SIES College of Arts, Science & Commerce
RISE WITH EDUCATION
NAAC REACCREDITED - 'A' GRADE
ISO 9001 : 2008

S.I.E.S College of Arts, Science and Commerce
Sion(W), Mumbai – 400 022.

CERTIFICATE

This is to certify that Mr. Naidu DeviPraveen Kumar Vengakeshu Roll No. **SCS2324038** Has successfully completed the necessary course of experiments in the subject of **DotNet Technologies** during the academic year **2023 – 2024** complying with the requirements of **University of Mumbai**, for the course of **S.Y.BSc. Computer Science [Semester-4]**

Prof. In-Charge
Prof. Jessica DCruz

Examination Date:
Examiner's Signature & Date:

Head of the Department
Prof. Manoj Singh

College Seal
And
Date

INDEX

Practical-1

Aim: Write C# programs for understanding C# basics involving a. Variables and Data Types b. Object-Based Manipulation c. Conditional Logic d. Loops e. Methods

Code:

Variables and DataTypes

```
using System;
namespace Data
{
    class FindVar
    {
        public static void Main(String[] args)
        {
            Console.WriteLine("Students Details");

            Console.WriteLine("Enter Your name");
            String str = Console.ReadLine();

            Console.WriteLine("Enter Your age");
            int n = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter Your Fees");
            double d = Convert.ToDouble(Console.ReadLine());

            Console.WriteLine("Enter Your Percentage");
            float f = Convert.ToSingle(Console.ReadLine());

            Console.WriteLine("Enter Your Course");
            String ci = Console.ReadLine();

            Console.WriteLine("Enter Your Grade");
            char c = Convert.ToChar(Console.ReadLine());


            Console.WriteLine("Your Name is " + str);
            Console.WriteLine("Your Age is " + n);
            Console.WriteLine("Your Fees is " + d);
            Console.WriteLine("Your Perecentage is " + f);
            Console.WriteLine("Your Course is " + ci);
            Console.WriteLine("Your Grade is " + c);
            Console.ReadKey();
        }

    }
}
```

Object-Based Manipulation:

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

namespace pract1c
{

    class Rectangle
    {
```

```
        // Properties
        public double Length { get; set; }
        public double Width { get; set; }

        // Constructor
        public Rectangle(double length, double width)
        {
            Length = length;
            Width = width;
        }

        // Method to calculate area
        public double CalculateArea()
        {
            return Length * Width;
        }

        // Method to calculate perimeter
        public double CalculatePerimeter()
        {
            return 2 * (Length + Width);
        }
    }

    class Program
    {
        static void Main()
        {
            // Creating a rectangle object
            Rectangle rectangle = new Rectangle(5.0, 6.0);

            // Accessing properties
            Console.WriteLine("Rectangle Length: " + rectangle.Length);
            Console.WriteLine("Rectangle Width: " + rectangle.Width);

            // Calculating and displaying area
            Console.WriteLine("Rectangle Area: " + rectangle.CalculateArea());

            // Calculating and displaying perimeter
            Console.WriteLine("Rectangle Perimeter: " +
rectangle.CalculatePerimeter());
            Console.ReadKey();
        }
    }
}
```

If-else:

```
using System;
namespace Data
{
    class FindVar
    {
        public static void Main(String[] args)
        {
            Console.WriteLine("For calculating the Grade");

            Console.WriteLine("Enter marks for sub1");
            int m1 = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter marks for sub2");
            int m2 = Convert.ToInt32(Console.ReadLine());
```

```
Console.WriteLine("Enter marks for sub3");
int m3 = Convert.ToInt32(Console.ReadLine());


Console.WriteLine("Enter marks for sub4");
int m4 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter marks for sub5");
int m5 = Convert.ToInt32(Console.ReadLine());


float tot = m1 + m2 + m3 + m4 + m5;
float per = tot / 500;
float per1 = per * 100;

Console.WriteLine("Your Percentage is " + per1);


if (per1 > 90)
{
    Console.WriteLine("Your Grade is O");

}


else if (per1 > 80 && per1 < 90)
{
    Console.WriteLine("Your Grade is A");

}


else if (per1 > 70 && per1 < 80)
{
    Console.WriteLine("Your Grade is B");

}


else if (per1 > 60 && per1 < 70)
{
    Console.WriteLine("Your Grade is C");


}


else if (per1 > 50 && per1 < 60)
{
    Console.WriteLine("Your Grade is D");


}


else if (per1 > 40 && per1 < 50)
{
    Console.WriteLine("Your Grade is E");

