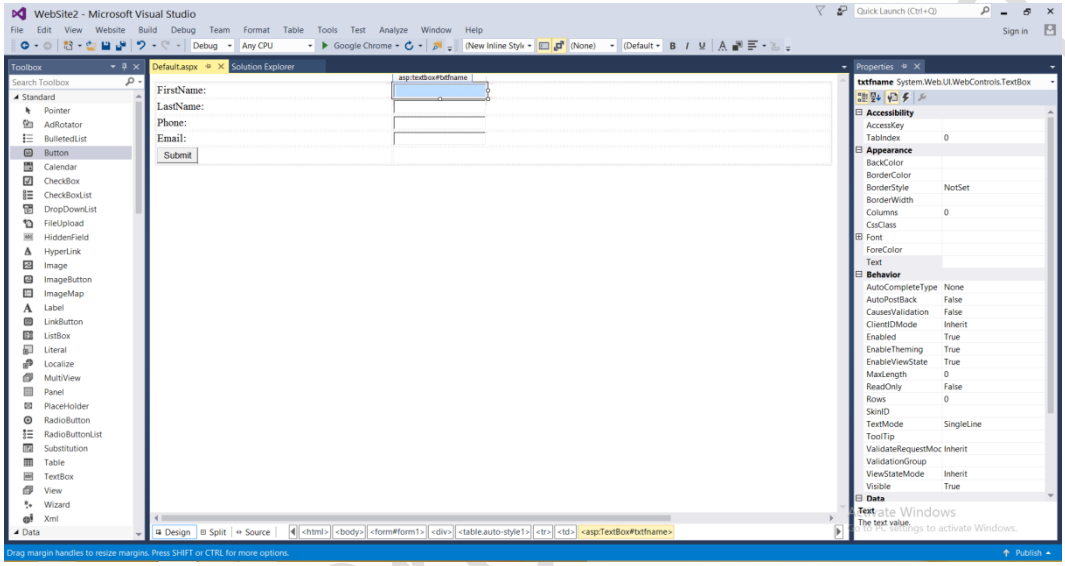
Web Application Development-I (Using C#)

Unit-1 Introduction of ASP.NET

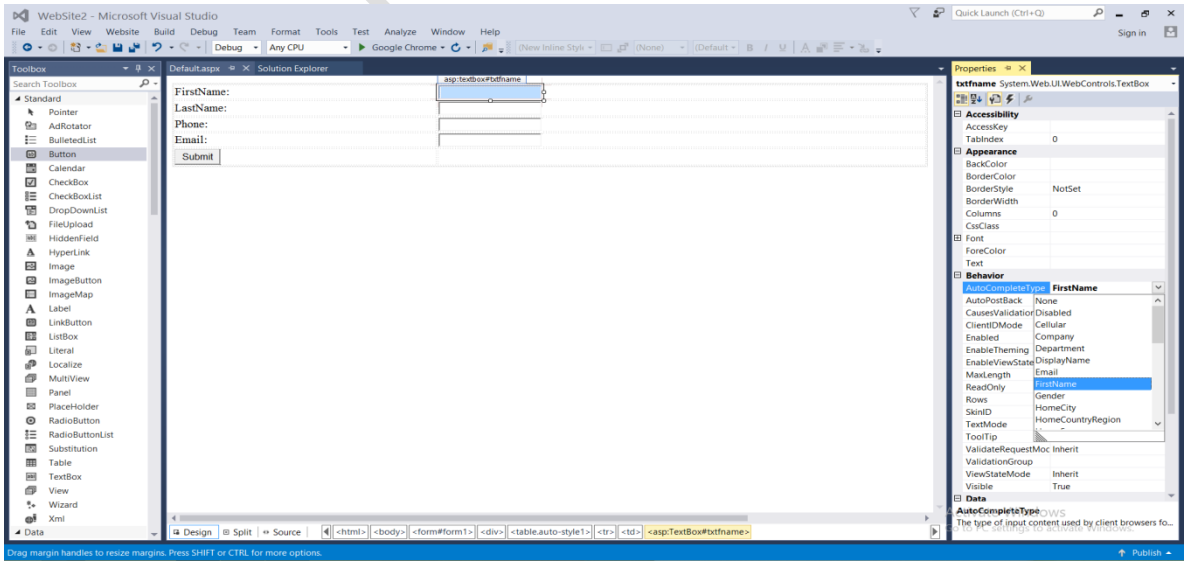
Program-1.

Design .aspx page, having 4 Textboxes (First name, Last name, Email and Mobile). Place a button on the page. On the click even of the button user will be redirected on another page, having same 4 Textboxes having AutoComplete capability. On another page user do not have type First name, Last name, Email, and Mobile number but it will be AutoComplete by pressing one or two keys in each textbox. (Demo of AutoCompleteType property).

