PRACTICAL 1

A] AIM: Create an application that obtains four int values from the user and displays the product.

Default.aspx Default.aspx
body
Enter first number :
Enter second number :
Enter third number:
Enter fourth number:
Result Reset
[lblDisplay]

```
<% @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"</p>
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter first number:        
    <asp:TextBox ID="txtOne" runat="server"></asp:TextBox>
    <br /><br />
    Enter second number:
    <asp:TextBox ID="txtTwo" runat="server"></asp:TextBox>
    <br /> <br />
    Enter third number:        
    <asp:TextBox ID="txtThree" runat="server"></asp:TextBox>
    <br /> <br />
    Enter fourth number:      
    <asp:TextBox ID="txtFour" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" />
 
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
    <br/>br />
    <br/>>
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

Control	Properties	Property Values
TextBox1	ID	txtOne
TextBox2	ID	txtTwo

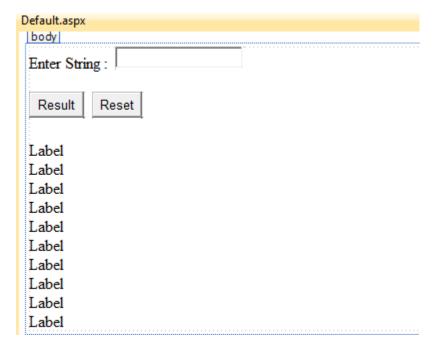
TextBox3	ID	txtThree
TextBox4	ID	txtFour
Label1	ID	lblDisplay
	Text	
Button1	ID	btnResult
	Text	Result
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
         protected void Page_Load(object sender, EventArgs e)
                  txtOne.Focus();
         protected void btnResult_Click(object sender, EventArgs e)
                  int pro;
pro = Convert. To Int 32 (txt One. Text) * Convert. To Int 32 (txt Two. Text) * Convert. To Int 32 (txt Threedom) * Convert. To Int 32 (
                                                                    *Convert.ToInt32(txtFour.Text);
                  lblDisplay.Text = "Result: "+pro.ToString();
         protected void btnReset_Click(object sender, EventArgs e)
                   txtOne.Text = "";
                   txtTwo.Text = "";
                   txtThree.Text = "";
                  txtFour.Text = "";
                  lblDisplay.Text = "";
```

localhost	×	+	-		×
← ბ	()	localhost:573	367/ 🗓	☆	
Enter first num	ber :	123			
Enter second n	umber	: 345			
Enter third nun	nber:	567			
Enter fourth nu	ımber:	789			
Result	et				
Result: <u>180397</u>	9721				

B] AIM: Create an application to demonstrate string operations.



Default.aspx[Source]

```
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter String : 
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br /><br/>
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" />
 
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
    <br /> <br />
<asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
    <asp:Label ID="Label3" runat="server" Text="Label"></asp:Label>
    <br >
```

```
<asp:Label ID="Label4" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label5" runat="server" Text="Label"></asp:Label>
    <br >
    <asp:Label ID="Label6" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label7" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label8" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label9" runat="server" Text="Label"></asp:Label>
    <asp:Label ID="Label10" runat="server" Text="Label"></asp:Label>
    <br/>br />
  </div>
  </form>
</body>
</html>
```

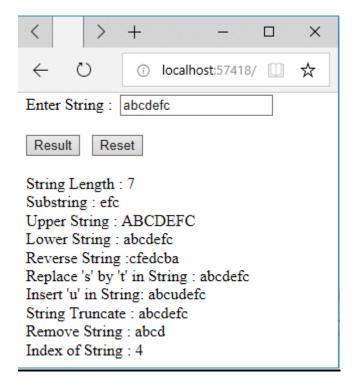
Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	Label1
Label2	ID	Label2
Label3	ID	Label3
Label4	ID	Label4
Label5	ID	Label5
Label6	ID	Label6
Label7	ID	Label7
Label8	ID	Label8
Label9	ID	Label9
Label10	ID	Label10
Button1	ID	btnResult
	Text	Result
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
```

```
protected void btnResult_Click(object sender, EventArgs e)
     String s = TextBox1.Text;
    Label1.Text = "String Length : " + s.Length;
     Label2. Text = "Substring: " + s. Substring(4, 3);
    Label3.Text = "Upper String : " + s.ToUpper();
     Label4.Text = "Lower String: " + s.ToLower();
     String rev = "";
     for (int i = s.Length - 1; i >= 0; i--)
       rev = rev + s[i];
     Label5.Text = "Reverse String:" + rev.ToString();
     Label6.Text = "Replace 's' by 't' in String : " + s.Replace('s', 't');
    Label7.Text = "Insert 'u' in String: " + s.Insert(3, "u");
     Label8.Text = "String Truncate : " + s.Trim();
    Label9.Text = "Remove String: " + s.Remove(4);
     Label10.Text = "Index of String : " + s.IndexOf('e');
  protected void btnReset_Click(object sender, EventArgs e)
    Label1.Text = "";
     Label2.Text = "";
    Label3.Text = "";
     Label4.Text = "";
     Label5.Text = "";
     Label6.Text = "";
    Label7.Text = "";
     Label8.Text = "";
     Label9.Text = "";
    Label10.Text = "";
     TextBox1.Text = "";
  }
Output
```



C] AIM: Write an application that receives the following information from a set of students:

STUDENT ID:

STUDENT NAME:

COURSE NAME:

DATE OF BIRTH:

The application should also display the information of all the students once the data is entered.

Default.aspx[Design]

Default							
body	<u> </u>						
Enter	Stud	lent I	d :				
Enter	r Stud	lent N	Vame	:			
Enter	r Cou	rse N	Jame:				
Date	of Bi	rth:					
<	s	epte	mber	201	8	>	
Мо	Tu	We	Th	Fr	Sa	Su	
27	28	29	30	31	1	2	
3	4	5	6		8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	
1	2	3	4	5	6	7	
Labe Labe Labe Labe Labe	! - 1 1 1	Rese	et				

Default.aspx[Source]

<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits=" Default" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

```
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter Student Id:          
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br /><br />
    Enter Student Name:
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <br /><br />
    Enter Course Name:    
    <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
    <br/>br />
    <br/>
    Date of Birth: <asp:Calendar ID="Calendar1" runat="server" BackColor="#FFFFCC"
      BorderColor="#FFCC66" BorderWidth="1px" DayNameFormat="Shortest"
      Font-Names="Verdana" Font-Size="8pt" ForeColor="#663399" Height="200px"
      ShowGridLines="True" Width="220px">
      <DayHeaderStyle BackColor="#FFCC66" Font-Bold="True" Height="1px" />
      <NextPrevStyle Font-Size="9pt" ForeColor="#FFFFCC" />
      <OtherMonthDayStyle ForeColor="#CC9966" />
      <SelectedDayStyle BackColor="#CCCCFF" Font-Bold="True" />
      <SelectorStyle BackColor="#FFCC66" />
      <TitleStyle BackColor="#990000" Font-Bold="True" Font-Size="9pt"
        ForeColor="#FFFFCC" />
      <TodayDayStyle BackColor="#FFCC66" ForeColor="White" />
    </asp:Calendar>
    <br/>br />
    <asp:Button ID="btnShow" runat="server" onclick=" btnShow_Click "
      Text="Show" />
 
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" style="height: 26px" />
    <br /><br />
    <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
    <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
    <br >
    <asp:Label ID="Label3" runat="server" Text="Label"></asp:Label>
    <br/>br />
    <asp:Label ID="Label4" runat="server" Text="Label"></asp:Label>
    <br/>>
    <asp:Label ID="Label5" runat="server" Text="Label"></asp:Label>
    </div>
  </form>
```

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

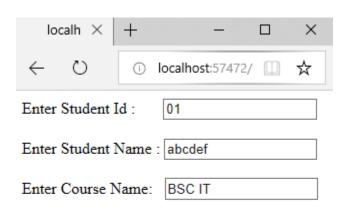
Control	Properties	Property Values
TextBox1	ID	TextBox1
TextBox2	ID	TextBox2
TextBox3	ID	TextBox3
Calendar1	ID	Calendar1
Label1	ID	Label1
Label2	ID	Label2
Label3	ID	Label3
Label4	ID	Label4
Label5	ID	Label5
Button1	ID	btnShow
	Text	Show
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

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

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

```
}
protected void btnShow_Click(object sender, EventArgs e)
  Label1.Text = "You entered: ";
  Label2.Text = "Student Id :" + TextBox1.Text;
  Label3.Text = "Student Name : " + TextBox2.Text;
  Label 4. Text = "Course\ Name:" + Text Box 3. Text;
  Label5.Text = "Date of Birth: " + Calendar1.SelectedDate.ToShortDateString();
}
protected void btnReset_Click(object sender, EventArgs e)
  Label1.Text = "";
  Label2.Text = "";
  Label3.Text = "";
  Label4.Text = "";
  Label5.Text = "";
  TextBox1.Text = "";
  TextBox2.Text = "";
  TextBox3.Text = "";
  Calendar1.SelectedDates.Clear();
}
```



Date of Birth:

≤	September 2018 ≥							
Мо	Tu	We	Th	Fr	Sa	Su		
<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	1	2		
<u>3</u>	4	<u>5</u>	<u>6</u>	7	<u>8</u>	9		
<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>		
<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>		
<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>		<u>30</u>		
1	2	<u>3</u>	4	<u>5</u>	<u>6</u>	7		



You entered: Student Id:01

Student Name : abcdef Course Name : BSC IT Date of Birth : 01-01-0001

D] AIM: Create an application to demonstrate following operations i] Generate Fibonacci series

Default.aspx[Design]

Default.aspxbody
Enter Number :
Fibonacci Series Reset
[lblDisplay]

```
Default.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter Number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>>
    <asp:Button ID="btnFibo" runat="server" onclick="btnFibo_Click"
      Text="Fibonacci Series" />
  
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
    <br/>br />
    <br/>br />
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

Properties

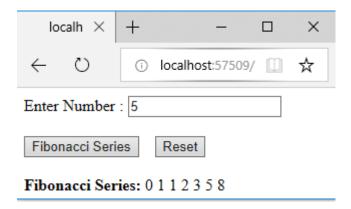
Control	Properties	Property Values
TextBox1	ID	TextBox1

Label1	ID	lblDisplay
	Text	
Button1	ID	btnFibo
	Text	Fibonacci Series
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  protected void btnFibo_Click(object sender, EventArgs e)
    int a, b, c, i, n;
    a = 0;
    b = 1;
    lblDisplay.Text ="<b>Fibonacci Series:</b> "+ a.ToString() + " "+b.ToString();
     n = Convert.ToInt32(TextBox1.Text);
    for (i = 1; i \le n; i++)
       c = a + b;
       lblDisplay.Text = lblDisplay.Text +" "+ c.ToString();
       a = b;
       b = c;
     }
  }
  protected void btnReset_Click(object sender, EventArgs e)
     TextBox1.Text = "";
    lblDisplay.Text = ""; } }
```

Output:-



ii] Test for prime numbers

Default.aspx body	
Enter Number :	
Check Prime Number	Reset
[lblDisplay]	

```
Default.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter Number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnPrime" runat="server" onclick="btnPrime_Click"
      Text="Check Prime Number" />
  
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
```

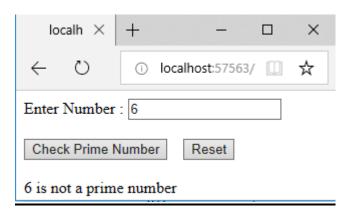
```
<br/>
<br/>
<br/>
<br/>
<asp:Label ID="lblDisplay" runat="server"></asp:Label></div></form></body></html>
```

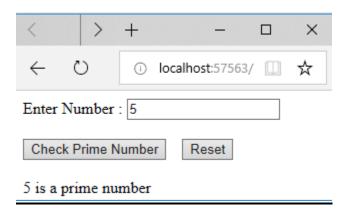
Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	lblDisplay
	Text	
Button1	ID	btnPrime
	Text	Check Prime Number
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  protected void btnPrime_Click(object sender, EventArgs e)
    int i, c = 0, j, num;
    num = Convert.ToInt32(TextBox1.Text);
    for (j = 1; j \le num; j++)
       i = num \% j;
       if (i == 0)
         c = c + 1;
    if (c = 2)
       lblDisplay.Text = num.ToString()+" is a prime number";
    else
```

Output:-





iii] Test for vowel

Default.aspx	
body	
Enter Character:	
Check Vowel or not Rese	et
[lblDisplay]	