}
```

```
            else
            {
                Console.WriteLine("Your Grade is F");

            }

             Console.ReadKey();
        }

    }
}
```

Switch case:

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

namespace ConsoleApp4
{
    public class Program2
    {
        public static void Main(string[] args)
        {
            Console.WriteLine("Enter a number1");
            int a = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter a number2");
            int b = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Press 1 for addition");
            Console.WriteLine("Press 2 for subtraction");
            Console.WriteLine("Press 3 for multiplication");
            Console.WriteLine("Press 4 for division");
            int ch = Convert.ToInt32(Console.ReadLine());


            switch (ch)
            {
                case 1:
                    int c = a + b;
                    Console.WriteLine("The addition is" + c);
                    break;


                case 2:
                    int d = a - b;
                    Console.WriteLine("The subtraction is" + d);
                    break;

                case 3:
                    int e = a * b;
                    Console.WriteLine("The multiplication is" + e);
                    break;
                case 4:
                    int f = a / b;
                    Console.WriteLine("The division is" + f);
                    break;

                default:
                    Console.WriteLine("Please enter a valid input");
```

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




        }
    }
}
```

For-loop:

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

namespace Prac1b
{
    class Program
    {
        public static void Main(string[] args)
        {
            int i = 1, num;
            long fact = 1;
            Console.WriteLine("Enter a number:");
            num = Convert.ToInt32(Console.ReadLine());
            if (num == 0)
                Console.WriteLine("Factorial is 1 ");
            else
            {
                for (i = 1; i <= num; i++)
                {
                    fact = fact * i;
                }
                Console.WriteLine("Factorial is " + fact);
            }
            Console.ReadKey();
        }
    }
}
```

While-loop:

```
using System;

namespace Prac1b
{
    public class Program
    {
        public static void Main(string[] args)
        {
            Console.WriteLine("Enter a number of your choice");
            int a = Convert.ToInt32(Console.ReadLine());
            int sum = 0; // Initialize sum to 0
            while (a != 0)
            {
                sum += a; // Add the number to sum only if it's not zero
                Console.WriteLine("Enter a number of your choice");
                a = Convert.ToInt32(Console.ReadLine());
            }
```

```
            Console.WriteLine("The sum is " + sum);
            Console.ReadLine();
        }
    }
}
```

Methods:

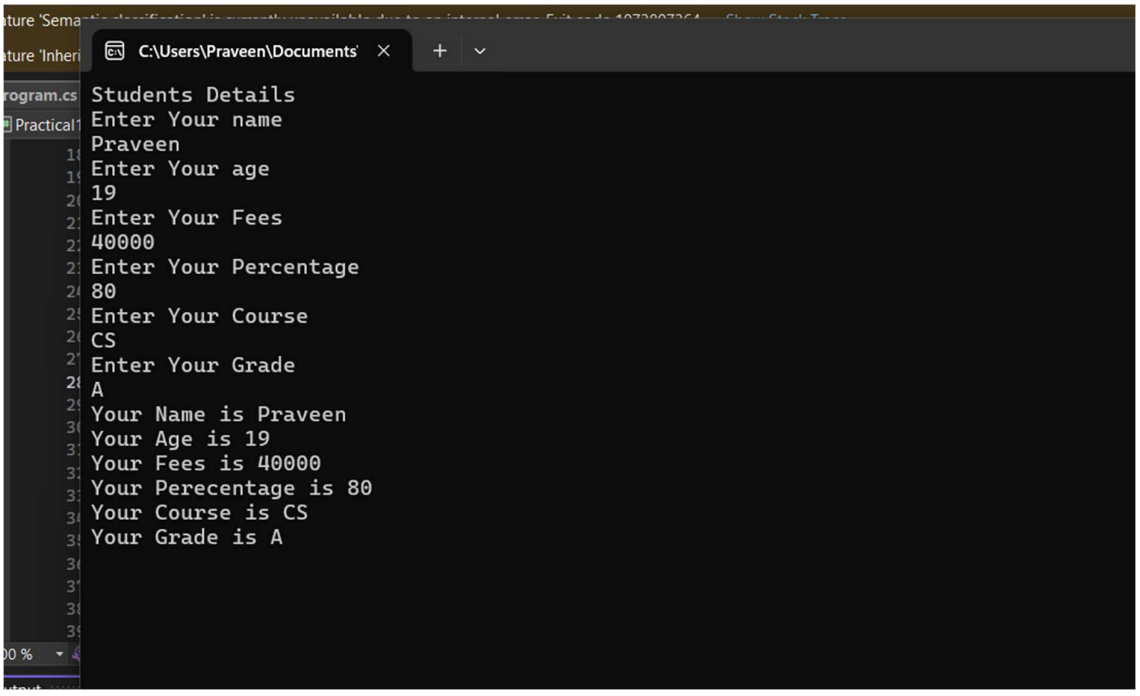
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Pract1e
{
    internal class Program
    {
        public bool isPrime(int n)
        {
            bool flag = false;
            for (int i = 2; i <= n / 2; i++)
            {
                if (n%i == 0)
                {
                    flag = false;
                    break;
                }
                else
                {
                    flag = true;
                    break;
                }
            }
            return flag;
        }
        static void Main(string[] args)