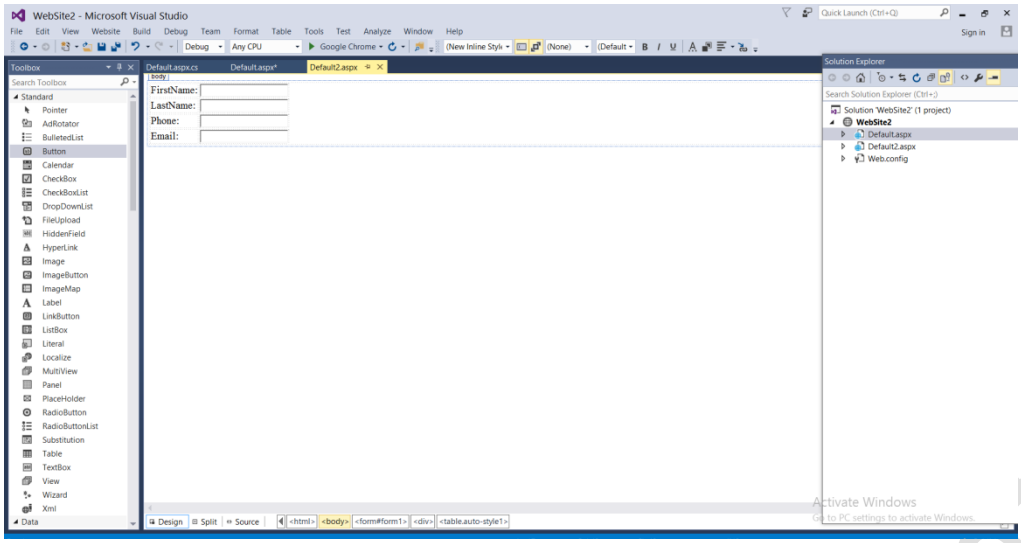
Step-1 : Add Default.aspx



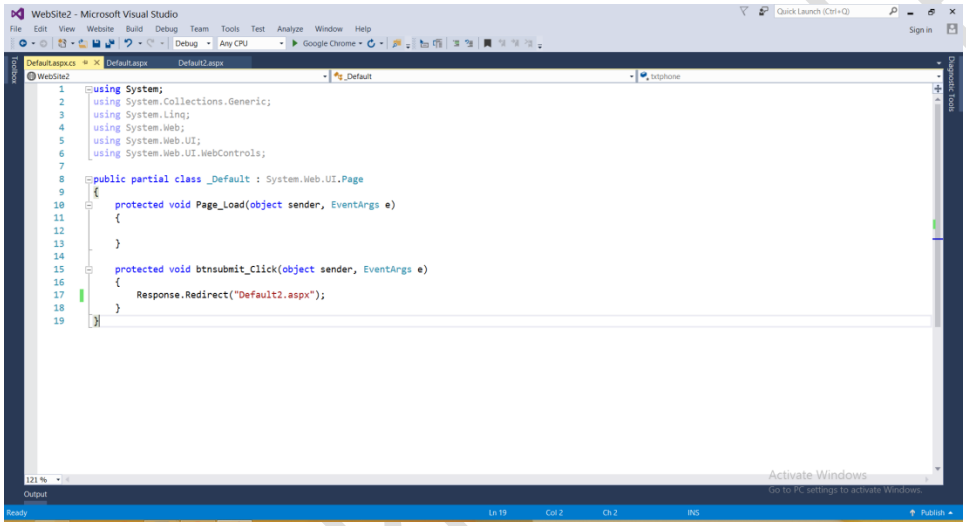
Step-2 : Set AutocompleteType Property



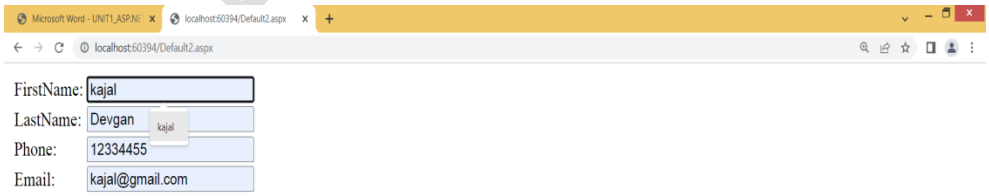
Step-3 : Add Default2.aspx, add 4 textboxes



Step- 4: Write code on button_click event in Default.aspx.cs



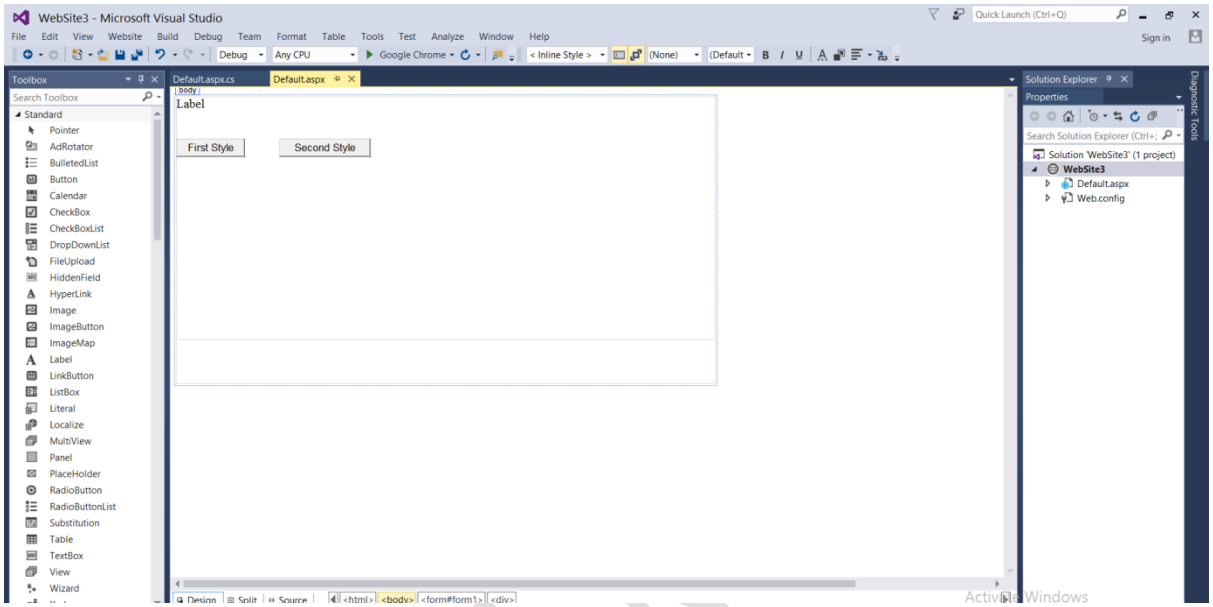
Output:



Program -2:

Design two different css class in the web page having different formatting features like border size, border style, border color, font color, background color etc. Place two buttons and a label on the .aspx page. On the click event of the first button one css class will be applied to the label and on the click event of the second button apply second css class to the label. (Changing appearance of the label at run time using CSSClass property).

Step-1 : create Default.aspx with 1 label and 2 buttons. Change text of Buttons.

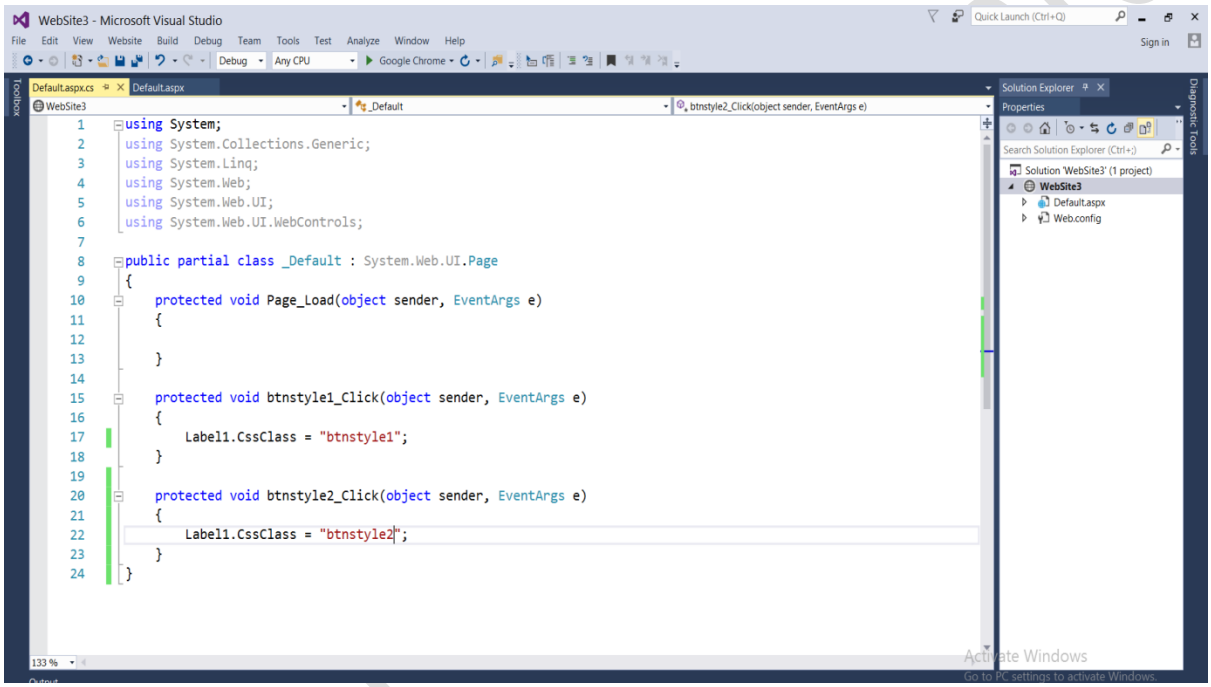


Step-2 Add CSS in source code of web page

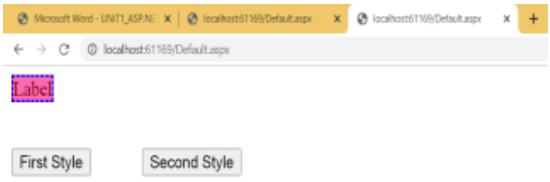
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs"
Inherits="_Default" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .btnstyle1 {
            background-color:aquamarine;
            color:darkblue;
            border:2px solid red;
        }
        .btnstyle2{
            background-color:hotpink;
            color:maroon;
            border:2px dashed blue;
        }
       </style>
</head>
<body style="height: 455px; width: 858px">
    <form id="form1" runat="server">
    <div style="height: 385px">