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter
    Character:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnVowel" runat="server" onclick="btnVowel_Click"
      Text="Check Vowel or not" />
  
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"</pre>
      Text="Reset" />
    <br/>>
    <br/>br />
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
</body> </html>
```

Properties

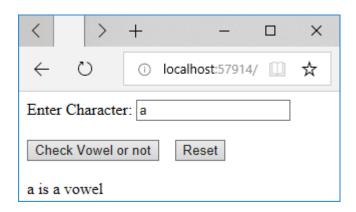
Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	lblDisplay
	Text	
Button1	ID	btnVowel
	Text	Check Vowel or not

Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

```
using System;
 using System.Collections.Generic;
 using System.Ling;
 using System.Web;
 using System.Web.UI;
 using System.Web.UI.WebControls;
 public partial class _Default : System.Web.UI.Page
                protected void btnVowel_Click(object sender, EventArgs e)
                                char c = Convert.ToChar(TextBox1.Text);
                                 if (c == 'a' \parallel c == 'A' \parallel c == 'e' \parallel c == 'E' \parallel c == 'i' \parallel c == 'I' \parallel c == 'o' \parallel c == 'O' \parallel c == 'u' \parallel c == 'u' \parallel c == 'a' \parallel c ==
c == 'U'
                                                  lblDisplay.Text = c.ToString() + " is a vowel";
                                else
                                                  lblDisplay.Text = c.ToString() + " is not a vowel";
                 protected void btnReset_Click(object sender, EventArgs e)
                                 TextBox1.Text = "";
                                lblDisplay.Text = "";
  }
```

Output:-



iv] foreach loop

Default.aspx[Design]

Default.aspx	
body	
Use of foreach loop	
For each loop	Clear
[lblDisplay]	

Default.aspx[Source]

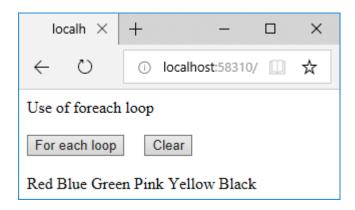
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Use of foreach loop<br/>>
    <br/>br />
    <asp:Button ID="btnForeach" runat="server" onclick="btnForeach_Click"
      Text="For each loop" />
   <asp:Button ID="btnClear" runat="server"
      onclick="btnClear_Click" Text="Clear" />
       
    <br/>br />
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

Properties

Control Properties Property Values	Control	Properties	Property Values
------------------------------------	---------	------------	-----------------

Label1	ID	lblDisplay
	Text	
Button1	ID	btnForeach
	Text	For each loop
Button2	ID	btnClear
	Text	Clear

Default.aspx.cs



v] To find reverse and sum of digits of a number **Default.aspx**[**Design**]

Default.aspx body		
Enter Number :		
Reverse Number	Sum of digit of number	Reset
[lblDisplay]		

```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter Number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnRev" runat="server" onclick="btnRev_Click"
      Text="Reverse Number" />
   
    <asp:Button ID="btnSmd" runat="server" Text="Sum of digit of number"
      onclick="btnSmd_Click"/>
       
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"</pre>
      Text="Reset" />
    <br/>br />
    <br/>br />
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
```

```
</body>
```

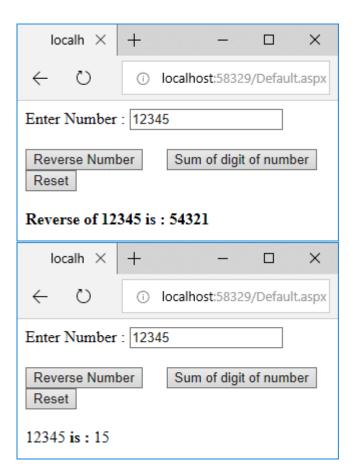
Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	lblDisplay
	Text	
Button1	ID	btnRev
	Text	Reverse Number
Button2	ID	btnSmd
	Text	Sum of digit of number
Button3	ID	btnReset
	Text	Reset

Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void btnRev_Click(object sender, EventArgs e)
    {
        int num, i, rev = 0;
        num = Convert.ToInt32(TextBox1.Text);
        while (num > 0)
        {
            i = num % 10;
            rev = i + rev * 10;
        }
}
```

```
num = num / 10;
    lblDisplay.Text = "<b>Reverse of <b>"+TextBox1.Text+" <b> is:
</b>"+rev.ToString();
  protected void btnSmd_Click(object sender, EventArgs e)
    int num, i, sum = 0;
    num = Convert.ToInt32(TextBox1.Text);
    while (num > 0)
       i = num \% 10;
       sum = i + sum;
       num = num / 10;
    lblDisplay.Text = "<bSum of digits of <b>" + TextBox1.Text + " <b> is : </b>" +
sum.ToString();
  protected void btnReset_Click(object sender, EventArgs e)
    TextBox1.Text = "";
    lblDisplay.Text = "";
  }
}
```



PRACTICAL 2

- A] AIM: Create simple application to perform the following operations
- i] Finding factorial value

Default.aspx[Design]

Default.aspx
body
Enter a number :
Factorial
<u> </u>
[lblResult]

```
Default.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter a number :  
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnFact" runat="server" onclick="btnFact_Click"
      Text="Factorial" />
    <br/>br />
    <asp:Label ID="lblResult" runat="server"></asp:Labe>
  </div>
  </form>
</body>
</html>
```

Properties

Control	Properties	Property Values
TextBox1	ID	TextBox1

Label1	ID	lblResult
	Text	
Button1	ID	btnFact
	Text	Factorial

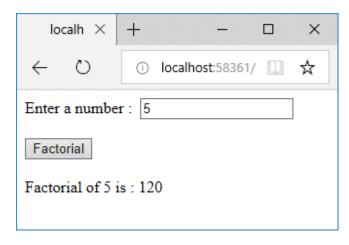
Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void btnFact_Click(object sender, EventArgs e)
    {
        int num, i, f = 1;
        num=Convert.ToInt32(TextBox1.Text);

        for (i = 1; i <= num; i++)
        {
            f = f * i;
        }

        lblResult.Text = "Factorial of "+TextBox1.Text+" is : "+ f.ToString();
        }
}</pre>
```



Default.aspx body			
Enter amount in Rupees:			
US Dollars Euros	British Pounds	Japanese Yen	
[IblResult]			

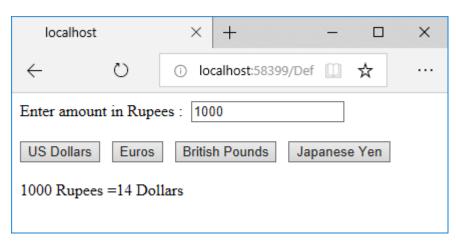
```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
   Enter amount in Rupees : 
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnDollars" runat="server" onclick="btnDollars_Click"
      Text="US Dollars" />
    <asp:Button ID="btnEuro" runat="server" onclick="btnEuro_Click" Text="Euros" />
 
    <asp:Button ID="btnPounds" runat="server" onclick="btnPounds_Click"
      Text="British Pounds" />
 
    <asp:Button ID="btnYen" runat="server" onclick="btnYen_Click"</pre>
      Text="Japanese Yen" />
    <br/>>
    <br >
    <asp:Label ID="lblResult" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

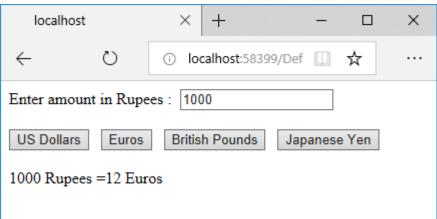
Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	lblResult
	Text	
Button1	ID	btnDollar
	Text	US Dollars
Button2	ID	btnEuro
	Text	Euros
Button3	ID	btnPounds
	Text	British Pounds
Button4	ID	btnYen
	Text	Japanese Yen

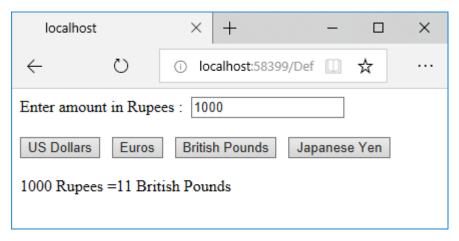
Default.aspx.cs

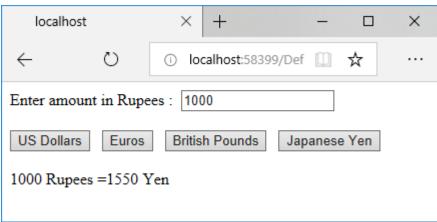
```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  protected void btnDollars_Click(object sender, EventArgs e)
    double r, dollar;
    r = Convert.ToDouble(TextBox1.Text);
    dollar = r * 0.014;
    lblResult.Text = TextBox1.Text+" Rupees = "+ dollar.ToString()+" Dollars ";
  protected void btnEuro_Click(object sender, EventArgs e)
    double r, euro;
    r = Convert.ToDouble(TextBox1.Text);
    euro = r * 0.012;
    lblResult.Text = TextBox1.Text + " Rupees =" + euro.ToString() + " Euros ";
  protected void btnPounds_Click(object sender, EventArgs e)
    double r, pound;
    r = Convert.ToDouble(TextBox1.Text);
    pound = r * 0.011;
```

```
lblResult.Text = TextBox1.Text + " Rupees =" + pound.ToString() + " British Pounds ";
}
protected void btnYen_Click(object sender, EventArgs e)
{
    double r, yen;
    r = Convert.ToDouble(TextBox1.Text);
    yen = r * 1.55;
    lblResult.Text = TextBox1.Text + " Rupees =" + yen.ToString() + " Yen ";
}
}
```









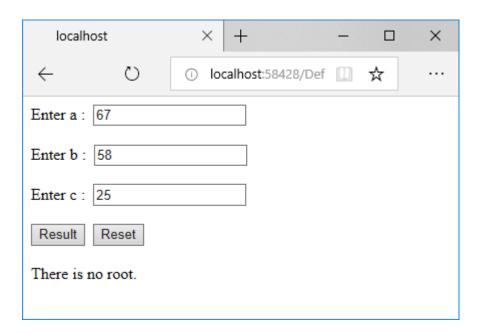
Default.aspx
[body]
Enter a :
Enter b:
Enter c:
Result Reset
[lblResult]

```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter a : 
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br /> <br /> Enter b :&nbsp;
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <br/>
<br/>
<br/>
Enter c :&nbsp;
    <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
    <br /><br />
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" /> 
    <asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
    <br/>br /><br/>
    <asp:Label ID="lblResult" runat="server"></asp:Label>
  </div>
  </form>
</body>
```

Control	Properties	Property Values
TextBox1	ID	TextBox1
TextBox2	ID	TextBox2
TextBox3	ID	TextBox3
Label1	ID	lblResult
	Text	
Button1	ID	btnResult
	Text	Result
Button2	ID	btnReset
	Text	Reset

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  public void demo()
    double a, b, c, r1, r2, x;
    double det;
    a = Convert.ToDouble(TextBox1.Text);
    b = Convert.ToDouble(TextBox2.Text);
    c = Convert.ToDouble(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);
       lblResult.Text = "There are two roots: " + r1.ToString() + " and " + r2.ToString();
    else if (det == 0)
       x = Math.Sqrt(det);
       r1 = (-b + x) / (2 * a);
       lblResult.Text = "There is only one root : " + r1.ToString();
     }
```



Default.aspx body		
Enter Value in Celsius :		
Enter Value in Fahrenheit:		
Celsius to Fahrenheit	Fahrenheit to Celsius Re	set
[lblResult1]	[lblResult2]	

```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
 <form id="form1" runat="server">
   Enter Value in Celsius:       
   <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
   <br /><br />
   Enter Value in Fahrenheit :   
   <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
   <br/><br/>knbsp;
   <asp:Button ID="btnCtoF" runat="server" onclick="btnCtoF_Click"
     Text="Celsius to Fahrenheit" />  
   <asp:Button ID="btnFtoC" runat="server" onclick="btnFtoC_Click"
     Text="Fahrenheit to Celsius" />
                                   
   <asp:Button ID="btnReset" runat="server" onclick="btnReset Click"
     Text="Reset" /><br /> <br />
          