        {
            ClassOddEven cknum = new ClassOddEven();
            Console.WriteLine("Enter A Number To Check its Odd or
Even");
            int num = Convert.ToInt32(Console.ReadLine());
            cknum.checkNum(num);
            Console.WriteLine("Enter A Number To Check its Prime or
Not");
            num = Convert.ToInt32(Console.ReadLine());
            Program pri = new Program();
            if (pri.isPrime(num))
            {
                Console.WriteLine("Its a Prime Number");

            }
            else
            {
                Console.WriteLine("Its not a Prime Number");
            }
            Console.ReadKey();
        }

    }
}
```

ClassOddEven.cs

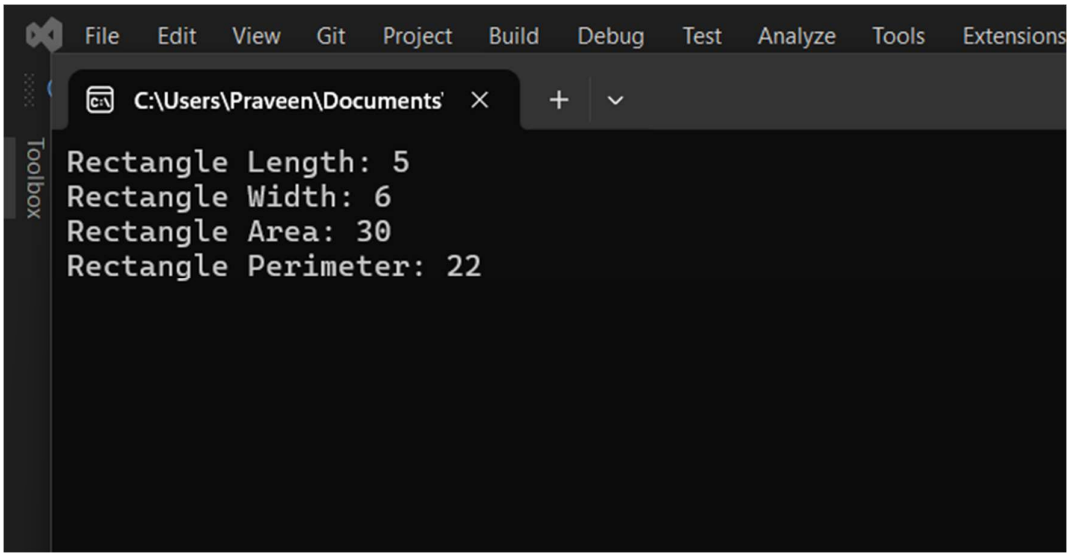
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Pract1e
{
    internal class ClassOddEven
    {
        public void checkNum(int num)
        {
            if(num%2 == 0)
            {
                Console.WriteLine("Number is Even");
            }
            else
            {
                Console.WriteLine("Number is Odd");
            }
        }
    }
}
```

Output:

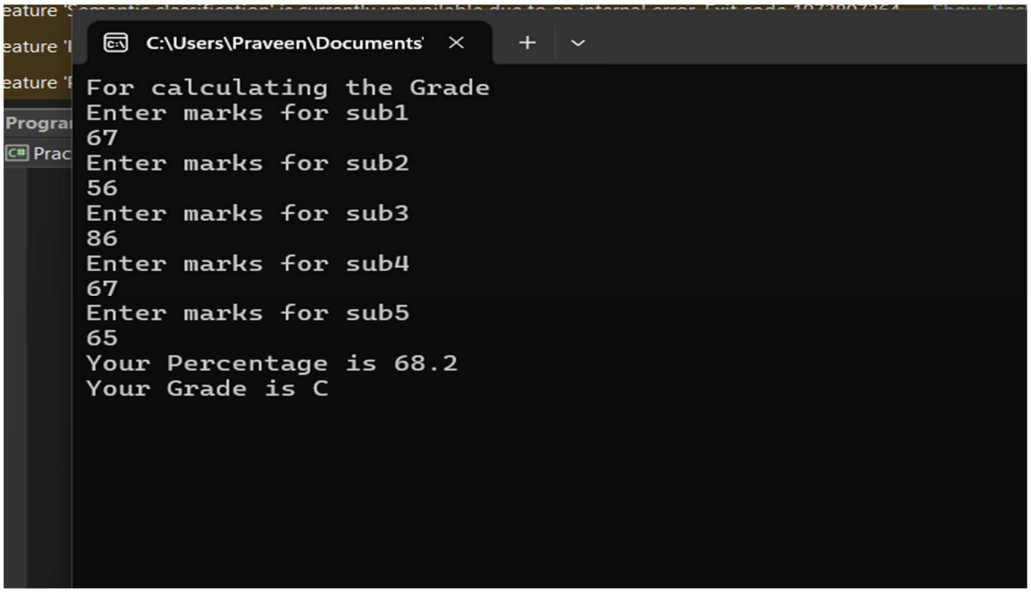
Variables and DataTypes



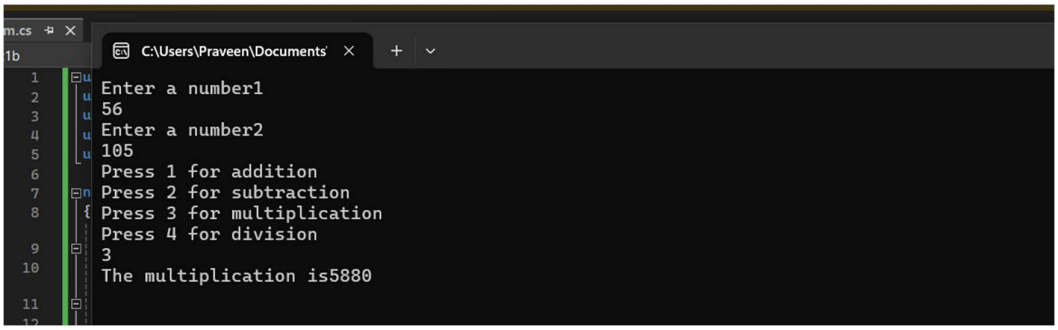
Object-Based Manipulation:



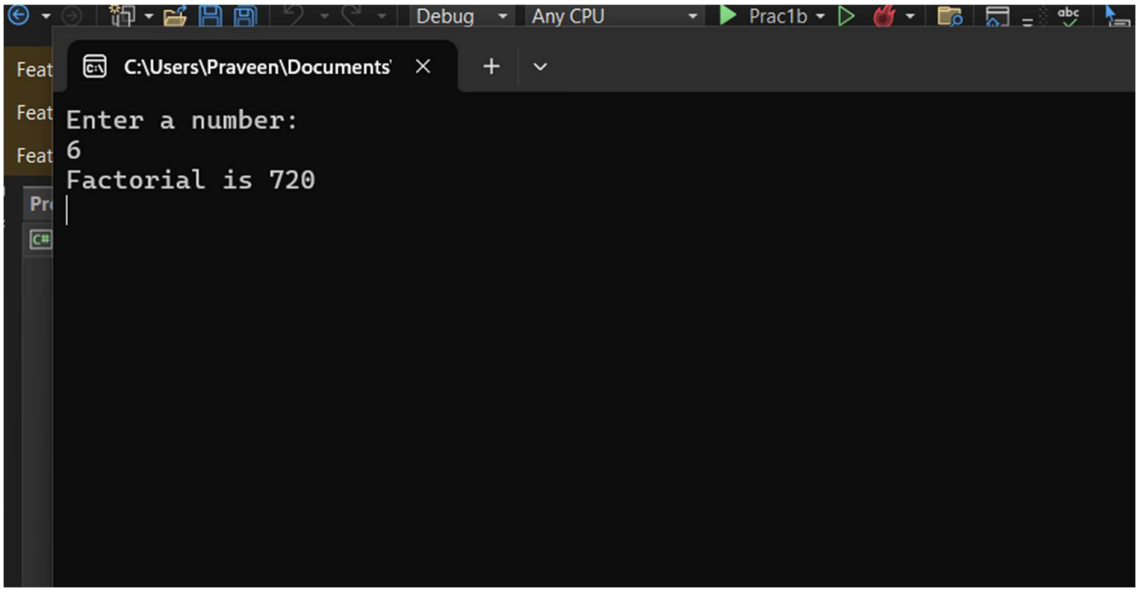
If-else:



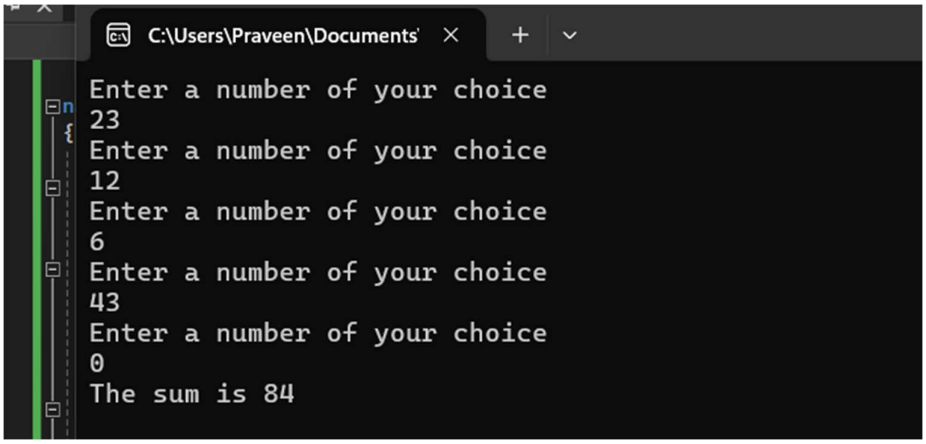
Switch case:



For-loop:



While-loop:



Methods:

```
F:\Source\practicals\Pract1e\bin\Debug>pract1e
Enter A Number To Check its Odd or Even
12
Number is Even
Enter A Number To Check its Prime or Not
3
Its not a Prime Number

F:\Source\practicals\Pract1e\bin\Debug>
```

Practical-2

Aim: . Write C# programs for Object oriented concepts of C# such as: a. Program using classes b. Constructor and Function Overloading c. Inheritance d. Namespaces

Code:

a]Classes:

```
using System;

namespace Practical2a
{
    internal class Program
    {
        class Car
        {
            // Properties
            public string Model { get; set; }
            public string Color { get; set; }
            public int Year { get; set; }

            // Method to display car details
            public void DisplayDetails()
            {
                Console.WriteLine($"Model: {Model}, Color: {Color}, Year:
{Year}");
            }
        }

        static void Main()
        {
            // Creating an object of Car class
            Car myCar = new Car();

            // Setting properties
            myCar.Model = "Ford Mustang";
            myCar.Color = "Black";
            myCar.Year = 1969;

            // Displaying details
            myCar.DisplayDetails();
            Console.ReadKey();
        }
    }
}
```

b]

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

namespace ConsoleApp3
{
    internal class Program
    {
        public void Area(double radius)
```

```
        {
            //area of circle
            double area = 3.14 * radius * radius;
            //other way:- double area=3.14 *Math.Pow(radius,2);
            Console.WriteLine($"Area of circle is {area} sq cm");
        }
        public void Area(int side)
        {
            //area of square
            double areasq = side * side;
            Console.WriteLine($"Area of square is {areasq}sq cm");
        }
        public void Area(double length, double breadth)
        {
            //area of rectangle
            double arearec = length * breadth;
            Console.WriteLine($"Area of rectangle is {arearec} sq cm");
        }
        static void Main(string[] args)
        {
            Program pr = new Program();
            pr.Area(6.7);
            pr.Area(54);
            pr.Area(23, 12.4);
        }
    }
}
```

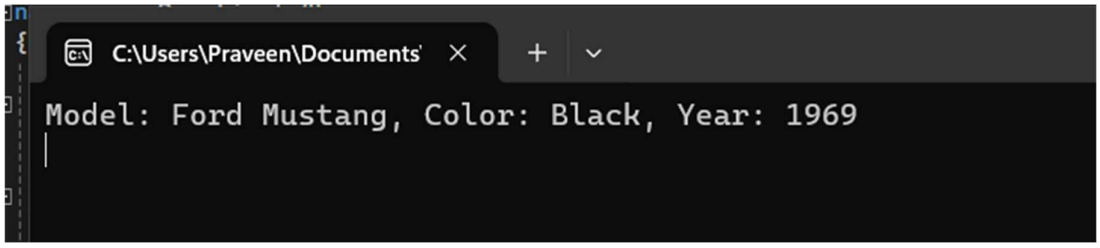
c]

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

namespace prac2c
{

    // Base class
    class Vehicle
    {
        public void Drive()
        {
            Console.WriteLine("Vehicle is being driven.");
        }
    }

    // Derived class
    class Car : Vehicle
    {
        public void Accelerate()
        {
            Console.WriteLine("Car is accelerating.");
        }
    }

    class Program
    {
        static void Main()
        {
            // Creating an object of Car class
            Car myCar = new Car();
```

