:crimson ;
font-size: 30px;
column-width: 5%;
  }
  li
  {
  display: inline;
  padding-left: 2px;
  column-width: 20px;
  }
 a{
text-decoration: none;
margin-left:20px
  }
```

```
li a:hover{
background-color: aqua;
color:coral ;
padding:1%;
#side{
text-align: center;
float: right;
width: 15%;
padding-bottom: 79%;
background-color: #F1FAEE;
}
#article{
background-color: burlywood;
padding: 10px;
padding-bottom: 75%;
}
#footer{
background-color: #C7EFCF;
text-align:center;
padding-bottom: 5%;
```

```
font-size: 20px;
}
#con{
  border:double;
  border-color:burlywood;
}
```

# \*\*\*Database Practicals\*\*\*\*\*\*\*

Here we to add new database in our website, as shown below. Add this database inside App\_Data folder.

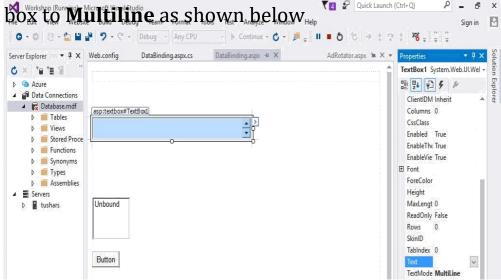




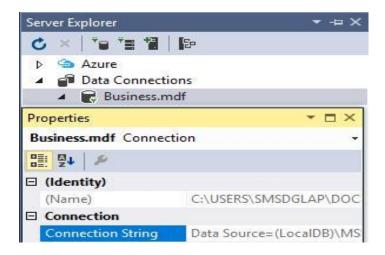
Practical No:	Date:

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

1. Create a webpage with one **Button**, one Multiline TextBox and one list box with setting **TextMode** Property of text



2. Write the Database related code in code behind C# file as given below.



3. Add this string to configuration file (web.config) as given below.

## Web.confing

Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename='C:\Us
ers\tushars\Documents\Visual Studio

2015\WebSites\Workshop\App\_Data\Database.mdf';Integra
ted Security=True" />

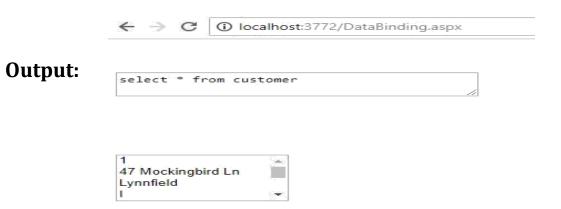
</connectionStrings>

</configuration>

4. Now use the following code C# in Default.aspx.cs (**Note** : First write following using statements at the top of file

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;
public partial class DataBinding : System.Web.UI.Page
{
  protected void Button1 Click(object sender,
  EventArgs e)
  {
     string connStr =
ConfigurationManager.ConnectionStrings["connStr"].Con
nectionString;
```

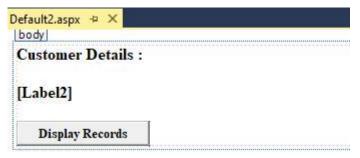
```
SqlConnection con = new
     SqlConnection(connStr);
     con.Open();
     SqlCommand cmd = new
     SqlCommand(TextBox1.Text,
     con); SqlDataReader reader =
     cmd.ExecuteReader();
     ListBox1.Items.Clear();
    while (reader.Read())
     {
       //To add new blank line in the text area
       for (int i = 0; i < reader.FieldCount - 1;</pre>
       i++)
       {
          ListBox1.Items.Add(reader[i].ToString());
       }
     }
     reader.Close();
     con.Close();
  }
}
```