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

```
        <br />
        <br />
        <br />

        <asp:Button ID="btnstyle1" runat="server" Text="First Style"
OnClick="btnstyle1_Click"  />
          
        <asp:Button ID="btnstyle2" runat="server" Text="Second Style"
OnClick="btnstyle2_Click" />

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

Step-3 Write code on button1_click ,button2_click event shown below:



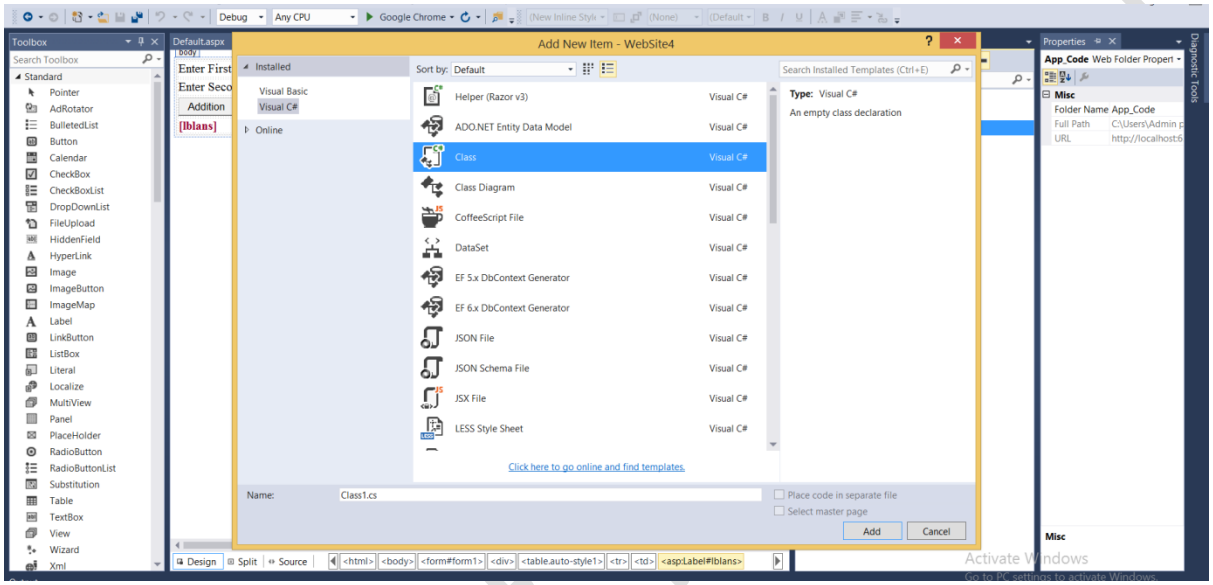
Output:



Program -3

Design a class file having two methods to do sum and multiplication, which takes two arguments. Design a web page having two textboxes to take integer number from the user. Place two buttons to invoke sum and multiplication method. Print the resultant value in the label control placed on the web page. (Use of App_code directory).

Step-1 : create a web form Default.aspx.
Step-2 : Add Asp.Net folder APP_Code .
Step-3 : Add Class file in App_Code directory.

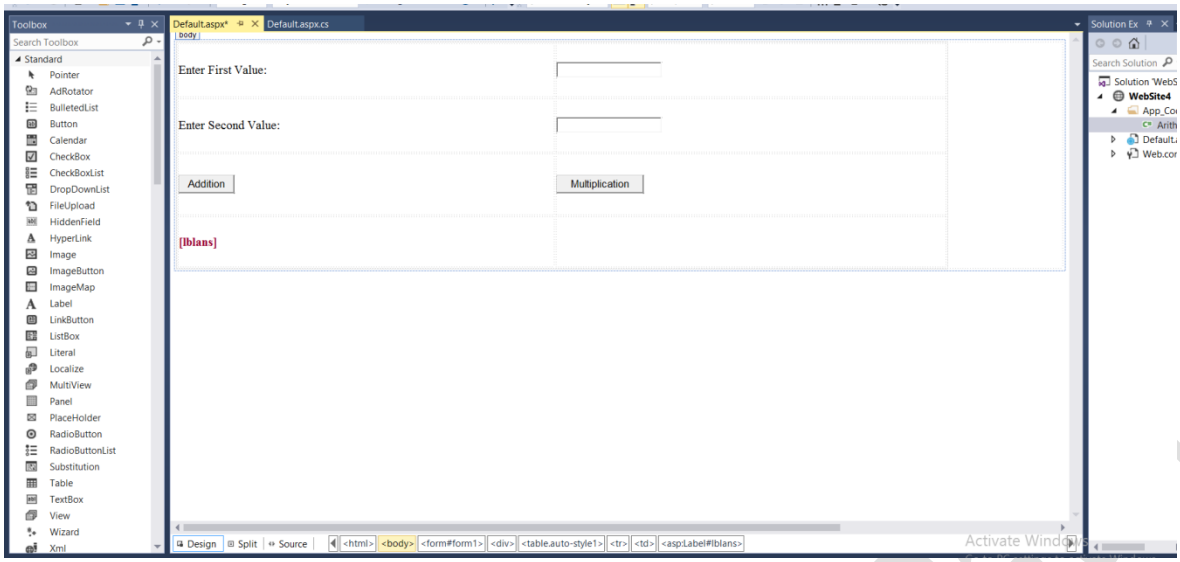


Step-4 Create two Methods in class file .

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
/// <summary>
/// Summary description for Arithmatic
/// </summary>
public class Arithmatic
{
    public Arithmatic()
    {
        //
        // TODO: Add constructor logic here
        //
    }
    public int sum(int num1,int num2)
    {
        return (num1 + num2);
    }
    public int multy(int num1,int num2)
    {
        return (num1 * num2);
    }
}
```

Step-5 : Now Add Textboxes and buttons in Default.aspx file.

Asst. Prof.

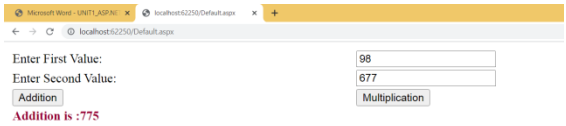


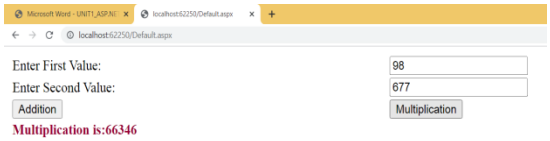
Step-6 : Now Write the code in Buttons click event .

```
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 btnadd_Click(object sender, EventArgs e)
    {
        Arithmatic obj = new Arithmatic();
        int a = Convert.ToInt16(txtfval.Text);
        int b = Convert.ToInt16(txtsval.Text);
        lblans.Text = "Addition is :"+obj.sum(a, b).ToString();
    }

    protected void btnmulti_Click(object sender, EventArgs e)
    {
        Arithmatic obj = new Arithmatic();
        int a = Convert.ToInt16(txtfval.Text);
        int b = Convert.ToInt16(txtsval.Text);
        lblans.Text = "Multiplication is:"+obj.multy(a, b).ToString();
    }
}
```

Output:

Asst. Prof. Kinjal Pa





Program-4 :

Create .dll class library file having 2 classes and each class has at least two methods. Add the .dll file into the ASP.NET website. Design a web page to invoke the methods of .dll files. Use appropriate textboxes, label and button controls. (Use of Bin directory).