<asp:Label ID="lblResult1" runat="server"></asp:Label>
      
   <asp:Label ID="lblResult2" runat="server"></asp:Label>
   <br />&nbsp;<br />
 </div>
 </form>
</body>
```

</html>

Properties

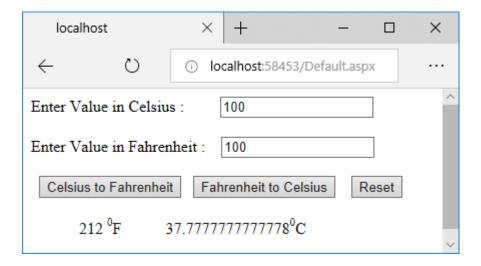
Control	Properties	Property Values
TextBox1	ID	TextBox1
TextBox2	ID	TextBox2
Label1	ID	lblResult1
	Text	
Label2	ID	lblResult2
	Text	
Button1	ID	btnCtoF
	Text	Celsius to Fahrenheit
Button2	ID	btnFtoC
	Text	Fahrenheit to Celsius
Button3	ID	btnReset
	Text	Reset

```
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;
    }
}

public partial class _Default : System.Web.UI.Page
{
    protected void btnCtoF_Click(object sender, EventArgs e)
    {
        return temp;
    }
}
```

```
TempConv s = new TempConv();
  double n = Convert.ToDouble(TextBox1.Text);
  double x = s.ctof(n);
  lblResult1.Text = x.ToString()+ " <sup>0</sup>F";
}
protected void btnFtoC_Click(object sender, EventArgs e)
{
  TempConv s = new TempConv();
  double n = Convert.ToDouble(TextBox2.Text);
  double x = s.ftoc(n);
  lblResult2.Text = x.ToString()+"<sup>0</sup>C";
}
protected void btnReset_Click(object sender, EventArgs e)
{
  TextBox1.Text = "";
  TextBox2.Text = "";
  lblResult1.Text = "";
  lblResult2.Text = "";
}
```



B] AIM: Create simple application to demonstrate the use of following concepts.

i] Function Overloading

Default.aspx[Design]

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Button ID="Button1" runat="server" onclick="Button1_Click"
      Text="Function Overloading" />
    <br/>br />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
    <asp:Label ID="Label2" runat="server"></asp:Label>
    <br/>br />
    <asp:Label ID="Label3" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

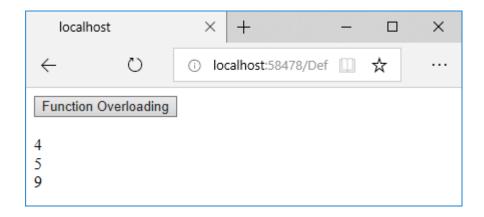
Properties

Control	Properties	Property Values
Label1	ID	Label1

	Text	
Label2	ID	Label2
	Text	
Label3	ID	Label3
	Text	
Button1	ID	Button1
	Text	Function Overloading

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : 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 Button1_Click(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

Default.aspx[Design]



Default.aspx[Source]

```
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter a number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"</pre>
      Text="Result" />
 <asp:Label ID="Label1" runat="server"></asp:Label>
    <br/>br />
```

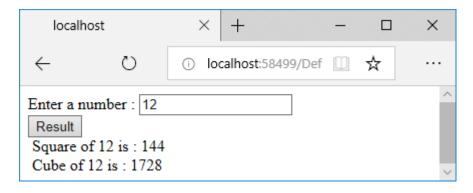
```
 <asp:Label ID="Label2" runat="server"></asp:Label>
</div>
</form>
</body>
</html>
```

Control	Properties	Property Values
TextBox1	ID	TextBox1
Label1	ID	Label1
	Text	
Label2	ID	Label2
	Text	
Button1	ID	btnResult
	Text	Result

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

public class A
{
    public int square(int val1)
    {
        return val1 * val1;
    }
}
public class B : A
{
    public int cube(int val1)
    {
        return val1 * val1 * val1;
    }
}
public partial class _Default : System.Web.UI.Page
{
    protected void btnResult_Click(object sender, EventArgs e)
```

```
B obj = new B();
int n = Convert.ToInt32(TextBox1.Text);
int sq = obj.square(n);
int cu = obj.cube(n);
Label1.Text = "Square of "+n+" is : "+sq.ToString();
Label2.Text = "Cube of " + n + " is : " + cu.ToString();
}
```



(2) Multilevel Inheritance

Default.aspx[Design]

Default.aspx body
Enter a number :
Result
[Label1]
[Label2]
[Label3]

Default.aspx[Source]

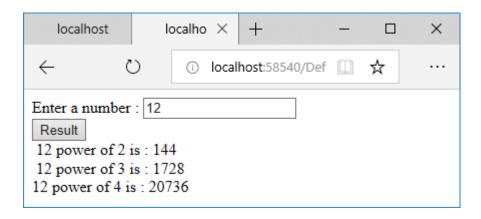
```
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter a number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" />
    <br/>br />
 <asp:Label ID="Label1" runat="server"></asp:Label>
    <br/>br />
 <asp:Label ID="Label2" runat="server"></asp:Label>
    <asp:Label ID="Label3" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
Properties
```

Control	Droportios	Droporty Volum
Control	Properties	Property Values

TextBox1	ID	TextBox1
Label1	ID	Label1
	Text	
Label2	ID	Label2
	Text	
Label3	ID	Label3
	Text	
Button1	ID	btnResult
	Text	Result

```
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)
    return val1 * val1 * val1;
public class C : B
  public int pow4(int val1)
    return val1 * val1 * val1*val1;
}
public partial class _Default : System.Web.UI.Page
```

```
protected void btnResult_Click(object sender, EventArgs e)
{
    C obj = new C();
    int n = Convert.ToInt32(TextBox1.Text);
    int x = obj.pow2(n);
    int y = obj.pow3(n);
    int z = obj.pow4(n);
    Label1.Text = n+" power of 2 is : "+x.ToString();
    Label2.Text = n + " power of 3 is : " + y.ToString();
    Label3.Text = n + " power of 4 is : " + z.ToString();
}
```



(3) Hierarchical Inheritance

Default.aspx[**Design**]

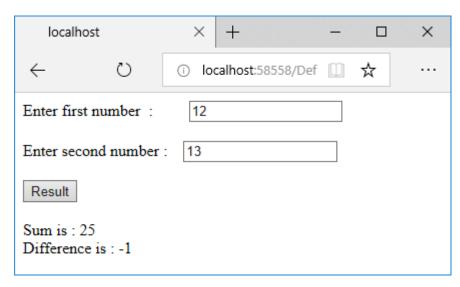
Default.aspx
body
Enter first number:
Enter second number :
Result
[Label1]
[Label2]

```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter first number  :      
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    Enter second number:      
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <br/>br/>
    <br/>br />
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click1"</pre>
      Text="Result" />
    <br/>br />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
    <br/>br />
    <asp:Label ID="Label2" runat="server"></asp:Label>
  </div>
  </form>
</body>
```

Control	Properties	Property Values
TextBox1	ID	TextBox1
TextBox2	ID	TextBox2
Label1	ID	Label1
	Text	
Label2	ID	Label2
	Text	
Button1	ID	btnResult
	Text	Result

```
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, 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;
}
```

```
public partial class _Default : System.Web.UI.Page
{
    protected void btnResult_Click1(object sender, EventArgs e)
    {
        B obj1 = new B();
        C obj2 = new C();
        int m = Convert.ToInt32(TextBox1.Text);
        int n = Convert.ToInt32(TextBox2.Text);
        int x = obj1.add(m, n);
        int y = obj2.sub(m, n);
        Label1.Text = "Sum is : " + x.ToString();
        Label2.Text = "Difference is : " + y.ToString();
    }
}
```



iii] Constructor Overloading

Default.aspx[Design]

```
| Default.aspx | body | | | Constructor Overloading | | [Label1] | [Label2] | [Label3]
```

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Button ID="Button1" runat="server" onclick="Button1_Click"
      Text="Constructor Overloading" />
    <br/>br />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
    <asp:Label ID="Label2" runat="server"></asp:Label>
    <asp:Label ID="Label3" runat="server"></asp:Label>
   </div>
  </form>
</body>
</html>
```

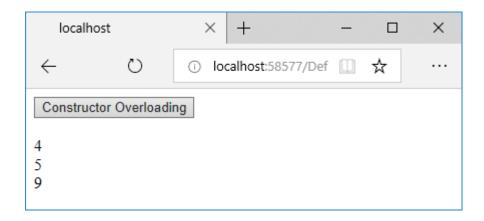
Properties

Control	Properties	Property Values
Label1	ID	Label1
	Text	
Label2	ID	Label2

	Text	
Label3	ID	Label3
	Text	
Button1	ID	Button1
	Text	Constructor Overloading

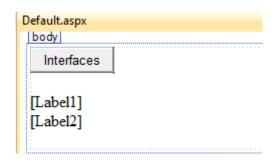
Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public 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;
  }
}
public partial class _Default : System.Web.UI.Page
  protected void Button1_Click(object sender, EventArgs e)
     Add obj1 = \text{new Add}(2);
     Add obj2 = \text{new Add}(2, 3);
     Add obj3 = \text{new Add}(2, 3, 4);
     Label1.Text = obj1.r.ToString();
     Label2.Text = obj2.r.ToString();
     Label3.Text = obj3.r.ToString();
  }
```



iv] Interfaces

Default.aspx[Design]



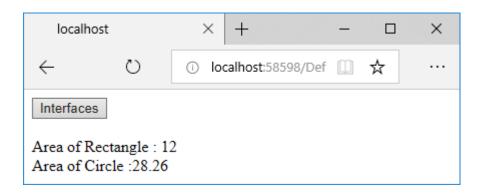
```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <asp:Button ID="Button1" runat="server" onclick="Button1_Click"
      Text="Interfaces" />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
    <br >
    <asp:Label ID="Label2" runat="server"></asp:Label>
    <br/>br />
   </div>
```

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

Control	Properties	Property Values
Label1	ID	Label1
	Text	
Label2	ID	Label2
	Text	
Button1	ID	Button1
	Text	Interfaces

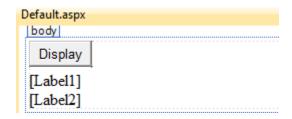
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
interface Area
  double show(double s, double t);
class Rect : Area
  public double show(double s, double t)
    return s * t;
  }
class Circle: Area
  public double show(double r,double t)
    return (3.14* r*r);
public partial class _Default : System.Web.UI.Page
  protected void Button1_Click(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="Area of Rectangle: "+x.ToString();
Label2.Text="Area of Circle:"+y.ToString();
}
Output
```



- C] AIM: Create simple application to demonstrate the use of following concepts.
- i] Using Delegates and Events

Default.aspx[Design]



Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

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

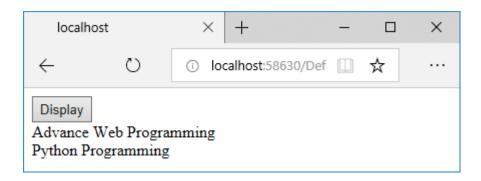
<asp:Button ID="Button1" runat="server" onclick="Button1_Click"

Control	Properties	Property Values
Label1	ID	Label1
	Text	
Label2	ID	Label2
	Text	
Button1	ID	Button1
	Text	Display

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

public partial class _Default : System.Web.UI.Page
{
    public delegate string dele();
    public static string display1()
    {
        string s1 = "Advance Web Programming";
        return s1;
    }
    public static string display2()
    {
        string s2 = "Python Programming";
        return s2;
    }
}
```

```
protected void Button1_Click(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

Default.aspx[**Design**]

Default.aspx
body
Enter a number :
Result
[Label1]

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter a number:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" />
    <br/>br />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
   </div>
  </form>
</body>
</html>
```

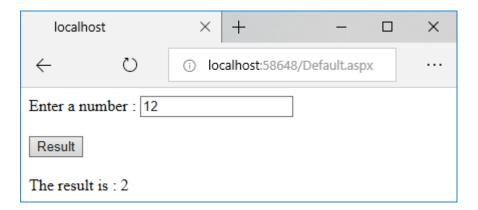
Properties

Control	Properties	Property Values
Label1	ID	Label1
	Text	

Button1	ID	btnResult
	Text	Result
TextBox1	ID	TextBox1

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  protected void Page_Load(object sender, EventArgs e)
  }
  protected void btnResult_Click(object sender, EventArgs e)
    try
       int a = Convert.ToInt32(TextBox1.Text);
       int[] b = \{ 12, 23, 33 \};
       int result;
       result = (b[2] / a);
       Label1.Text = "The result is : " + result.ToString();
    catch (System.DivideByZeroException ex)
       Label1.Text = ex.ToString();
     catch (System.IndexOutOfRangeException ex)
       Label1.Text = ex.ToString();
```



PRACTICAL 3

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

Default.aspx[Design]

Default.aspx body	
Enter name:	
Enter rollno :	
Select Class:	OFY OSY OTY
Select Course	:Select Course
Submit	
[Label1]	

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    Enter name : 
    <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
    <br /><br />
    Enter rollno:  
    <asp:TextBox ID="txtRoll" runat="server"></asp:TextBox>
    <br /><br />
    Select Class:  
   <asp:RadioButton ID="RadioButton1" runat="server" GroupName="Class" Text="FY"/>
```