Button

# Practical 6 (b): Create a web application to display records by using database.

Create a web page with following design:



```
protected void Button1_Click(object sender, EventArgs
e)
    {
        string connStr =
        ConfigurationManager.ConnectionStrings["connStr"].Con
        nectionString;
        SqlConnection con = new SqlConnection(connStr);
        SqlCommand cmd = new SqlCommand("Select
        City, State from Customer", con);
        con.Open();
        SqlDataReader reader = cmd.ExecuteReader();
```

```
while (reader.Read())
     {
     Label1.Text += reader["City"].ToString() +
                          reader["State"].ToString() +
"<br>";
     }
     reader.Close();
     con.Close();
   }
```

#### ← → C O localhost:3772/DisplayRecords.aspx

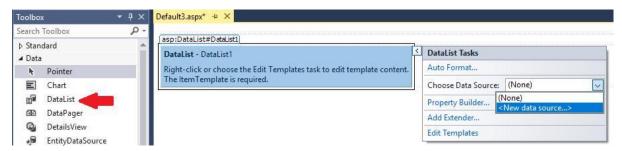
Customer Details

LabelLynnfield MA Woburn MA Quincy MA Waltham MA Display H Waltham MA Wilmington MA Salem NH

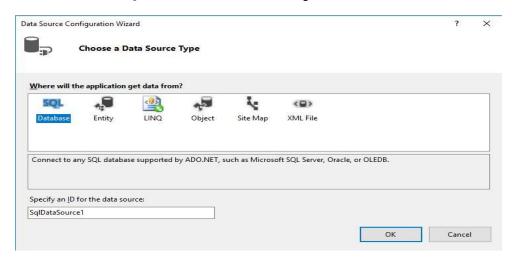
Output: Newton MA Salem NH Wilmington MA Salem NH Quincy MA

### Practical 6 (c): Demonstrate the use of Datalist link control.

- 1. Drag the Datalist control to our web page form toolbox->Data-> Datalist.
- 2. Then select **Choose Data Source** Option and select **<New Data Source>.**



3. Now Select SQL Database from options and Click Ok button.



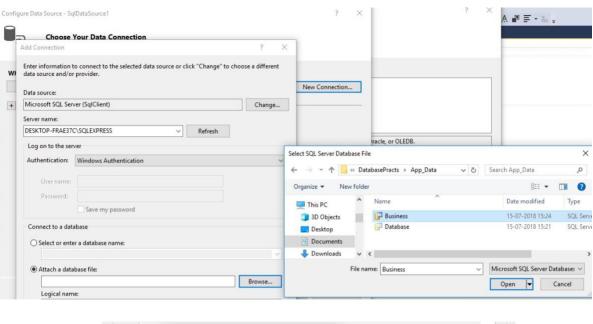
4. In next window click on New Connection button.

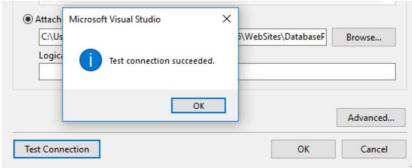
5. In add connection window Select the available SQL Server Name

6. Keep the Authentication as Windows Authentication.

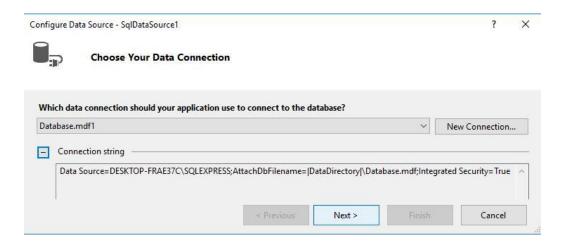
7. After that select Attach a Database file radio button. Here we have to select the database that we have created in our application. (Usually it will be in Documents folder under Visual Studio 2015/ Websites).

- 8. After selection of Database file. We can also Test the connection.
- 9. Then Click on OK button.