Step-1 : File -> New -> Project

Step-2: Create Class Library file.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace myArithClsLib {
    public class Class1
    {
        public int sum(int num1,int num2)
        {
            return (num1 +num2);
        }
        public int sub(int num1, int num2)
        {
            return (num1 - num2);
        }
    }
}
```

Step-3 : Now Go to solution Explorer , Right click on project name and add Class file and give name multidiv.cs.

Step-4 : create two methods.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace myArithClsLib
{
   public class class2
    {
        public int mul(int num1, int num2)
```

Asst. Prof. Kinjal Patel

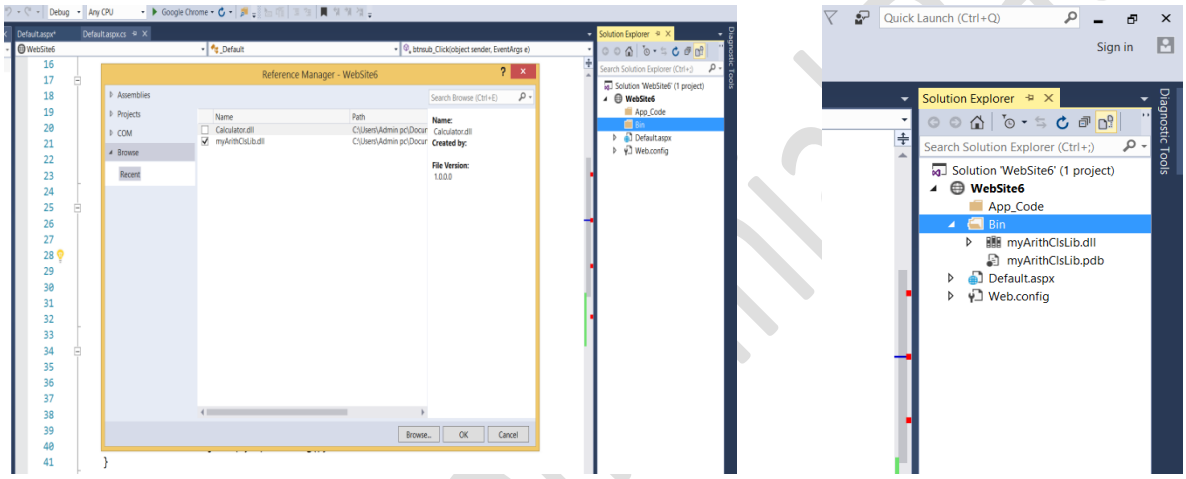
```
        {
            return (num1 * num2);
        }
        public int div(int num1, int num2)
        {
            return (num1 / num2);
        }
    }
}
```

Step-5: Now Build -> Build Solution.

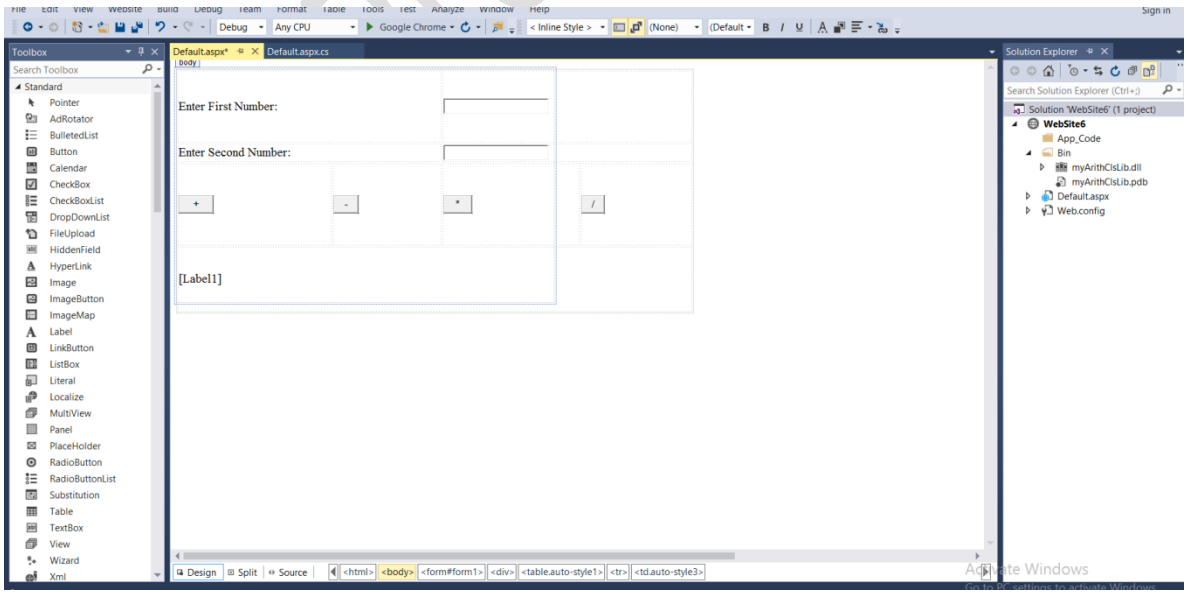
Step-6: get the message Build Succeeded

Step-7 : create new website. File -> New -> website

Step-8 : select solution explorer ,add folder Bin, now add reference (.dll) file which we made in project



Step-9 : Add Default.aspx ,add 2 texboxes and 2 buttons

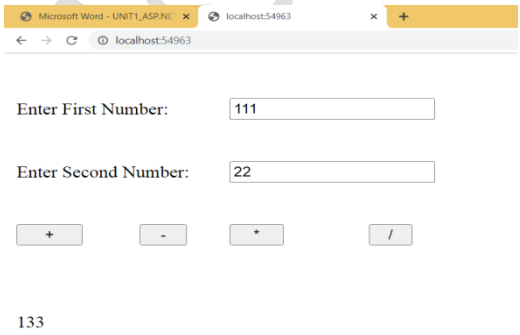


Step-10 : write Code on buttons click event.

```
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 btnadd_Click(object sender, EventArgs e)
    {
       myArithClsLib.Class1 obj = new myArithClsLib.Class1();
        int a = Convert.ToInt16(txtfno.Text);
        int b = Convert.ToInt16(txtsno.Text);
        Label1.Text = obj.sum(a, b).ToString();
    }
    protected void btnsub_Click(object sender, EventArgs e)
    {

        myArithClsLib.Class1 obj = new myArithClsLib.Class1();
        int a = Convert.ToInt16(txtfno.Text);
        int b = Convert.ToInt16(txtsno.Text);
        Label1.Text = obj.sub(a, b).ToString();
    }
    protected void btnmult_Click(object sender, EventArgs e)
    {

        myArithClsLib.Class2 obj = new myArithClsLib.Class2();
        int a = Convert.ToInt16(txtfno.Text);
        int b = Convert.ToInt16(txtsno.Text);
        Label1.Text = obj.mul(a, b).ToString();
    }
    protected void btndiv_Click(object sender, EventArgs e)
    {
        myArithClsLib.Class2 obj = new myArithClsLib.Class2();
        int a = Convert.ToInt16(txtfno.Text);
        int b = Convert.ToInt16(txtsno.Text);
        Label1.Text = obj.div(a, b).ToString();
    }
}
```

Output:

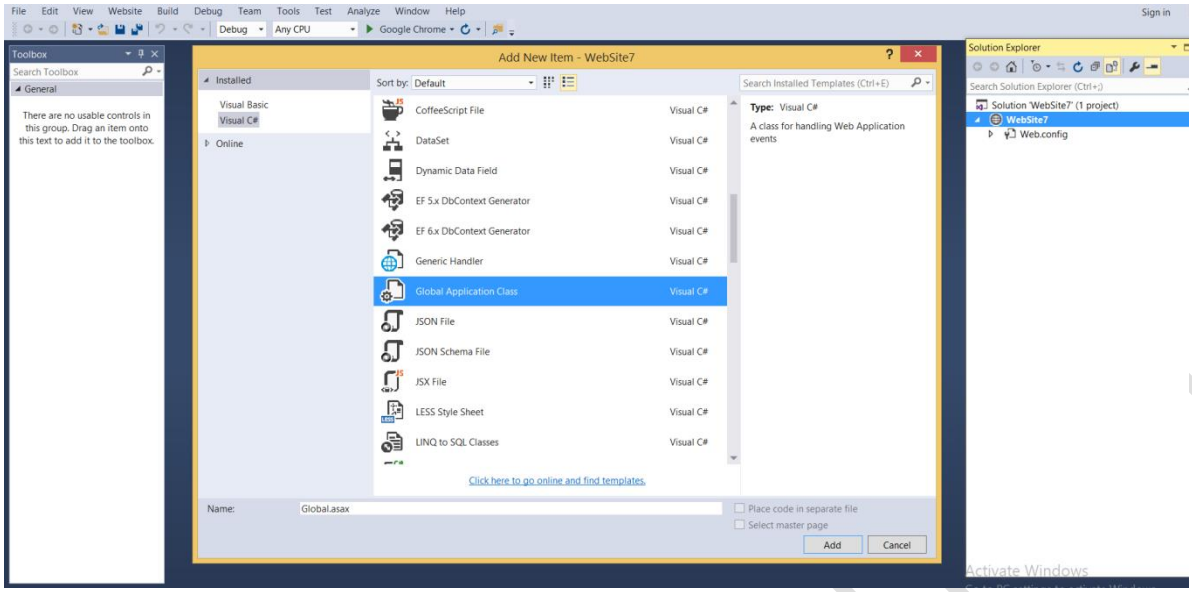


Program -5

Create a page which will show number of visitors of a page in label (using global.asax).

Asst. Prof. Kinjal Patel

Step-1 : Solution Explorer -> Add New Item-> Global Application class.



Step-2 : Write the code in global.asax file.

```
<%@ Application Language="C#" %>

<script runat="server">

    void Application_Start(object sender, EventArgs e)
    {
        // Code that runs on application startup
        Application["noOfusers"]= 0;
    }

    void Application_End(object sender, EventArgs e)
    {
        //  Code that runs on application shutdown

    }

    void Application_Error(object sender, EventArgs e)
    {
        // Code that runs when an unhandled error occurs

    }

    void Session_Start(object sender, EventArgs e)
    {
        // Code that runs when a new session is started
        Application["noOfusers"] = Convert.ToInt16(Application["noOfusers"]) + 1;
    }

    void Session_End(object sender, EventArgs e)
    {
        // Code that runs when a session ends.
        // Note: The Session_End event is raised only when the sessionstate mode
        // is set to InProc in the Web.config file. If session mode is set to StateServer
        // or SQLServer, the event is not raised.
         Application["noOfusers"] = Convert.ToInt16(Application["noOfusers"]) - 1;
    }
```

Asst. Prof. Kinjal

```
</script>
```

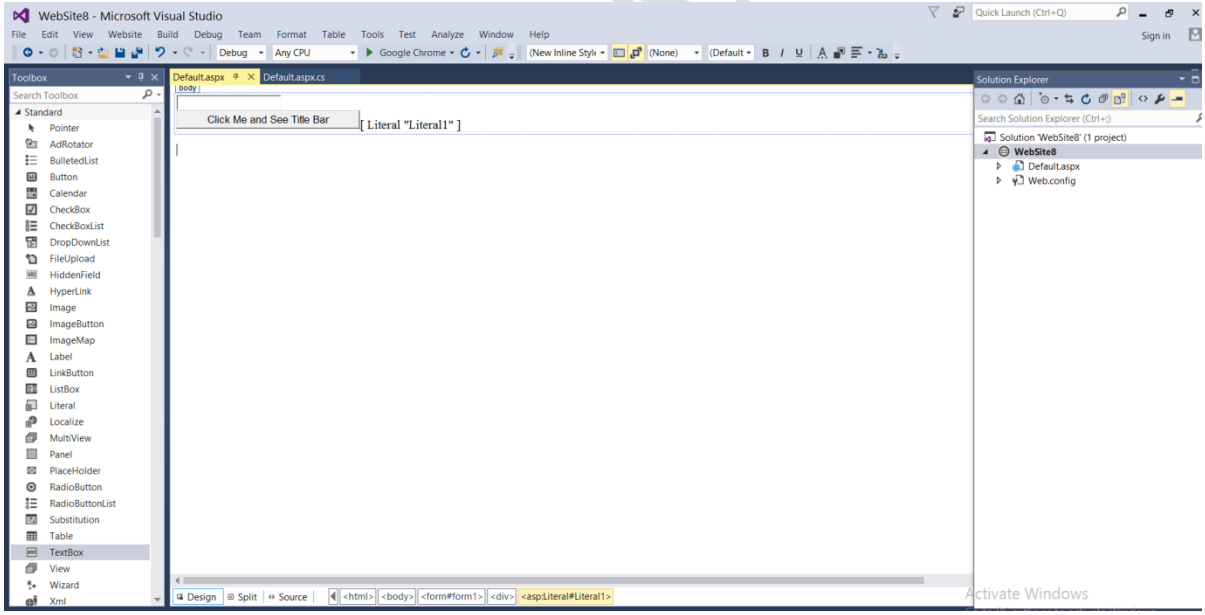
Step-3 : Add Default.aspx file and write code as below:

```
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)
    {
        Label1.Text="You have visit "+ Convert.ToString(Application["noOfusers"]);
    }
}
```

Program -6 :

Design a webpage which has textbox and a button. User will enter his/her name in the textbox. On the click event of the button name of the user and current date time will be displayed on the titlebar of the web page. (Using Literal control).

Step-1 : add Default.aspx



Step-2 : Write code on Button_click1 events.

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

Kinjal Patel

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

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        Literal1.Page.Title = TextBox1.Text + DateTime.Now;
    }
}
```

Program -7 :

Create an application Hit counter, which count the total number of users visited the page. (Using global.asax).

Step-1 : Add Global application class(global.asax) file in website and write code as below:

```
<%@ Application Language="C#" %>

<script runat="server">

    void Application_Start(object sender, EventArgs e)
    {
        // Code that runs on application startup
        Application["cnt"] = 0;
    }

    void Application_End(object sender, EventArgs e)
    {
        //  Code that runs on application shutdown

    }

    void Application_Error(object sender, EventArgs e)
    {
        // Code that runs when an unhandled error occurs

    }

    void Session_Start(object sender, EventArgs e)
    {
        // Code that runs when a new session is started
        Application["cnt"] = (int)Application["cnt"] + 1;

    }

    void Session_End(object sender, EventArgs e)
    {
        // Code that runs when a session ends.
        // Note: The Session_End event is raised only when the sessionstate mode
        // is set to InProc in the Web.config file. If session mode is set to StateServer
        // or SQLServer, the event is not raised.

    }

</script>
```

Asst. Prof. Kinjal Patel

Step-2:Now add one label in Default.aspx file and write code in Page_Load event.