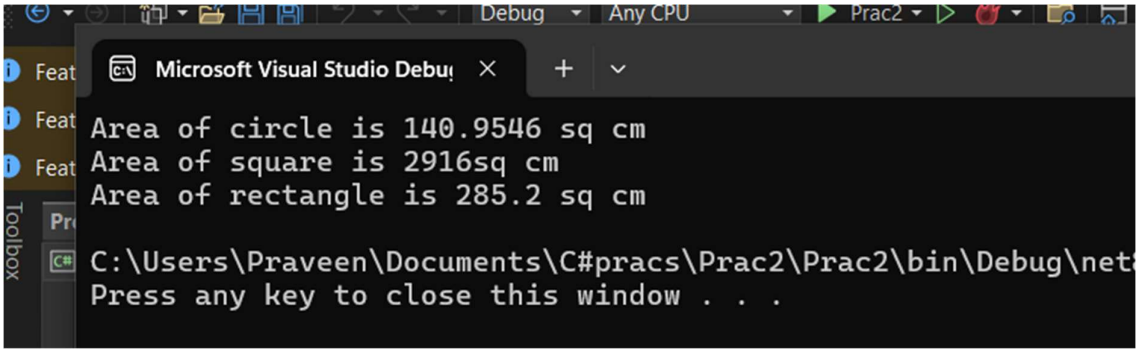
```
            // Accessing methods from both base and derived class
            myCar.Drive();
            myCar.Accelerate();
            Console.ReadKey();
        }
    }
}
d]
using System;

// Defining a namespace
namespace Geometry
{
    // Class inside namespace
    class Circle
    {
        public double Radius { get; set; }

        // Constructor
        public Circle(double radius)
        {
            Radius = radius;
        }

        // Method to calculate area
        public double CalculateArea()
        {
            return Math.PI * Radius * Radius;
        }
    }
}

class Program
{
    static void Main()
    {
        // Creating an object of Circle class
        Geometry.Circle myCircle = new Geometry.Circle(3.0);

        // Calculating and displaying area
        Console.WriteLine("Area of circle: " + myCircle.CalculateArea());
        Console.ReadKey();

    }
}
```

Output:

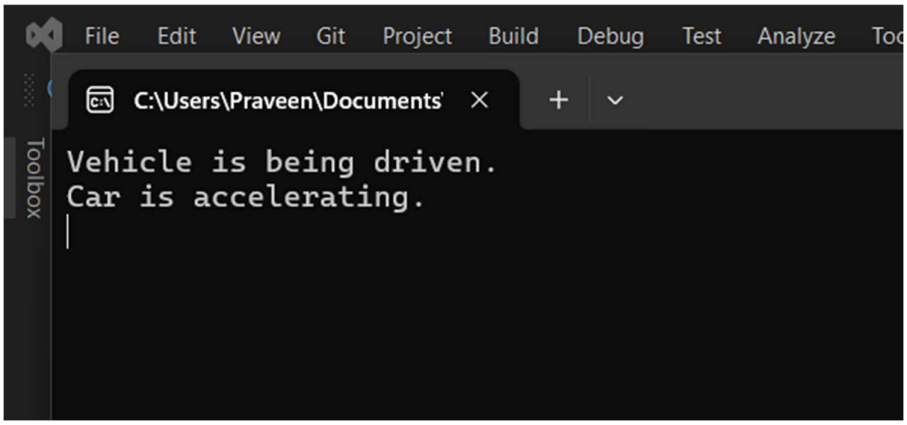
a]



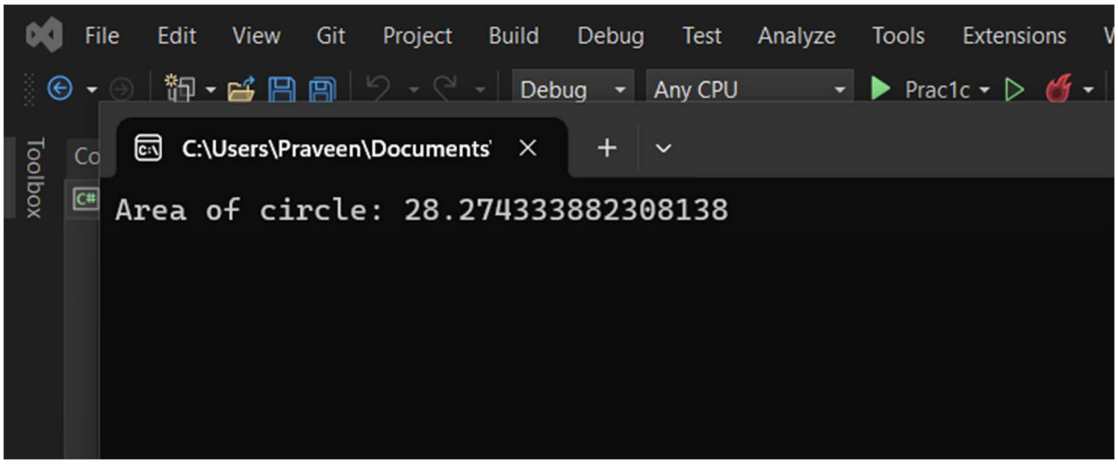
b]