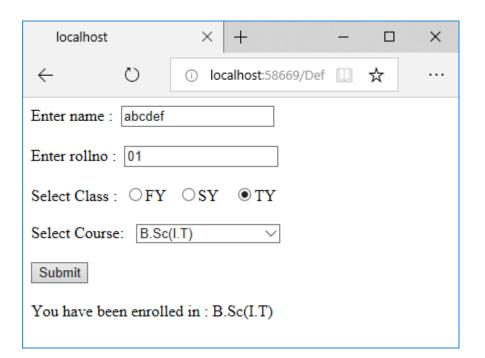
```
 
  <asp:RadioButton ID="RadioButton2" runat="server" GroupName="Class" Text="SY" />
  
  <asp:RadioButton ID="RadioButton3" runat="server" GroupName="Class" Text="TY" />
    <br/>br />
    <br/>br />
   Select Course:    
    <asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="True"
      onselectedindexchanged="DropDownList1_SelectedIndexChanged">
      <asp:ListItem>----</asp:ListItem>
      <asp:ListItem>B.Sc(I.T)</asp:ListItem>
      <asp:ListItem>B.Sc(C.S)</asp:ListItem>
      <asp:ListItem>B.Sc</asp:ListItem>
    </asp:DropDownList>
    <br/>br />
    <br/>br />
    <asp:Button ID="Button1" runat="server" EnableTheming="True"
      onclick="Button1_Click" Text="Submit" />
    <br/>br />
    <br/>br />
    <asp:Label ID="Label1" runat="server"></asp:Label>
   </div>
  </form>
</body>
</html>
```

Control	Properties	Property Values
Label1	ID	Label1
	Text	
TextBox1	ID	txtName
TextBox2	ID	txtRoll
RadioButton1	ID	RadioButton1
	Text	FY
	GroupName	Class
RadioButton1	ID	RadioButton2
	Text	SY
	GroupName	Class
RadioButton1	ID	RadioButton3
	Text	TY
	GroupName	Class
DropDownList1	ID	DropDownList1
	AutoPostBack	True

Button1	ID	Button1
	Text	Submit

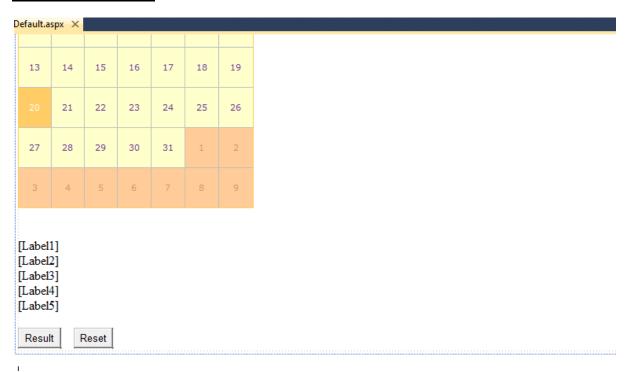
Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
  protected void Button1_Click(object sender, EventArgs e)
    String s;
    if (RadioButton1.Checked == true)
       s = RadioButton1.Text;
    else if (RadioButton2.Checked == true)
      s = RadioButton2.Text;
    else
      s = RadioButton3.Text;
    Label1.Text += " in " + s;
  }
  protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
    Label1.Text = "You have been enrolled in: " + DropDownList1.SelectedItem;
```



- 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) Selected day in a calendar control using style
- d) Difference between two calendar dates

Default.aspx[Design]



Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:Calendar ID="Calendar1" runat="server" BackColor="#FFFCC"
BorderColor="#FFCC66" BorderStyle="Solid" BorderWidth="1px"</pre>
```

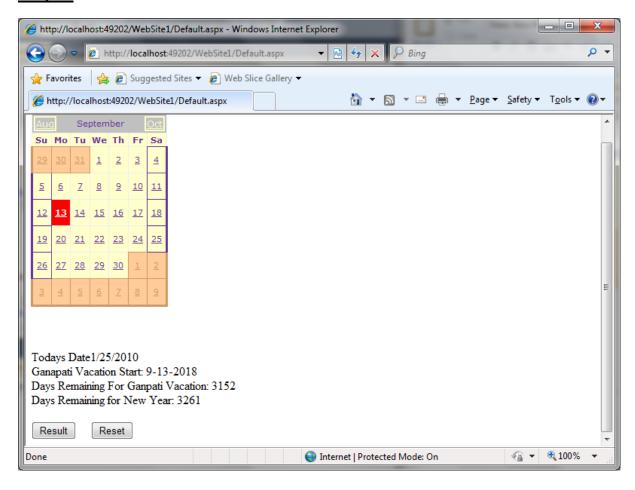
```
DayNameFormat="Shortest" Font-Names="Verdana" Font-Size="8pt"
ForeColor="#663399" Height="200px" NextPrevFormat="ShortMonth"
onselectionchanged="Calendar1_SelectionChanged" ShowGridLines="True"
      Width="300px" OnDayRender="Calendar1_DayRender">
<DayHeaderStyleBackColor="#FFCC66" Font-Bold="True" Height="1px" />
<NextPrevStyleBorderStyle="Solid" BorderWidth="2px" Font-Size="9pt"</pre>
ForeColor="#FFFFCC" />
<OtherMonthDayStyleBackColor="#FFCC99" BorderStyle="Solid"</p>
ForeColor="#CC9966" />
<SelectedDayStyleBackColor="Red" Font-Bold="True" />
<SelectorStyleBackColor="#FFCC66" />
<TitleStyleBackColor="#990000" Font-Bold="True" Font-Size="9pt"</pre>
ForeColor="#FFFFCC" />
<TodayDayStyleBackColor="#FFCC66" ForeColor="White" />
<WeekendDayStyle Height="50px"/>
</asp:Calendar>
<br/>br /><br/>
<asp:Label ID="Label1" runat="server"></asp:Label><br/>
<asp:Label ID="Label2" runat="server"></asp:Label><br/>br />
<asp:Label ID="Label3" runat="server"></asp:Label><br/>
<asp:Label ID="Label4" runat="server"></asp:Label><br/>
<asp:Label ID="Label5" runat="server"></asp:Label><br/>br /><br/>
<asp:Button ID="btnResult" runat="server" onclick="btnResult_Click"
      Text="Result" />
   
<asp:Button ID="btnReset" runat="server" onclick="btnReset_Click"
      Text="Reset" />
<br/>br />
</div> </form> </body> </html>
```

Control	Properties	Property Values
Calendar	ID	Calendar1
	BackColor	#FFFFCC
	ForeColor	#663399
	BorderStyle	Solid
	BorderWidth	1
	BorderColor	#FFCC66
	DayNameFormat	Shortest
	Font-Names	Verdana
	Font-Size	8
	Height	200
	NextPrevFormat	ShortMonth
	ShowGridLines	True
	Width	300
	DayHeaderStyle	
	BackColor	#FFCC66
	Font-Bold	True
	Height	1

	NextPrevStyle	
	BorderStyle	Solid
	BorderWidth	2
	ForeColor	#FFFFCC
	Font-Size	9
	OtherMonthDayStyle	
	BackColor	#FFCC99
	ForeColor	#CC9966
	BorderStyle	Solid
	SelectedDayStyle	
	BackColor	Red
	Font-Bold	True
	SelectorStyle	1100
	BackColor	#FFCC66
	TitleStyle	
	BackColor	#990000
	ForeColor	#FFFCC
	Font-Bold	True
	Font-Size	9
	TodayDayStyle	
	BackColor	#FFCC66
	ForeColor	White
	WeekendDayStyle	Willie
	Height	50
	OnDayRender	Calendar1_DayRender
	OnDayKender	Calendar I_DayKender
Label1	ID	Label1
	Text	
	Tent	
Label2	ID	Label2
Luociz	Text	Eugerz
	Text	
Label3	ID	Label3
Luocis	Text	Lubels
	Text	
Label4	ID	Label4
Luocit	Text	Lubert
	Text	
Label5	ID	Label5
Laucis	Text	Laucis
	ICAL	
Button1	ID	btnResult
Duttoni	Text	Result
	Τελι	Kesuit
Button2	ID	btnReset
Dation2	Text	Reset
	ΙΟΛΙ	Nosci

```
using System;
usingSystem.Collections.Generic;
usingSystem.Ling;
usingSystem.Web;
usingSystem.Web.UI;
usingSystem.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
protected void Page_Load(object sender, EventArgs e)
  }
protected void Calendar1_SelectionChanged(object sender, EventArgs e)
    Label1.Text = "Your Selected Date: " +
Calendar1.SelectedDate.Date.ToShortDateString();
protected void btnResult Click(object sender, EventArgs e)
    Calendar1.Caption = "TYIT";
    Calendar1.FirstDayOfWeek = FirstDayOfWeek.Sunday;
    Calendar1.NextPrevFormat = NextPrevFormat.ShortMonth;
    Calendar1.TitleFormat = TitleFormat.Month:
    Label2.Text = "Todays Date" + Calendar1.TodaysDate.ToShortDateString();
    Label3.Text = "Ganapati 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 btnReset_Click(object sender, EventArgs e)
    Label1.Text = "";
    Label2.Text = "";
    Label3.Text = "";
    Label4.Text = "";
    Label5.Text = "";
Calendar1.SelectedDates.Clear();
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/>br>Teachers Day!";
e.Cell.Controls.Add(lbl);
if (e.Day.Date.Day == 13 &&e.Day.Date.Month == 9)
       Calendar1.SelectedDate = new DateTime(2018, 9, 12);
Calendar1.SelectedDates.SelectRange(Calendar1.SelectedDate,
Calendar1.SelectedDate.AddDays(10));
       Label lbl1 = new Label();
      lbl1.Text = "<br/>br>Ganpati!";
e.Cell.Controls.Add(lbl1);
    }
   }
```



PRACTICAL 4

A] Create a Registration form to demonstrate use of various Validation controls

Default.aspx[Design]

Default.aspx	
body	
Enter your name :	Please enter your name
Enter Age :	Not a valid age
Enter Password:	
Re-enter Password :	Please re-enter password
Enter Email-Id :	Enter valid email address
Enter text :	The text must be 8 characters long
Validate	
[IblDisplay]	
Your page contains the following errors	
Error message 1. Error message 2.	
Default.aspx[Source]	
<%@ Page Language="C#" AutoEventW Inherits="_Default" %>	Vireup="true" CodeFile="Default.aspx.cs"
html PUBLIC "-//W3C//D' "http://www.w3.org/TR/xhtml1/DTD/xht</td <td></td>	
<html server"="" xmlns="http://www.w3.org/1999/2<head runat="></html>	xhtml">
<title></title>	
<form id="form1" runat="server"> <div></div></form>	