```
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)
    {
        Label1.Text = "This website is visted for
"+"<b>"+Convert.ToString(Application["cnt"]+"</b>"+ " times");
    }
}
```

Program -8 :

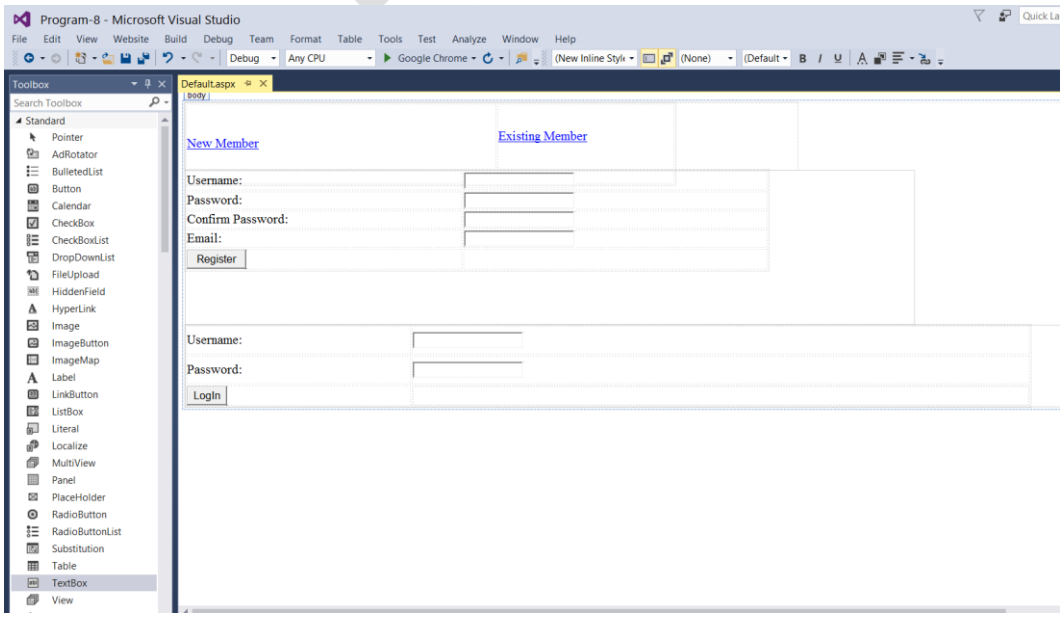
Take to linkbuttons showing 'New Member' and 'Existing Member'. When user clicks on the 'New Member' link button panel1 becomes visible, having user name, password, confirm password and email as inputs. When user clicks on 'Existing Member' link button then only panel2 becomes visible having user name and password as inputs). Set proper property of the textbox to mask the password.

Step-1: Add Default.aspx

Step-2: Add 2 LinkButtons and give name "New Member" and "Existing Member".

Step-3: Add 2 panels .

Step-4: Set the Password texbox Property Textmode =Password.

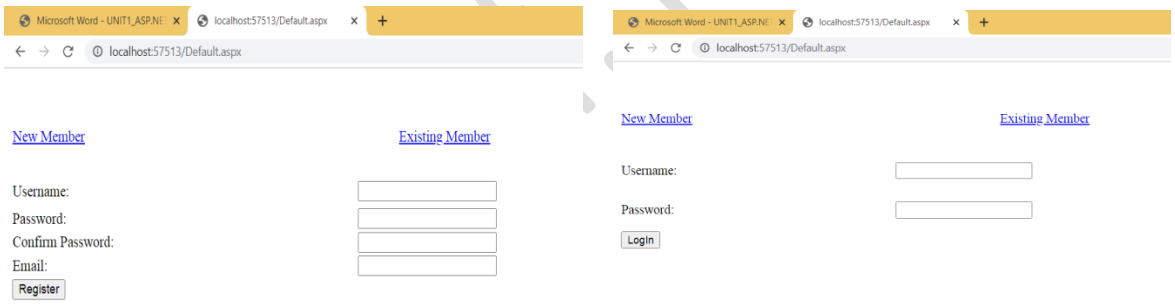


Prof. Kinjal Patel

Step- 5: write code in Linkbutton1_click and LinkButton2_click is shown below:

```
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 lnknew_Click(object sender, EventArgs e)
    {
        Panel1.Visible = true;
        Panel2.Visible = false;
    }

    protected void lnkex_Click(object sender, EventArgs e)
    {
        Panel1.Visible = false;
        Panel2.Visible = true;
    }


}
```

Output:



Program -9 :

Design .aspx web page which prints "Gujarat University" for 5 times, each in a new row with increasing font size by 1 each time. (Use loop in c# using code render block).

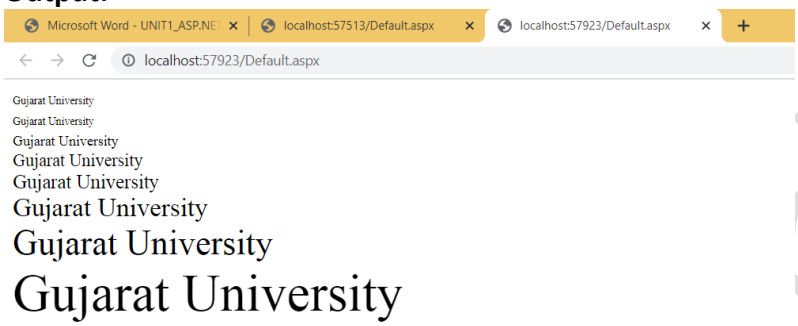
Step-1 : Add Default.aspx write in source code.

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
```

Kinjal Patel

```
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
    <% int i;
        for (i = 0; i < 8; i++)
        { %>
       <font size="<%=i %>">Gujarat University</font>
        <br />
        <%} %>
    </div>
    </form>
</body>
</html>
```

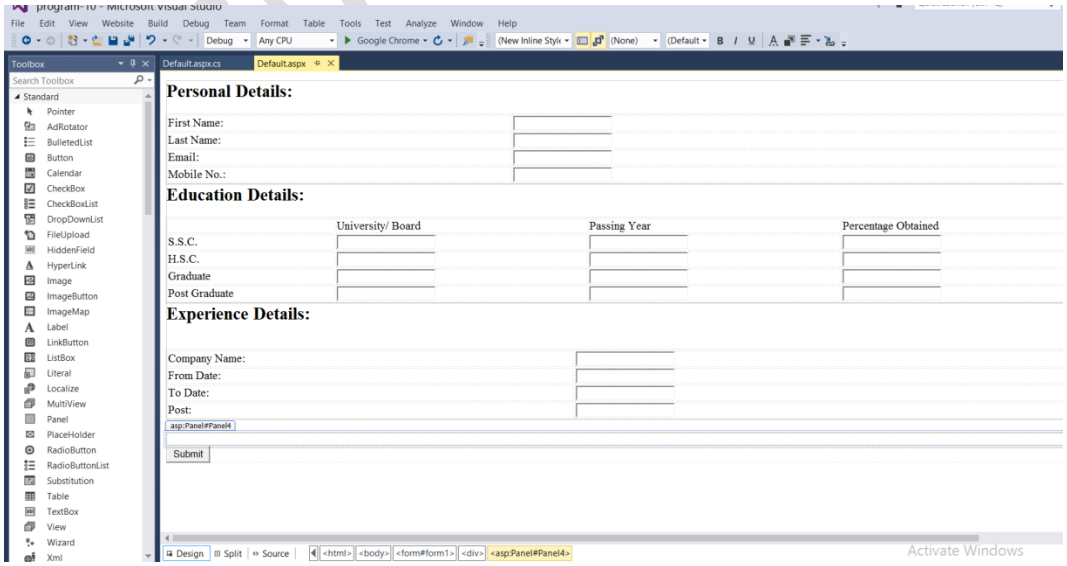
Output:



Program-10:

Create web page which will ask the employee personal detail, education detail, work experience detail with use of different panel for each part. Allow user to click on submit button and display a message "Data is successfully submitted" in a new label by adding it at runtime in a panel.