Debug
Any CPU
Prac2
Microsoft Visual Studio Debu
Area of circle is 140.9546 sq cm
Area of square is 2916sq cm
Area of rectangle is 285.2 sq cm
C:\Users\Praveen\Documents\C#pracs\Prac2\Prac2\bin\Debug\net
Press any key to close this window . . .
Toolbox

c]


File
Edit
View
Git
Project
Build
Debug
Test
Analyze
C:\Users\Praveen\Documents
Vehicle is being driven.
Car is accelerating.
Toolbox

d]

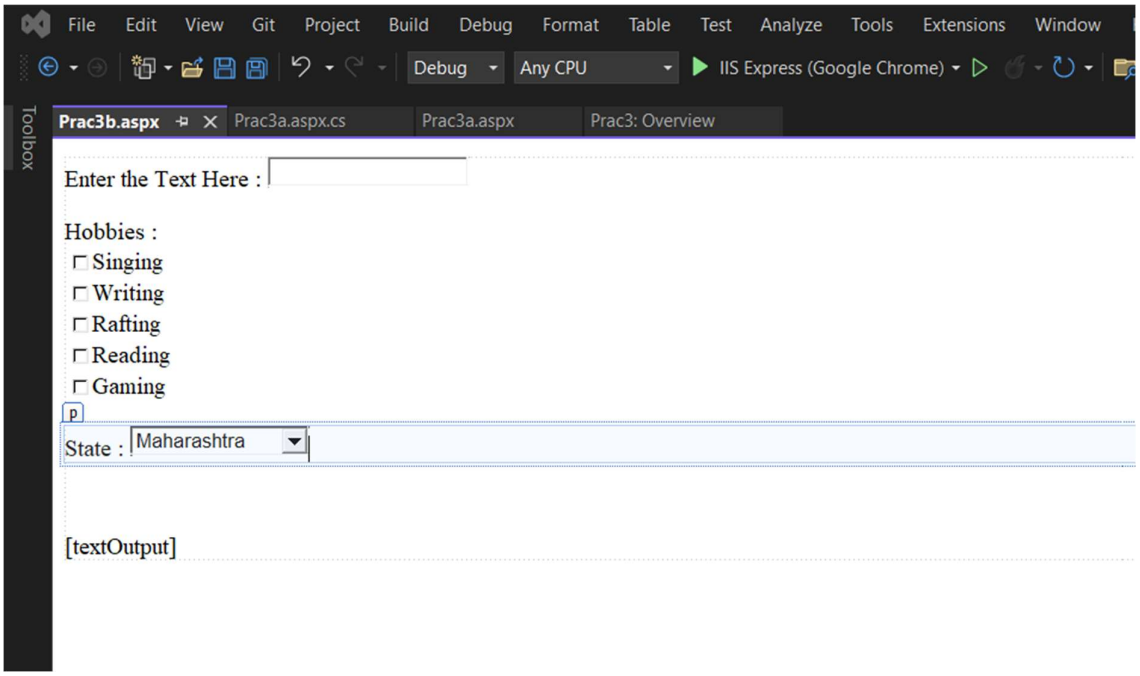

File
Edit
View
Git
Project
Build
Debug
Test
Analyze
Tools
Extensions
Debug
Any CPU
Prac1c
C:\Users\Praveen\Documents
Area of circle: 28.274333882308138
Toolbox