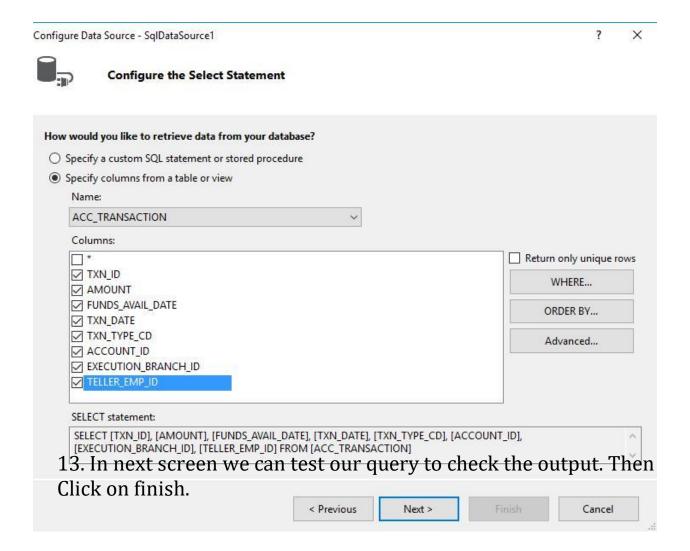


### 10. Once the Connection is made then click on Next button from Data Source Wizard.



11. Then wizard ask for saving the connection string in configuration file. If you already stored it web.config file then uncheck check box, if you haven't, then select the checkbook. Then click on next button.

12. The next screen gives option to configure the select statement. Here we can choose the table as well as configure the select statement as we need to display the data on web page.



Practical No:	Date:
After successful steps form the Datalist controls option wizard web page design and output will look like following.	our



TXN ID: 1 AMOUNT: 100

FUNDS\_AVAIL\_DATE: 1/15/2000 12:00:00 AM

TXN\_DATE: 1/15/2000 12:00:00 AM TXN\_TYPE\_CD: CDT

ACCOUNT ID: 1

EXECUTION BRANCH ID:

TELLER\_EMP\_ID:

TXN\_ID: 2 AMOUNT: 100

FUNDS\_AVAIL\_DATE: 1/15/2000 12:00:00 AM

TXN\_DATE: 1/15/2000 12:00:00 AM

TXN TYPE CD: CDT ACCOUNT\_ID: 2

EXECUTION\_BRANCH\_ID:

TELLER\_EMP\_ID:

TXN\_ID: 3 AMOUNT: 100

FUNDS\_AVAIL\_DATE: 6/30/2004 12:00:00 AM

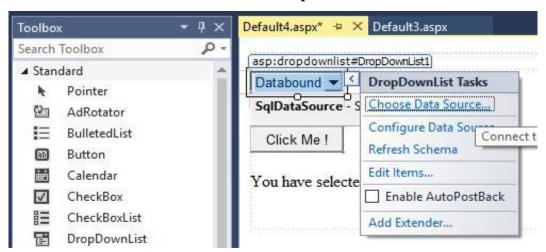
TXN\_DATE: 6/30/2004 12:00:00 AM

TXN\_TYPE\_CD: CDT ACCOUNT\_ID: 3 EXECUTION\_BRANCH\_ID:

TELLER\_EMP\_ID:

# Practical 7 (a): Create a web application to display Databinding using Dropdownlist control.

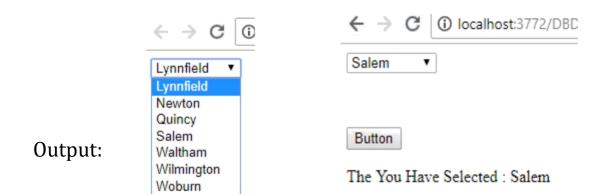
- 1. Create a web page with DropDownList control, one Button and one Label control.
- 2. Use code to bind the data to DropDownList.