Step-1: Add Default.aspx



Prof. Nayal Patel

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .auto-style1 {
            width: 100%;
        }
        .auto-style2 {
            font-size: x-large;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:Panel ID="Panel1" runat="server">
            <span class="auto-style2"><strong>Personal Details:</strong></span><strong><br
class="auto-style2" /> </strong>
            <table class="auto-style1">
                <tr>
                    <td>First Name:</td>
                    <td>
                        <asp:TextBox ID="txtfname" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Last Name:</td>
                    <td>
                        <asp:TextBox ID="txtlname" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Email:</td>
                    <td>
                        <asp:TextBox ID="txtemail" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Mobile No.:</td>
                    <td>
                        <asp:TextBox ID="txtmno" runat="server"></asp:TextBox>
                    </td>
                </tr>
            </table>
        </asp:Panel>
        <asp:Panel ID="Panel2" runat="server">
            <strong><span class="auto-style2">Education Details:</span></strong><br />
            <table class="auto-style1">
                <tr>
                    <td> </td>
                    <td>University/ Board</td>
                    <td>Passing Year</td>
                    <td>Percentage Obtained</td>
                </tr>
                <tr>
                    <td>S.S.C.</td>
```

Asst. Prof. Kinjal Patel

```
                <td>
                    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox9" runat="server"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>H.S.C.</td>
                <td>
                    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox10" runat="server"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>Graduate</td>
                <td>
                    <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox7" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox11" runat="server"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>Post Graduate</td>
                <td>
                    <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox8" runat="server"></asp:TextBox>
                </td>
                <td>
                    <asp:TextBox ID="TextBox12" runat="server"></asp:TextBox>
                </td>
            </tr>
        </table>
    </asp:Panel>
    <asp:Panel ID="Panel3" runat="server">
        <strong><span class="auto-style2">Experience Details:</span></strong><br />
        <br />
        <table class="auto-style1">
            <tr>
                <td>Company Name:</td>
                <td>
                    <asp:TextBox ID="TextBox13" runat="server"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>From Date:</td>
                <td>
                    <asp:TextBox ID="TextBox14" runat="server"></asp:TextBox>
```

Asst. Prof. Kinjal Patel

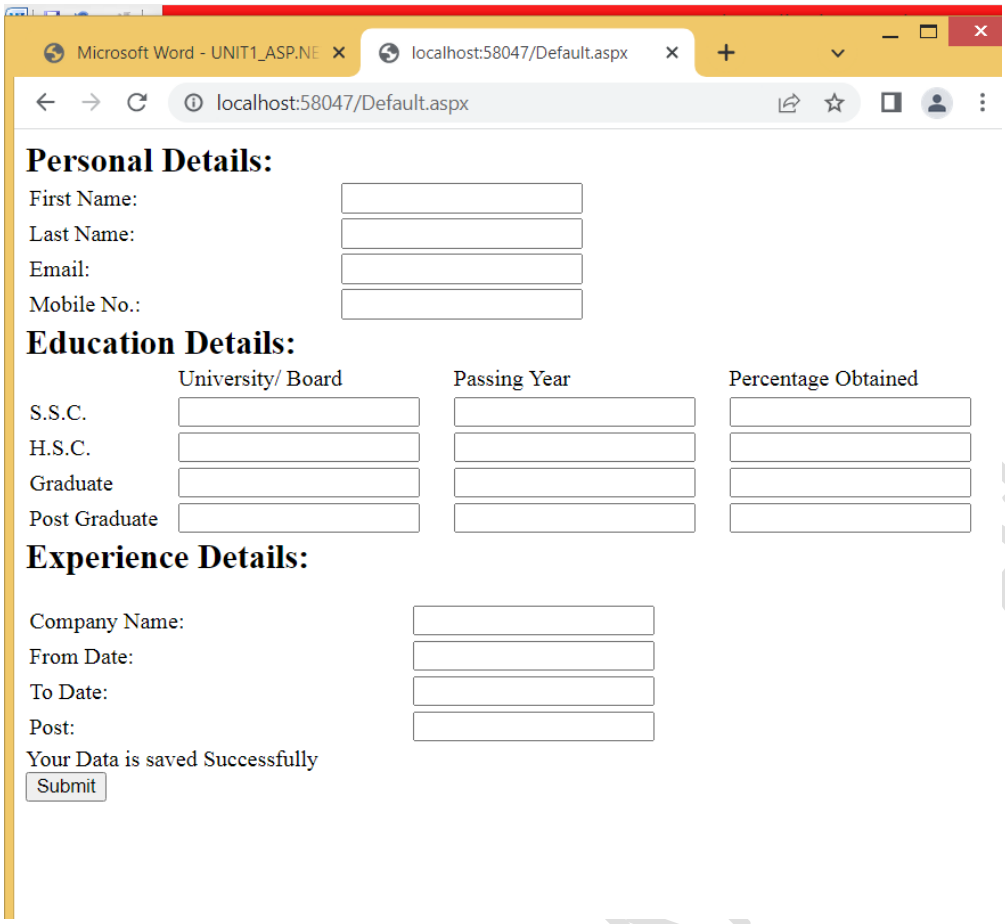
```
                    </td>
                </tr>
                <tr>
                    <td>To Date:</td>
                    <td>
                        <asp:TextBox ID="TextBox15" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Post:</td>
                    <td>
                        <asp:TextBox ID="TextBox16" runat="server"></asp:TextBox>
                    </td>
                </tr>
            </table>
        </asp:Panel><br />
        <asp:Panel ID="Panel4" runat="server"></asp:Panel>
    </div>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
    </form>
</body>
</html>
```

Step-2: Write code in 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 Button1_Click(object sender, EventArgs e)
    {
        Label lb = new Label();
        lb.Text = "Your Data is saved Successfully";
        Panel4.Controls.Add(lb);
    }
}
```

Output:

Asst. Prof. Kinjal Patel



Program-11:

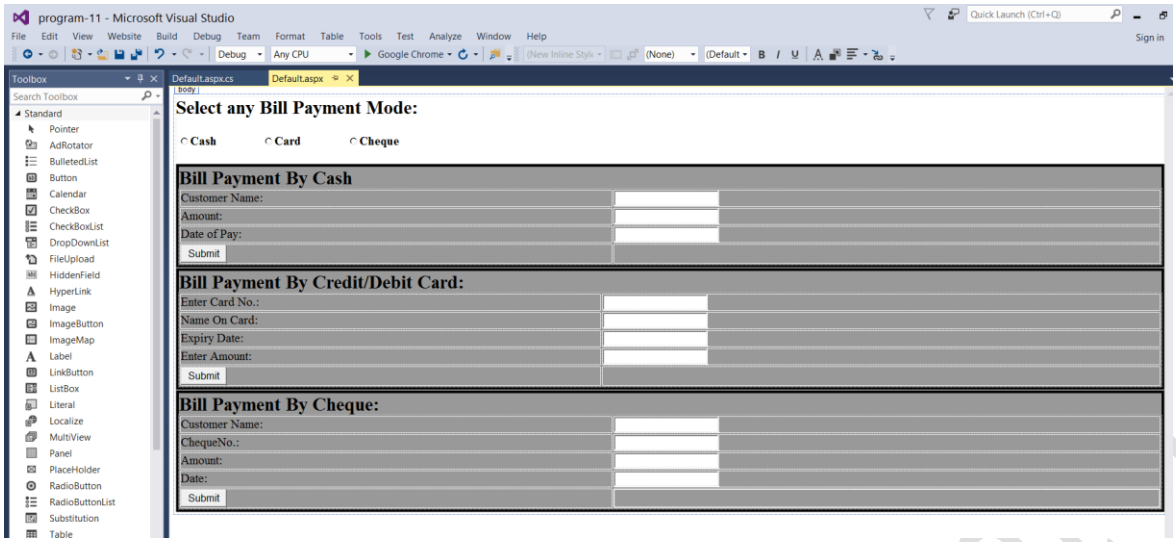
Create web page which will ask payment detail of customer purchase, this detail either in Cash or Credit/Debit card or by Cheque. According to the payment mode panel control will display and accept payment detail and display all that detail in next page using label control.