Enter your name:

```
<asp:TextBox ID="txtName" runat="server"></asp:TextBox>
 
   <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
     ControlToValidate="txtName" ErrorMessage="Please enter your name"
     ForeColor="Red"></asp:RequiredFieldValidator>
   <br/>>
   <br/>br />
   Enter Age
:          
sp;   
   <asp:TextBox ID="txtAge" runat="server"></asp:TextBox>
  
   <asp:RangeValidator ID="RangeValidator1" runat="server"
     ControlToValidate="txtAge" ErrorMessage="Not a valid age" ForeColor="Red"
     MaximumValue="50" MinimumValue="18" Type="Integer"></asp:RangeValidator>
   <br/>br />
   <br/>br />
   Enter Password:              
   <asp:TextBox ID="txtPassword" runat="server"
TextMode="Password"></asp:TextBox>
  
   <br/>
   <br/>>
   Re-enter Password :  
   <asp:TextBox ID="txtConfirm" runat="server"
TextMode="Password"></asp:TextBox>
  
   <asp:CompareValidator ID="CompareValidator1" runat="server"
     ControlToCompare="txtPassword" ControlToValidate="txtConfirm"
     ErrorMessage="Please re-enter password"
ForeColor="Red"></asp:CompareValidator>
   <br/>br />
   <br/>
   Enter Email-Id:                
   <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>
   
   <asp:RegularExpressionValidator1" runat="server"
     ControlToValidate="txtEmail" ErrorMessage="Enter valid email address"
     ForeColor="Red"
     ValidationExpression="\w+([-+.']\w+)*@\w+([-.]\w+)*\.\w+([--]\w+)
.]\w+)*"></asp:RegularExpressionValidator>
   <br/>br />
   <br/>br />
   Enter text
:          
sp;   
   <asp:TextBox ID="txtData" runat="server"></asp:TextBox>
  
   <asp:CustomValidator ID="CustomValidator1" runat="server"
```

```
ControlToValidate="txtData" ErrorMessage="The text must be 8 characters long"
       ForeColor="Red"
OnServerValidate="vldCode_ServerValidate"></asp:CustomValidator>
    <br/>br />
    <br/>br />
    <asp:Button ID="btnValidate" runat="server" onclick="btnValidate_Click"
       Text="Validate" />
    <br/>br />
    <br/>br />
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
    <br/>br />
    <br/>br />
    <asp:ValidationSummary ID="ValidationSummary1" runat="server" ForeColor="Red"</pre>
       HeaderText="Your page contains the following errors" ShowMessageBox="True"
       ShowSummary="False" />
   </div>
  </form>
</body>
</html>
```

Control	Properties	Property Values
Label1	ID	lblDisplay
	Text	
TextBox1	ID	txtName
TextBox2	ID	txtAge
TextBox3	ID	txtPassword
TextBox4	ID	txtConfirm
TextBox5	ID	txtEmail
TextBox6	ID	txtData
Button1	ID	btnValidate
	Text	Validate
RequiredFieldValidator	ID	RequiredFieldValidator1
	ErrorMessage	Please enter your name
	ControlToValidate	txtName
	ForeColor	Red
RangeValidator	ID	RangeValidator 1
	ErrorMessage	Not a valid age
	ControlToValidate	txtAge
	MaximumValue	50
	MinimumValue	18
	Type	Integer
	ForeColor	Red
CompareValidator	ID	CompareValidator1
	ErrorMessage	Please re-enter password

	ControlToValidate	txtConfirm
	ControlToCompare	txtPassword
	ForeColor	Red
RegularExpressionValidator	ID	RegularExpressionValidator1
	ErrorMessage	Enter valid email address
	ControlToValidate	txtEmail
	ValidationExpression	Internet email address
	ForeColor	Red
CustomValidator	ID	CustomValidator1
	ErrorMessage	The text must be 8 characters long
	ControlToValidate	txtData
	ForeColor	Red
ValidationSummary	ID	ValidationSummary1
	HeaderText	Your page contains the following errors
	ShowMessageBox	True
	ShowSummary	False
	ForeColor	Red

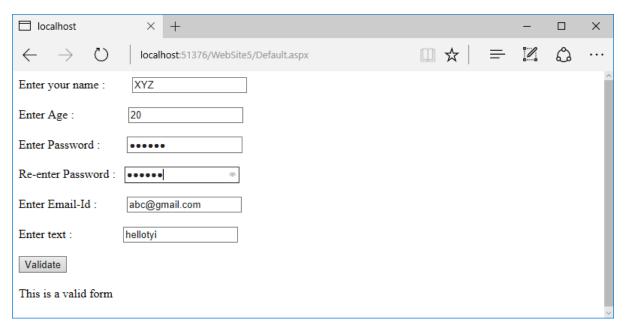
Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        txtName.Focus();
    }

    protected void btnValidate_Click(object sender, EventArgs e)
    {
        if (Page.IsValid)
        {
            lbIDisplay.Text = "This is a valid form";
        }
        else
        {
            lbIDisplay.Text = "The text must be 8 characters long";
        }
        protected void vldCode_ServerValidate(object sender, ServerValidateEventArgs e)
        {
            reconstruction of the construction of the construct
```

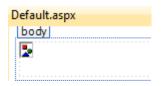
```
if (e.Value.Length == 8)
    {
        e.IsValid = true;
    }
    else
    {
        e.IsValid = false;
    }
}
```



localhost	☐ localhost	×	+			_		×
\leftarrow \rightarrow \circlearrowleft	localhost:51376/WebSit	te5/Default.aspx		□ ☆	=	0	۵	
Enter your name :	XYZ							^
Enter Age :	20							- 1
Enter Password:]						-1
Re-enter Password :								-1
Enter Email-Id :	abc@gmail.com							- 1
Enter text :	hellotyit	The text mus	st be 8 characters long					-1
Validate								
The text must be 8 ch	naracters long							
								~

B] Create a Web Form to demonstrate use of Adrotator control

Default.aspx[Design]



Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <asp:AdRotator ID="AdRotator1" runat="server" AdvertisementFile="~/Advs.xml" />
    <br /><br />
   </div>
  </form>
</body>
</html>
```

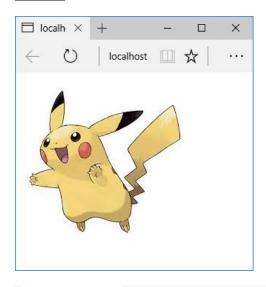
Advs.xml[Advertisement File]

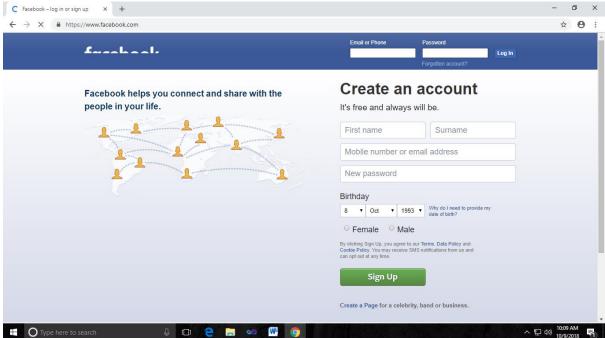
```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
   <Ad>
        <ImageUrl>Penguin.png</ImageUrl>
        <NavigateUrl>http://www.google.com</NavigateUrl>
        <AlternateText>Birds</AlternateText>
        <Impressions>1</Impressions>
        <Keyword>Photo</Keyword>
        </Ad>
        <Ad>
        <Ad>
        <Ad>
        <Ad>
        <And>
        <And>
        <And>
        <And>
        <And>
        <And>
        <AndrageUrl>http://www.facebook.com</NavigateUrl>
        </AvigateUrl>http://www.facebook.com</NavigateUrl>
```

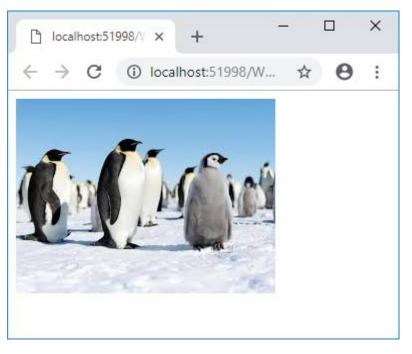
- <AlternateText>Flowers</AlternateText>
- <Impressions>2</Impressions>
- <Keyword>Photo</Keyword>
- </Ad>
- </Advertisements>

Properties

Control	Properties	Property Values
AdRotator	ID	AdRotator1
	AdvertisementFile	Advs.xml











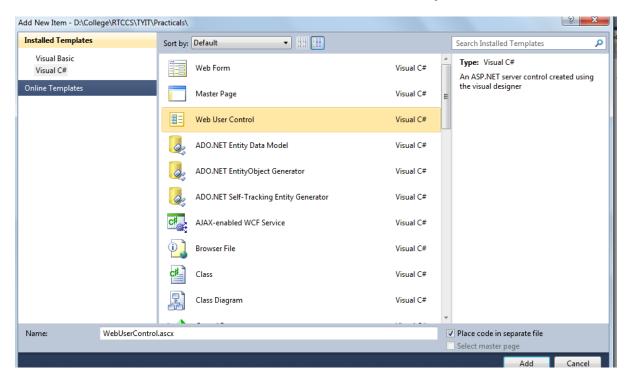
Google offered in: हिन्दी वाश्ना මෙහාරා मराठी தமிழ் ગુજરાતી ಕನ್ನಡ മലയാളం ਪੰਜਾਬੀ



C] Create a Web Form to demonstrate User Controls.

Add Web User Control

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

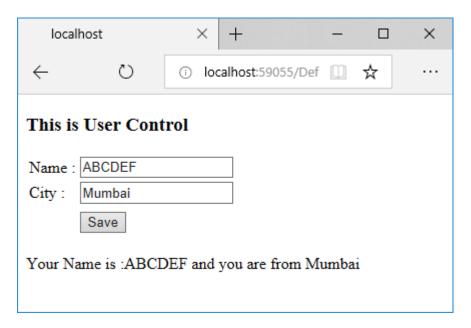


MyUserControl.ascx[Source]

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

```
<asp:Button ID="btnSave" runat="server" Text="Save" onclick="btnSave_Click" />
<br/>
<asp:Label ID="Label1" runat="server" Text=""></asp:Label>
MyUserControl.ascx.cs
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class MyUserControl : System.Web.UI.UserControl
  protected void btnSave_Click(object sender, EventArgs e)
    Label1.Text = "Your Name is:" + txtName.Text + " and you are from " + txtCity.Text;
}
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<%@ Register Src="~/MyUserControl.ascx" TagPrefix="uc" TagName="Student"
%>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
  <uc:Student ID="studentcontrol" runat="server" />
   </div>
  </form>
</body>
</html>
```

Output:-



PRACTICAL 5

A] Create a Web Form to demonstrate use of Website Navigation controls and Site Map.

Add Site Map File

Website-> Add New Item-> Site Map and name it 'Web.sitemap'

```
Web.sitemap
```

```
<?xml version="1.0" encoding="utf-8" ?>
<siteMapxmlns="http://schemas.microsoft.com/AspNet/SiteMap-File-1.0" >
<siteMapNodeurl="Default.aspx" title="RTCCS Home" description="">
<siteMapNodeurl="FYIT.aspx" title="FYIT" description="" />
<siteMapNodeurl="SYIT.aspx" title="SYIT" description="" />
<siteMapNodeurl="TYIT.aspx" title="TYIT" description="" />
</siteMapNode>
</siteMapNode></siteMap>
```

Default.aspx[Design]

```
Default.aspx
| body|
RTCCS Home
RTCCS Home >

SiteMapDataSource - SiteMapDataSource1
```

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<asp:SiteMapPath ID="SiteMapPath1" runat="server">
</asp:SiteMapPath>
<br/>br />
<asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1">
</asp:Menu>
<br/>br />
<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
</div>
</form>
</body>
</html>
```

FYIT.aspx[Design]

```
FYIT.aspx
 body
 RTCCS Home > FYIT
 RTCCS Home
 SiteMapDataSource - SiteMapDataSource1
 Welcome To FYIT
FYIT.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="FYIT.aspx.cs"
Inherits="FYIT" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:SiteMapPath ID="SiteMapPath1" runat="server">
</asp:SiteMapPath>
<br/>br />
<asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1">
</asp:Menu>
<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
<br/>br />
<br/>br />
<b>Welcome To FYIT</b>
</div>
</form>
</body>
</html>
SYIT.aspx[Design]
SYIT.aspx
body
 RTCCS Home > SYIT
 RTCCS Home
 Welcome To SYIT
```

SiteMapDataSource - SiteMapDataSource1

SYIT.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="SYIT.aspx.cs"
Inherits="SYIT" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:SiteMapPath ID="SiteMapPath1" runat="server">
</asp:SiteMapPath>
<br/>br />
<asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1">
</asp:Menu>
<br/>br />
<br/>>
<b>Welcome To SYIT</b>
<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
</div>
</form>
</body>
</html>
```

TYIT.aspx[Design]

```
TYIT.aspx
|body|

RTCCS Home > TYIT

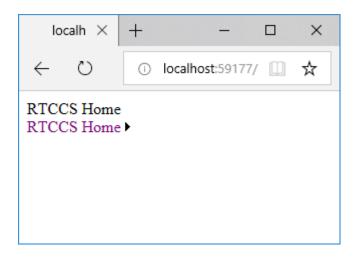
RTCCS Home ▶

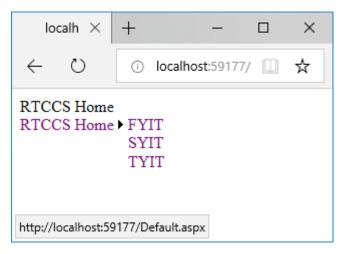
Welcome To TYIT

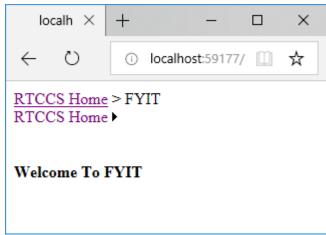
SiteMapDataSource - SiteMapDataSource1
```

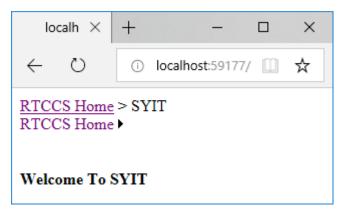
TYIT.aspx[Source]

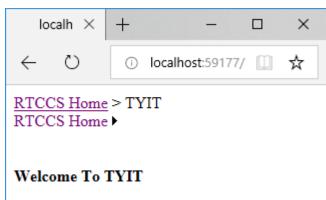
```
< @ Page Language="C#" AutoEventWireup="true" CodeFile="TYIT.aspx.cs"
Inherits="TYIT" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:SiteMapPath ID="SiteMapPath1" runat="server">
</asp:SiteMapPath>
<br/>br />
<asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1">
</asp:Menu>
<br/>br />
<br/>br />
<b>Welcome To TYIT</b>
<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
</div>
</form>
</body>
</html>
```











C] Create a Web Form to demonstrate various states of ASP.NET Pages.