#### 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.Configuration;
public partial class DBDropDown : System.Web.UI.Page
{
  protected void Page_Load(object sender, EventArgs
  e)
  {
     if (IsPostBack == false)
     {
       string connStr =
```

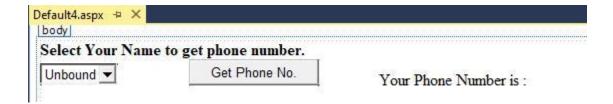
```
ConfigurationManager.ConnectionStrings["connStr"].Con
nectionString;
       SqlConnection con = new
       SqlConnection(connStr);
       SqlCommand cmd = new SqlCommand("Select
       Distinct City from Customer", con);
       con.Open();
       SqlDataReader reader = cmd.ExecuteReader();
       DropDownList1.DataSource = reader;
       DropDownList1.DataTextField = "City";
       DropDownList1.DataBind();
       reader.Close();
       con.Close();
     }
  }
  protected void Button1 Click(object sender,
  EventArgs e)
  {
     Label1.Text = "The You Have Selected : " +
    DropDownList1.SelectedValue;
}
```



Practical No:	Date:

## Practical 7 (b): Create a web application for to display the Postal Code no of Customer using database.

Create a web page with DropDownList, Button and with Label control as shown below.



#### 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.Configuration;
```

```
public partial class PostalCodeByCity :
System.Web.UI.Page
{
  protected void Button1 Click(object sender,
  EventArgs e)
  {
     Label1.Text = ListBox1.SelectedValue;
  }
  protected void Page Load(object sender, EventArgs
  e)
  {
     if (IsPostBack == false)
     {
       string connStr =
ConfigurationManager.ConnectionStrings["connStr"].Con
nectionString;
       SqlConnection con = new
       SqlConnection(connStr);
       SqlCommand cmd = new SqlCommand("Select
       Distinct POSTAL CODE from Customer",
con);
       con.Open();
```

```
SqlDataReader reader = cmd.ExecuteReader();
ListBox1.DataSource = reader;
ListBox1.DataTextField = "City";
ListBox1.DataValueField = "POSTAL_CODE";
ListBox1.DataBind();
reader.Close();
con.Close();
}
}
```

### **Output:**



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# Practical 7 (c): Create a web application for inserting and deleting record from a database. (Using Execute-Non Query).

Create a web page with TextBox, and Two Button and one Label control as shown below.

And follow the database related steps same as it is in previous examples.

Bank Addr	ess	
Bank City		
		26
Bank Branc	h Name	
Bank Brand State	h Name	

#### Code of C# Code behind file

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;
public partial class ExecuteNonQuery:
System.Web.UI.Page {
 protected void Button1_Click(object sender, EventArgs e)
 {
  string connStr =
  ConfigurationManager.ConnectionStrings["connStr"].Conne
```

```
ctionString; SqlConnection con = new
  SqlConnection(connStr);
  string InsertQuery = "insert into BRANCH
values(@ADDRESS, @CITY, @NAME, @STATE, @ZIP_CODE)";
  SqlCommand cmd = new SqlCommand(InsertQuery, con);
  cmd.Parameters.AddWithValue("@ADDRESS", TextBox1.Text);
  cmd.Parameters.AddWithValue("@CITY", TextBox2.Text);
  cmd.Parameters.AddWithValue("@NAME", TextBox3.Text);
  cmd.Parameters.AddWithValue("@STATE", TextBox4.Text);
  cmd.Parameters.AddWithValue("@ZIP_CODE", TextBox5.Text);
  con.Open();
  cmd.ExecuteNonQuery();
  Label1.Text = "Record Inserted Successfuly.";
  con.Close();
 }
 protected void Button2_Click(object sender, EventArgs e)
 {
  string connStr =
  ConfigurationManager.ConnectionStrings["connStr"].Conne
  ctionString; SqlConnection con = new
  SqlConnection(connStr);
```

```
string InsertQuery = "delete from branch where
NAME=@NAME";

SqlCommand cmd = new SqlCommand(InsertQuery, con);
cmd.Parameters.AddWithValue("@NAME", TextBox1.Text);
con.Open();
cmd.ExecuteNonQuery();
Label1.Text = "Record Deleted Successfuly.";
con.Close();
}
```

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