Step-1: Add Default.aspx

Step-2: Add Radiobuttonlist from Toolbox and add listitems

Step-3: Add 3 panels.

Asst. Prof. N. Patel



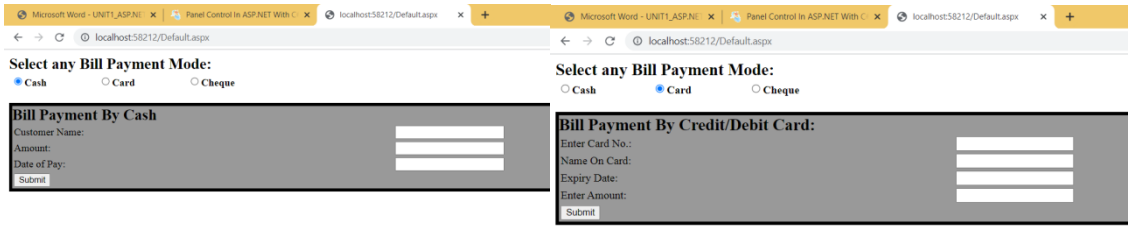
Step-4: set RadioButtonList Autopostback Property True.

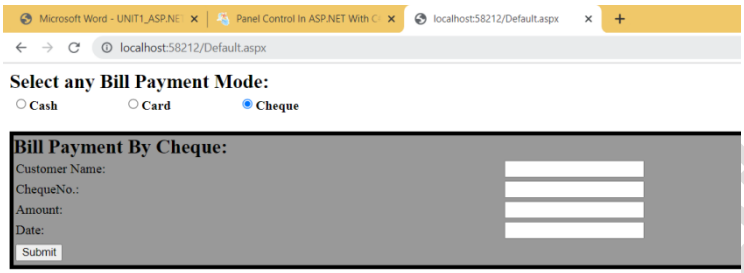
Step-5: Write the code in RadioButton_SelectedIndexedChanged event in Default.aspx.cs file.

```
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)
    {
        Panel1.Visible = false;
        Panel2.Visible = false;
        Panel3.Visible = false;
    }
    protected void RadioButtonList1_SelectedIndexChanged(object sender, EventArgs e)
    {
        if(RadioButtonList1.SelectedIndex==0)
        {
            Panel1.Visible = true;
        }
        if(RadioButtonList1.SelectedIndex==1)
        {
            Panel2.Visible = true;
        }
        if(RadioButtonList1.SelectedIndex==2)
        {
            Panel3.Visible = true;
        }
    }
}
```

Output:

Asst. Prof. Kinjal Patel





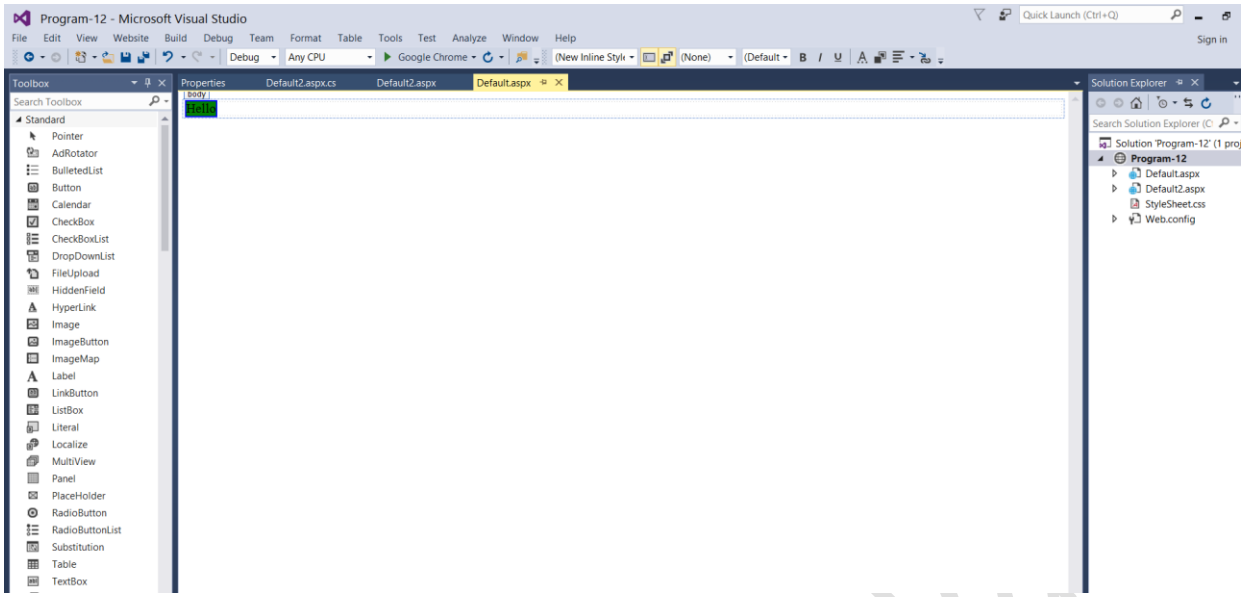
Program-12:

Write a program to set the following properties of Label control using internal css class.

- **Background-color as green,**
- **Border style as solid**
- **Border color as blue**
- **Border width as 2px**
- **Text as "Hello!"**

When user moves mouse over the label, its background color should change it to yellow. Add one more web form which contains button. When user clicks on it change its fore color as pink using external css.

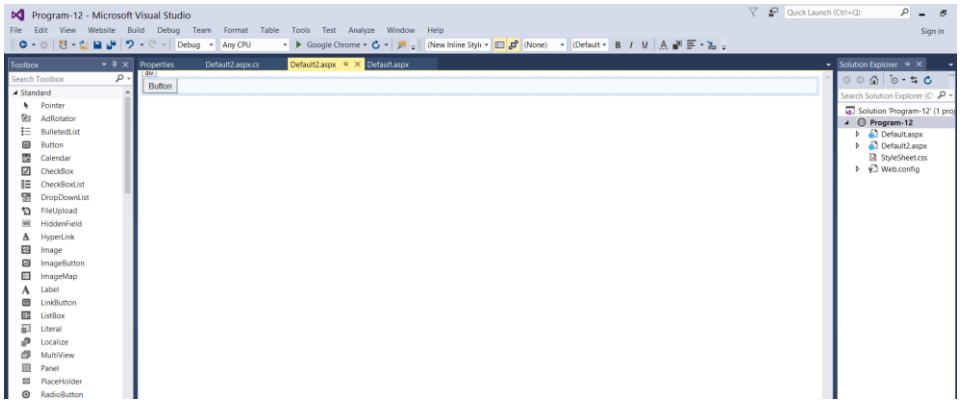
Asst. Prof. Kinjal Patel



Step-2: write code in source code.

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style>
        .myStyle{
            background-color:green;
            border:2px solid blue;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
    <div>

        <asp:Label ID="Label1" runat="server" Text="Hello" CssClass="myStyle"
onmouseover="this.style.background='yellow';this.style.border='2px solid
blue'"></asp:Label>

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

Asst. Prof. Kinjal P




```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs"
Inherits="Default2" %>

<!DOCTYPE html>

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

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

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

Step-3: write code on button_click event.

```
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)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        Button1.CssClass = "myStyle";
    }
}
```

Asst. Prof. Kinjal Patel