I] View State

Default.aspx[Design]

```
Default.aspx
body
   Increment
 [lblDisplay]
```

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Button ID="btnIncrement" runat="server" onclick="btnIncrement_Click"
      Text="Increment" />
    <br/>br />
    <br/>>
    <asp:Label ID="lblDisplay" runat="server"></asp:Label>
  </div>
  </form>
</body>
```

Properties

</html>

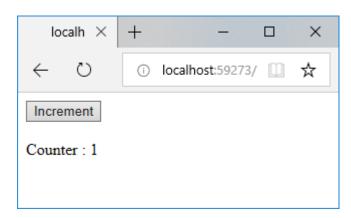
Control	Properties	Property Values
Button1	ID	btnIncrement
	Text	Increment
Label1	ID	lblDisplay
	Text	

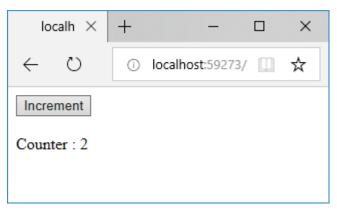
Default.aspx.cs

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

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

public partial class _Default : System.Web.UI.Page
{
    protected void btnIncrement_Click(object sender, EventArgs e)
    {
        int counter;
        if(ViewState["Counter"]== null)
        {
            counter=1;
        }
        else
        {
            counter=(int)ViewState["Counter"]+1;
        }
        ViewState["Counter"] = counter;
        lblDisplay.Text = "Counter : " + counter.ToString();
     }
}
```





II] Query String

Default.aspx[Design]

Default.aspx	
Enter first name:	
Enter last name :	
Submit	

```
Default.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
    Enter first name:
<asp:TextBox ID="txtFname" runat="server"></asp:TextBox>
<br/>br />
<br/>br />
    Enter last name:
<asp:TextBox ID="txtLname" runat="server"></asp:TextBox>
<br/>br />
<br/>br />
<asp:Button ID="btnSubmit" runat="server" onclick="btnSubmit_Click"
      Text="Submit" />
</div>
</form>
</body>
</html>
```

Properties

Control	Properties	Property Values

TextBox1	ID	txtFname
TextBox2	ID	txtLname
Button1	ID	btnSubmit
	Text	Submit

Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void btnSubmit_Click(object sender, EventArgs e)
        {
            String url = "Default2.aspx?fname=" + txtFname.Text + "&";
url += "lname=" + txtLname.Text;
Response.Redirect(url);
        }
}
```

Default2.aspx[Design]

```
Default2.aspx
| body|
[lbDisplay]
```

Default2.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs"
Inherits="Default2" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title></head>
<body>
<form id="form1" runat="server">
<div>
<asp:Label ID="lbDisplay" runat="server"></asp:Label>
</div>
</form>
```

```
</body>
```

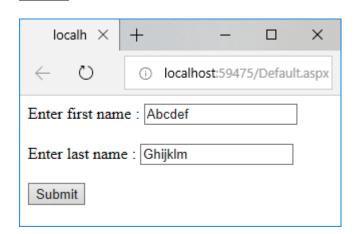
Properties

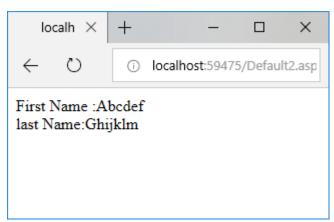
Control	Properties	Property Values
Label1	ID	lblDisplay
	Text	

Default2.aspx.cs

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

public partial class Default2 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
        {
        lbDisplay.Text = "First Name :"+Request.QueryString["fname"]+"<br/>";
        lbDisplay.Text+= "last Name:"+Request.QueryString["lname"]; }
        Output
```





III] Cross Page Posting

Default.aspx[Design]

Default.aspx
body
First Name:
Last Name:
Last Name.
Cross-Page Postback
Closs-rage rostback
<u>Default.aspx[Source]</u>
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</th
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<head runat="server"></head>
<title> Cross-Page Postback</title>
<body></body>
<form id="form1" runat="server"></form>
<div></div>
First Name:
<asp:textbox id="TextBox1" runat="server"></asp:textbox>
 br />
Last Name:
<asp:textbox id="TextBox2" runat="server"></asp:textbox>
 br />
 br />
<asp:button <="" id="btnPost" postbackurl="~/Default2.aspx" runat="server" td=""></asp:button>
Text="Cross-Page Postback" />

Properties

Control	Properties	Property Values
TextBox1	ID	TextBox1
TextBox2	ID	TextBox2
Button1	ID	btnPost
	Text	Cross-Page Postback
	PostBackUrl	Default2.aspx

Default.aspx.cs using System;

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

public partial class _Default : System.Web.UI.Page
{
    public string FullName
    {
        get
        {
            return TextBox1.Text + " " + TextBox2.Text;
        }
      }
}
```

Default2.aspx[Design]

Default2.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs" Inherits="Default2" %>
<%@ PreviousPageType VirtualPath="~/Default.aspx" %>
```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

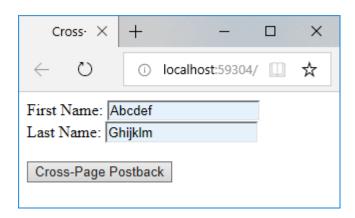
Properties

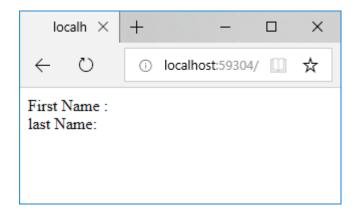
Control	Properties	Property Values
Label1	ID	lblInfo
	Text	

Default2.aspx.cs

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

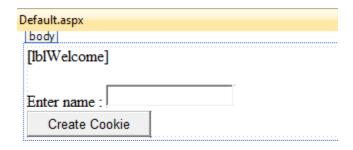
public partial class Default2 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (PreviousPage != null)
        {
            lblInfo.Text = "You came from a page titled " + PreviousPage.Title + "<br/>";
            lblInfo.Text += "You typed in this : " + PreviousPage.FullName;
        }
        }
    }
}
```





IV] Cookies

Default.aspx[Design]



Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Label ID="lblWelcome" runat="server"></asp:Label>
    <br/>br />
    <br/>br />
    Enter name:
    <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
    <br/>>
    <asp:Button ID="btnStore" runat="server" onclick="btnStore_Click"
      Text="Create Cookie" />
  </div>
  </form>
```

```
</body>
```

Properties

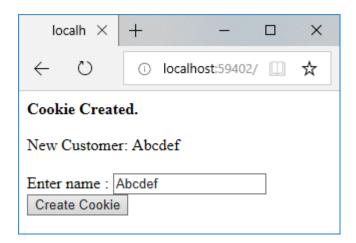
Control	Properties	Property Values
Label1	ID	lblWelcome
	Text	
Button1	ID	btnStore
	Text	Create Cookie
TextBox1	ID	txtName

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Net;
public partial class _Default : System.Web.UI.Page
  protected void Page_Load(object sender, EventArgs e)
    HttpCookie cookie = Request.Cookies["Preferences"];
    if (cookie == null)
      lblWelcome.Text = "<b>Unknown Customer.</b><br>";
    else
      lblWelcome.Text = "<b> Cookie Found.</b><br>";
      lblWelcome.Text += "Welcome, " + cookie["Name"];
    }
  protected void btnStore_Click(object sender, EventArgs e)
    HttpCookie cookie = Request.Cookies["Preferences"];
    if (cookie == null)
      cookie = new HttpCookie("Preferences");
```

```
cookie["Name"] = txtName.Text;
cookie.Expires = DateTime.Now.AddMonths(1);
Response.Cookies.Add(cookie);

lblWelcome.Text = "<b>Cookie Created. </b><br>";
lblWelcome.Text += "New Customer: " + cookie["Name"];
}
}
```



V] Session State

Default.aspx[Design]

```
Default.aspx
| body|
[IblSession]
| Econo Sofa
| Pioneer Table
| Retro Cabinet

| More Information
| [IblRecord]
```

Default.aspx[Source]

```
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits=" Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <asp:Label ID="lblSession" runat="server"></asp:Label>
    <br/>br />
    <asp:ListBox ID="lstItems" runat="server">
      <asp:ListItem>Econo Sofa</asp:ListItem>
      <asp:ListItem>Pioneer Table</asp:ListItem>
      <asp:ListItem>Retro Cabinet</asp:ListItem>
    </asp:ListBox>
 <br/>
    <asp:Button ID="btnMoreInfo" runat="server" onclick="btnMoreInfo_Click"
      Text="More Information" />
    <br/>hr />
    <br/>>
    <asp:Label ID="lblRecord" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

Properties

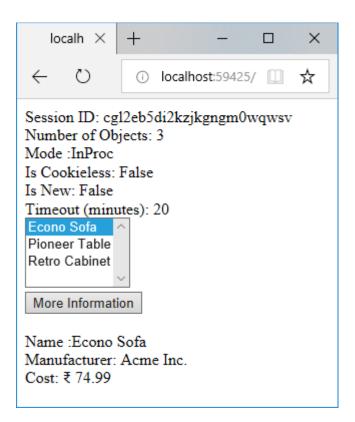
Control	Properties	Property Values
0 01101 01		2 2 3 p 2 2 3 3 4 2 2 2 2 2

Label1	ID	lblSession
	Text	
Label2	ID	lblRecord
	Text	
ListBox1	ID	lstItems
Button1	ID	btnMoreInfo
	Text	More Information

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
public class Furniture
  public string Name;
  public string Description;
  public decimal Cost;
  public Furniture(string name, string description, decimal cost)
    Name = name;
    Description = description;
    Cost = cost;
  }
}
public partial class _Default : System.Web.UI.Page
  protected void Page_Load(object sender, EventArgs e)
    if (!this.IsPostBack)
       Furniture piece1 = new Furniture("Econo Sofa", "Acme Inc.", 74.99M);
       Furniture piece2 = new Furniture("Pioneer Table", "Heritage Unit", 866.75M);
       Furniture piece3 = new Furniture("Retro Cabinet", "Sixties Ltd. Inc.", 300.11M);
       Session["Furniture1"] = piece1;
       Session["Furniture2"] = piece2;
       Session["Furniture3"] = piece3;
    lblSession.Text = "Session ID: " + Session.SessionID;
    lblSession.Text += "<br/>br>Number of Objects: " + Session.Count.ToString();
    lblSession.Text += "<br/>br>Mode :" + Session.Mode.ToString();
    lblSession.Text += "<br/>br>Is Cookieless: " + Session.IsCookieless.ToString();
    lblSession.Text += "<br>Is New: " + Session.IsNewSession.ToString();
    lblSession.Text += "<br/>br>Timeout (minutes): " + Session.Timeout.ToString();
```

```
protected void btnMoreInfo_Click(object sender, EventArgs e)
{
   if (lstItems.SelectedIndex == -1)
   {
      lblRecord.Text = "No item Selected.";
   }
   else
   {
      string key = "Furniture" + (lstItems.SelectedIndex + 1).ToString();
      Furniture piece = (Furniture)Session[key];
      lblRecord.Text = "Name :" + piece.Name;
      lblRecord.Text += "<br>      lblRecord.Text += "<br/>      lbr>Cost: " + piece.Cost.ToString("c");
      }
}
```



VI] Application State

Default.aspx[Design]

```
Default.aspx
| body|
[lblCounter]
```

```
Default.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Label ID="lblCounter" runat="server"></asp:Label>
  </div>
  </form>
</body>
```

Properties

</html>

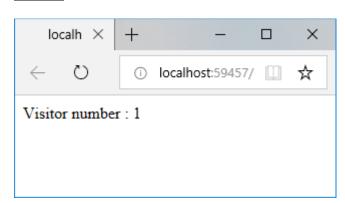
Control	Properties	Property Values
Label1	ID	lblCounter
	Text	

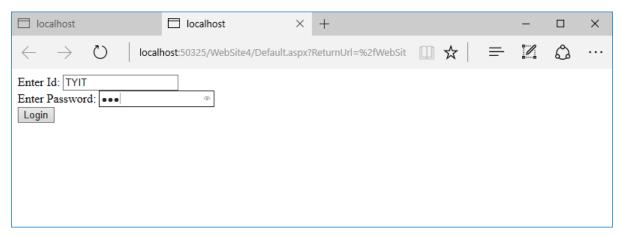
Default.aspx.cs

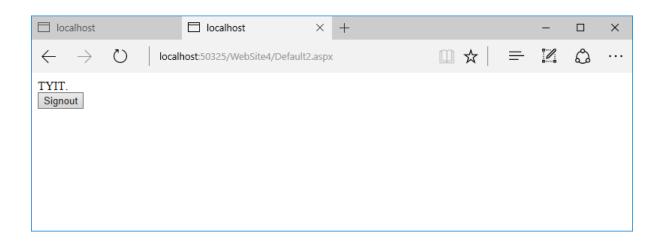
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
```

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

public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        Application.Lock();
        int count = 0;
        if (Application["HitCounter"] != null)
        {
            count = (int)Application["HitCounter"];
        }
        count++;
        Application["HitCounter"] = count;
        Application.UnLock();
        lblCounter.Text = "Visitor number : "+count.ToString();
      }
}
```

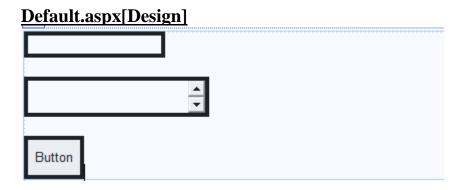






PRACTICAL NO 6

(A)AIM:-Create a web application to bind the data in multiline textbox by the query from another textbox.



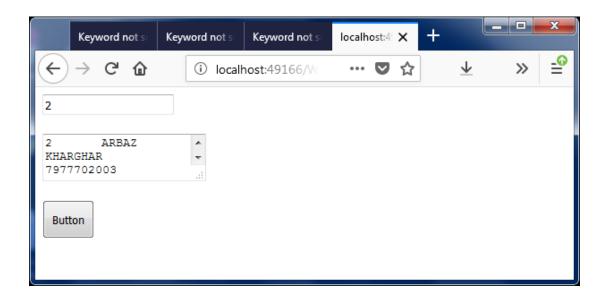
</html>

```
Default.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="kitty.aspx.cs"</p>
Inherits="kitty" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:TextBox ID="TextBox1" runat="server" Width="141px" BorderWidth="4px"</pre>
      ForeColor="Black"></asp:TextBox>
    <br/>br />
    <br>
     <asp:TextBox ID="TextBox3" runat="server" TextMode="MultiLine"</pre>
      BorderWidth="4px" ForeColor="Black"></asp:TextBox>
    <br/>>
    <br>
    <asp:Button ID="Button1" runat="server" Height="43px" Text="Button"
      onclick="Button1_Click" BorderWidth="4px" />
  </div>
  >
  </form>
</body>
```

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
public partial class kitty: System.Web.UI.Page
  SqlConnection cn = new SqlConnection("Data Source=.;Initial Catalog=rtccs;Integrated
Security=True");
  SqlCommand cmd = new SqlCommand();
  SqlDataReader dr;
  protected void Page_Load(object sender, EventArgs e)
    cn.Open();
    cmd.Connection = cn;
  protected void Button1_Click(object sender, EventArgs e)
    cmd.CommandText = "select * from TYIT where ROLL_NO=" + TextBox1.Text + "";
    dr = cmd.ExecuteReader();
    while (dr.Read())
       TextBox3.Text += dr[0].ToString() + "\t" + dr[1].ToString() + "\t" + dr[2].ToString()
+ "\t" + dr[3].ToString() + "\n";
     }
```

OUTPUT:-



(B)AIM:-Create a web application to display record by using data base.

Default.aspx[Design]



Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="kitty.aspx.cs"
Inherits="kitty" %>
```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

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

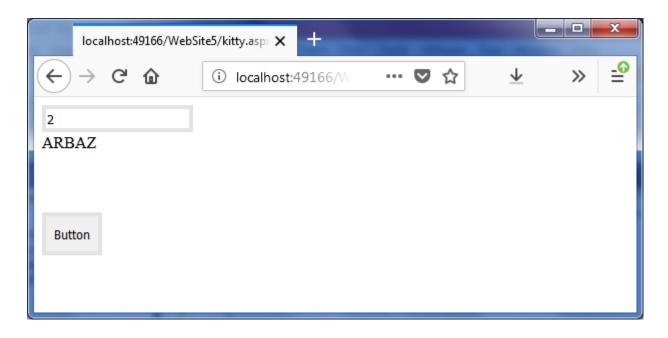
<asp:TextBox ID="TextBox1" runat="server" Width="141px" BorderWidth="4px" ForeColor="Black"></asp:TextBox>

```
<br/>
<br/>
<asp:Label ID="Label1" runat="server" Text="Label"></asp:Label><br/>
<br/>
<br/>
<asp:Button ID="Button1" runat="server" Height="43px" Text="Button"<br/>
onclick="Button1_Click" BorderWidth="4px" /></div></div></div></form></body></html>
```

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
public partial class kitty: System.Web.UI.Page
  SqlConnection cn = new SqlConnection("Data Source=.;Initial Catalog=rtccs;Integrated
Security=True");
  SqlCommand cmd = new SqlCommand();
  SqlDataReader dr;
  protected void Page_Load(object sender, EventArgs e)
    cn.Open();
    cmd.Connection = cn;
  protected void Button1_Click(object sender, EventArgs e)
    cmd.CommandText = "select name from TYIT where ROLL_NO=" + TextBox1.Text +
      Label1.Text = cmd.ExecuteScalar().ToString();
       }
```

OUTPUT:-



(C)AIM:-Demonstrate the use of data link control.

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="kitty.aspx.cs"</p>
Inherits="kitty" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
      <br>
    <br/>br />
    <br
    <asp:SqlDataSource ID="SqlDataSource1" runat="server"
      ConnectionString="<% ConnectionStrings:rtccsConnectionString %>"
      SelectCommand="SELECT * FROM [TYIT]"></asp:SqlDataSource>
    <asp:DataList ID="DataList1" runat="server" DataSourceID="SqlDataSource1">
      <ItemTemplate>
         ROLL NO:
         <asp:Label ID="ROLL_NOLabel" runat="server" Text='<%# Eval("ROLL_NO")</pre>
<mark>%></mark>'/>
         <br/>>
         NAME:
         <asp:Label ID="NAMELabel" runat="server" Text='<%# Eval("NAME") %>'/>
         <br/>>
         CITY:
         <asp:Label ID="CITYLabel" runat="server" Text='<%# Eval("CITY") %>'/>
         <br/>>
         CONTACT:
         <asp:Label ID="CONTACTLabel" runat="server" Text='<%# Eval("CONTACT")</pre>
<mark>%></mark>'/>
         <br/>br />
<br/>br />
      /ItemTemplate>
    </asp:DataList>
  </div>
  >
```

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

Default.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
public partial class kitty: System.Web.UI.Page
  SqlConnection cn = new SqlConnection("Data Source=.;Initial Catalog=rtccs;Integrated
Security=True");
  SqlCommand cmd = new SqlCommand();
  SqlDataReader dr;
  protected void Page_Load(object sender, EventArgs e)
    cn.Open();
    cmd.Connection = cn;
  }
}
```

OUTPUT:-





i localhost:49166/Wel

ROLL_NO: 1 NAME: SADIA CITY: MUMBAI

CONTACT: 8433585691

ROLL_NO: 2 NAME: ARBAZ CITY: KHARGHAR CONTACT: 7977702003

ROLL_NO: 3 NAME: RIYA CITY: PUNE

CONTACT: 8433565984

ROLL_NO: 4 NAME: ARFAT CITY: PANVEL

CONTACT: 5681436488

ROLL_NO: 5 NAME: WAQAS CITY: MUMBAI

CONTACT: 9324742218

PRACTICAL NO 7

AIM:-Create a web application for inserting and deleting record from a database.

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"</p>
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div style="height: 534px">
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br/>>
    <br/>>
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <br/>br />
    <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
    <br/>br />
    <br/>>
    <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
    <br/>>
    <br/>br />
    <asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="Insert" />
    <br >
    <br/>>
    <asp:Button ID="Button2" runat="server" onclick="Button2_Click" Text="Delete" />
    <br/>>
    <br/>br />
    <asp:Button ID="Button3" runat="server" onclick="Button3_Click" Text="View" />
    <br/>>
    <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False">
    </asp:GridView>
  </div>
```

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

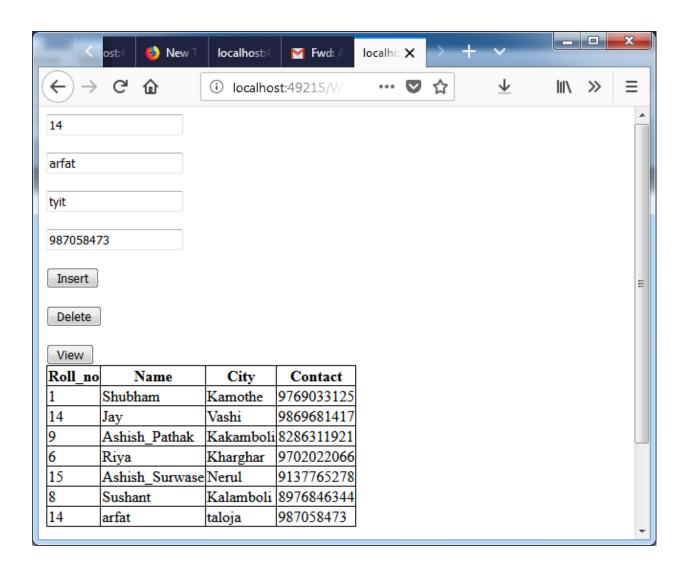
Default.aspx.cs[Source]

```
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
public partial class _Default : System.Web.UI.Page
  SqlConnection con = new SqlConnection("Data Source=.;Initial Catalog=jay;Integrated
Security=true");
  SqlCommand cmd = new SqlCommand();
  SqlDataReader dr;
  SqlParameter @p1, @p2, @p3, @p4;
  protected void Page_Load(object sender, EventArgs e)
  {
    con.Open();
    cmd.Connection = con;
  protected void Button1_Click(object sender, EventArgs e)
    @p1 = new SqlParameter();
    @p1.ParameterName = "Roll_no";
    @p1.SqlDbType = System.Data.SqlDbType.VarChar;
    @p2 = new SqlParameter();
    @p2.ParameterName = "Name";
    @p2.SqlDbType = System.Data.SqlDbType.VarChar;
    @p3 = new SqlParameter();
    @p3.ParameterName = "City";
    @p3.SqlDbType = System.Data.SqlDbType.VarChar;
    @p4 = new SqlParameter();
    @p4.ParameterName = "Contact";
    @p4.SqlDbType = System.Data.SqlDbType.VarChar;
    cmd.Parameters.AddWithValue("@p1", TextBox1.Text);
    cmd.Parameters.AddWithValue("@p2", TextBox2.Text);
    cmd.Parameters.AddWithValue("@p3", TextBox3.Text);
    cmd.Parameters.AddWithValue("@p4", TextBox4.Text);
```

```
cmd.CommandText = "insert into TYIT(Roll_no,Name,City,Contact)
values(@p1,@p2,@p3,@p4)";
    cmd.ExecuteNonQuery();

}
protected void Button3_Click(object sender, EventArgs e)
{
    cmd.CommandText = "select * from TYIT";
    dr = cmd.ExecuteReader();
    GridView1.DataSource = dr;
    GridView1.DataBind();
}
protected void Button2_Click(object sender, EventArgs e)
{
    cmd.CommandText = "delete from stdetail where sno=" + TextBox1.Text;
    cmd.ExecuteNonQuery();
}
```

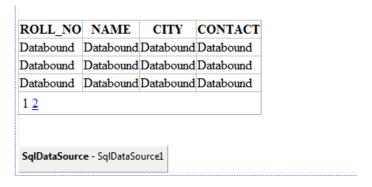
OUTPUT:-



PRACTICAL NO 9

AIM:-create a web application to demonstrate GridView paging and creating own table format using Grid View.

Default.aspx[**Design**]



Default.aspx[Source]

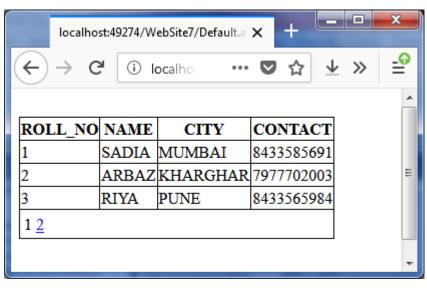
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"</p>
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <br >
    <asp:GridView ID="GridView1" runat="server" AllowPaging="True"
      AutoGenerateColumns="False" DataSourceID="SqlDataSource1"
      onselectedindexchanged="GridView1_SelectedIndexChanged" PageSize="3">
      <Columns>
        <asp:BoundField DataField="ROLL_NO" HeaderText="ROLL_NO"
          SortExpression="ROLL_NO" />
        <asp:BoundField DataField="NAME" HeaderText="NAME"
SortExpression="NAME" />
        <asp:BoundField DataField="CITY" HeaderText="CITY" SortExpression="CITY"
/>
        <asp:BoundField DataField="CONTACT" HeaderText="CONTACT"
          SortExpression="CONTACT" />
```

Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        }
        protected void GridView1_SelectedIndexChanged(object sender, EventArgs e)
        {
        }
    }
}
```

OUTPUT:-





PRACTICAL 10

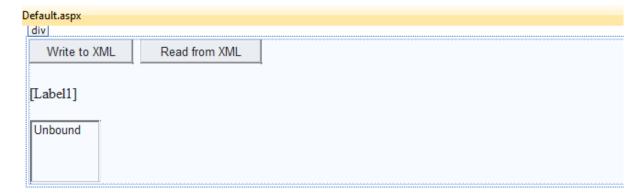
A] AIM: Create a web application to demonstrate reading and writing operation with XML.

Adding XML file

Website-> Add New Item-> XML File and name it 'XMLWriteRead.xml'

XMLWriteRead.xml

Default.aspx[Design]



Default.aspx[Source]

ID

Control Properties Property Values Button1 ID btnWrite Text Write to XML Button2 ID btnRead Read from XML Text Label1 ID Label1 Text

ListBox1

Default.aspx.cs

ListBox1

Properties

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

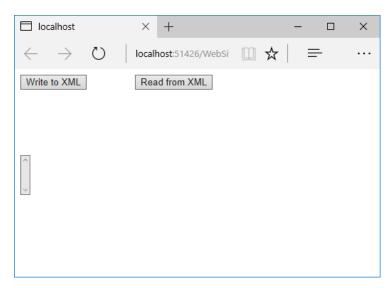
public partial class _Default : System.Web.UI.Page
{
    protected void btnWrite_Click(object sender, EventArgs e)
    {
        XmlTextWriter w = new XmlTextWriter(@"D:\College\2018-2019\TYIT\SEM-5\PRACTICALS\10A\XMLWriteRead.xml", null);
        w.Formatting = Formatting.Indented;//set it to indent output
```

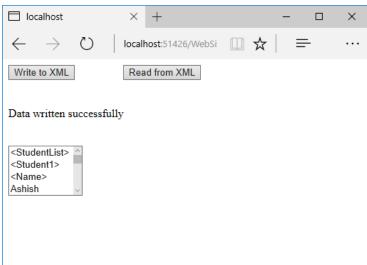
```
w.Indentation = 5;//set the number of indent spaces
    w.WriteStartDocument();
    w.WriteStartElement("StudentList");//Root Element
    w.WriteStartElement("Student1");
    w.WriteStartElement("Name");
    w.WriteString("Vidya");
    w.WriteEndElement();
    w.WriteStartElement("Id");
    w.WriteString("01");
    w.WriteEndElement();
    w.WriteEndElement();
    w.WriteStartElement("Student2");
    w.WriteStartElement("Name");
    w.WriteString("Menon");
    w.WriteEndElement();
    w.WriteStartElement("Id");
    w.WriteString("02");
    w.WriteEndElement();
    w.WriteEndElement();
    w.WriteEndElement();
    w.WriteEndDocument();
    w.Close();
    Label1.Text = "Data written successfully";
  }
protected void btnRead_Click(object sender, EventArgs e)
    XmlTextReader r = new XmlTextReader (@"D:\College\2018-2019\TYIT\SEM-
5\PRACTICALS\10A\XMLWriteRead.xml");
    while (r.Read())
      switch (r.NodeType)
         case XmlNodeType.Element:
           ListBox1.Items.Add("<" + r.Name + ">");
           break;
         case XmlNodeType.Text:
           ListBox1.Items.Add(r.Value);
         case XmlNodeType.EndElement:
           ListBox1.Items.Add("</" + r.Name + ">");
           break;
      }
    }
```

```
}
```

Output

}





B] AIM: Create a web application to demonstrate Form Security and Windows Security with proper Authentication and Authorization properties.

i] Form Security

```
web.config
<?xml version="1.0"?>
<1--
For more information on how to configure your ASP.NET application, please visit
http://go.microsoft.com/fwlink/?LinkId=169433
 -->
<configuration>
      <system.web>
             <authentication mode="Forms">
                    <forms loginUrl="Login.aspx"/>
             </authentication>
             <authorization>
                    <deny users="?"/>
                    <allow users=""*"/>
             </authorization>
             <compilation debug="true" targetFramework="4.0"/>
      </system.web>
</configuration>
Login.aspx[Design]
Login.aspx
 body
 User Name:
 Password:
  Login
 [lblStatus]
Login.aspx[Source]
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Login.aspx.cs"
Inherits="Login" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Login</title>
</head>
<body>
```

```
<form id="form1" runat="server">
  <div>
    User Name : 
    <asp:TextBox ID="txtUser" runat="server"></asp:TextBox>
    <br/>br />
    <br/>br />
    Password:      
    <asp:TextBox ID="txtPassword" runat="server"
TextMode="Password"></asp:TextBox>
    <br/>br />
    <br/>>
    <asp:Button ID="btnLogin" runat="server" onclick="btnLogin_Click"
      Text="Login" />
    <br/>br />
    <br/>br />
    <asp:Label ID="lblStatus" runat="server"></asp:Label>
  </div>
  </form>
</body>
</html>
```

Properties

Control	Properties	Property Values
Button1	ID	btnLogin
	Text	Login
TextBox1	ID	txtUser
TextBox2	ID	txtPassword
	TextMode	Password
Label1	ID	IblStatus
	Text	

Login.aspx.cs

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

public partial class Login: System.Web.UI.Page
```

```
{
  protected void btnLogin_Click(object sender, EventArgs e)
    if (txtPassword.Text == "TYIT")
      FormsAuthentication.RedirectFromLoginPage(txtUser.Text, false);
      Response.Redirect("Home.aspx");
    }
    else
      lblStatus.Text = "Try again.";
  }
Home.aspx[Design]
Home.aspx
 body
 [lblMessage]
   Sign Out
Home.aspx[Source]
< @ Page Language="C#" AutoEventWireup="true" CodeFile="Home.aspx.cs"
Inherits="Home" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Home</title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Label ID="lblMessage" runat="server" Text=""></asp:Label>
    <br/>
    <br/>>
    <br/>br />
    <asp:Button ID="btnSign" runat="server" Text="Sign Out"
      onclick="btnSign_Click"/>
  </div>
  </form>
```

```
</body>
```

Properties

Control	Properties	Property Values
Button1	ID	btnSign
	Text	Sign Out
Label1	ID	lblMessage
	Text	

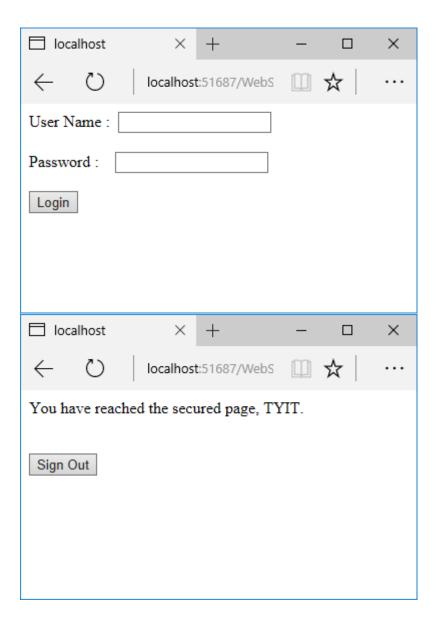
Home.aspx.cs

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

public partial class Home : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        lblMessage.Text = "You have reached the secured page,";
        lblMessage.Text += User.Identity.Name + ".";

    }
    protected void btnSign_Click(object sender, EventArgs e)
    {
        FormsAuthentication.SignOut();
        Response.Redirect("Login.aspx");
    }
}
```

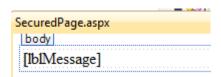
Output



ii] Windows Security

web.config

SecuredPage.aspx[Design]



SecuredPage.aspx[Source]

Properties

Control	Properties	Property Values
Label1	ID	lblMessage
	Text	

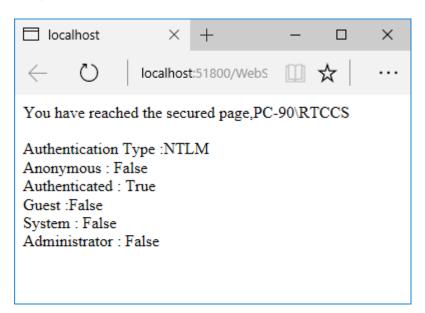
SecuredPage.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Text;
using System.Security.Principal;

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

```
StringBuilder s = new StringBuilder();
    s.Append("You have reached the secured page,");
    s.Append(User.Identity.Name);
    WindowsIdentity win = (WindowsIdentity)User.Identity;
    s.Append("<br>>dr> Authentication Type:");
    s.Append(win.AuthenticationType);
    s.Append("<br>>Anonymous : ");
    s.Append(win.IsAnonymous);
    s.Append("<br/>br>Authenticated: ");
    s.Append(win.IsAuthenticated);
    s.Append("<br > Guest :");
    s.Append(win.IsGuest);
    s.Append("<br>System:");
    s.Append(win.IsSystem);
    s.Append("<br>>Administrator : ");
    s.Append(User.IsInRole(@"BUILTIN\Administrators"));
    lblMessage.Text = s.ToString();
  }
}
```

Output



C] AIM: Create a web application to demonstrate use of various AJAX controls.

Default.aspx[Design]

Default.aspx
. body
ScriptManager - ScriptManager1
[Label2]
Timer - Timer1

Default.aspx[Source]

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <br/>br />
    <asp:ScriptManager ID="ScriptManager1" runat="server">
    </asp:ScriptManager>
    <asp:UpdatePanel ID="UpdatePanel1" runat="server">
    <ContentTemplate>
      <asp:Label ID="Label2" runat="server" Text=""></asp:Label><br /><br />
      <asp:Timer ID="Timer1" runat="server" Interval="1000" ontick="Timer1_Tick">
      </asp:Timer>
    </ContentTemplate>
    </asp:UpdatePanel>
  </div>
  </form>
</body>
</html>
```

Properties

Control	Properties	Property Values
Label1	ID	Label2
	Text	

ScriptManager	ID	ScriptManager1
UpdatePanel	ID	UpdatePanel1
Timer	ID	Timer1
	Interval	1000

Default.aspx.cs

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

public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        string t = DateTime.Now.ToLongTimeString();
        Label2.Text = "Todays date and time : " + t;
     }
}
```

Output