Practical-3

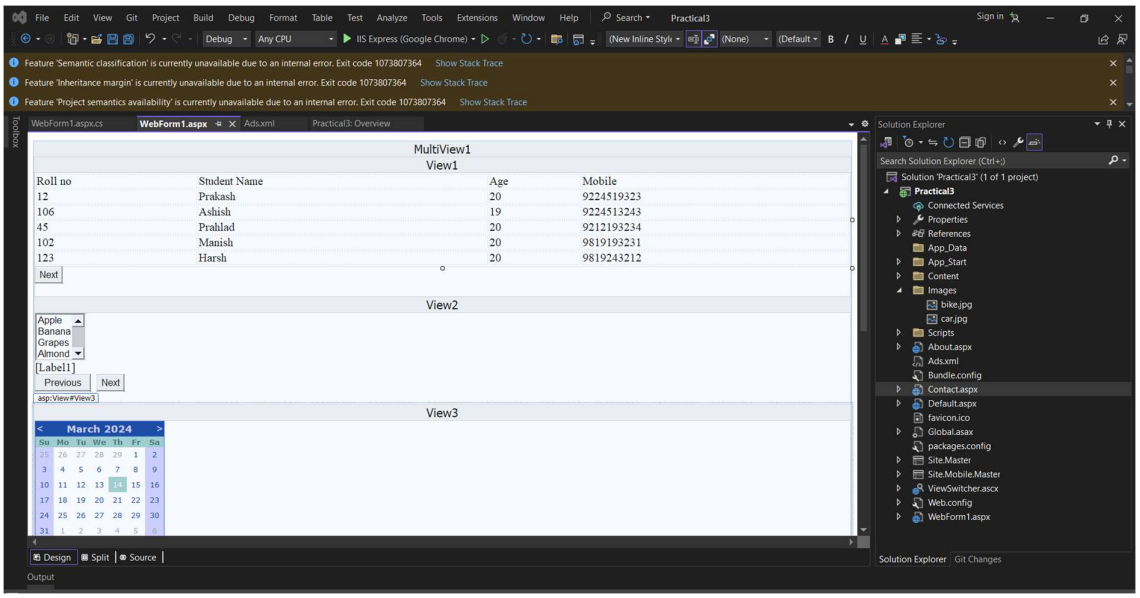
Aim: . Design ASP.NET Pages with a. Server controls. b. Web controls and demonstrate the use of AutoPostBack c. Rich Controls (Calendar / Ad Rotator)

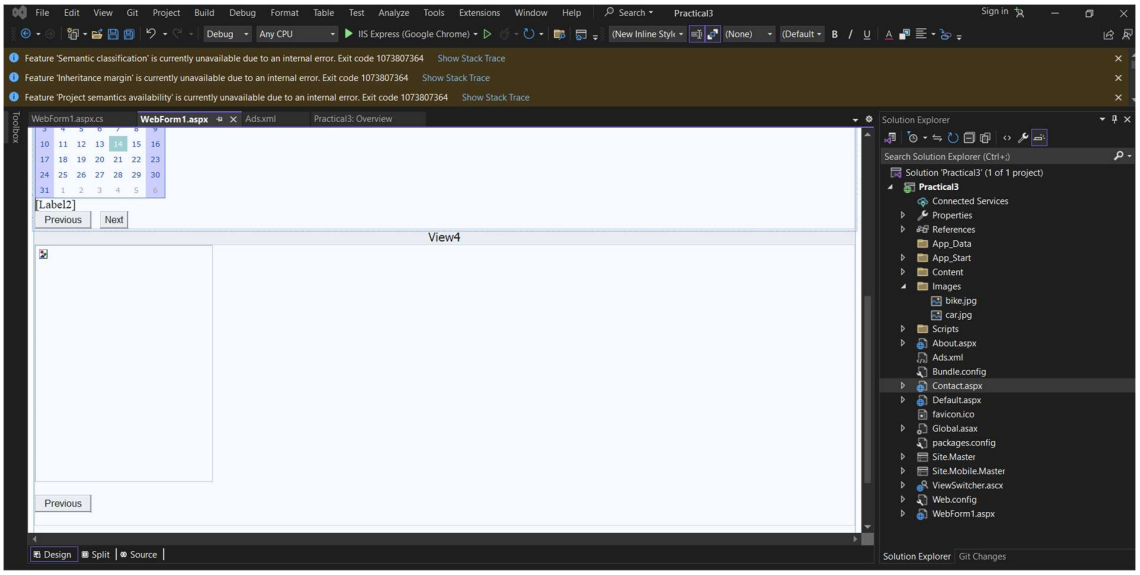
UI:

B]



c]





Code:

A]

Prac3a.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac3a.aspx.cs"
Inherits="Prac3.Prac3a" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Label ID="Label1" runat="server" Text="Hello Practical
3"></asp:Label>
 <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Click on Me" />
        </div>

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

Prac3a.aspx.cs

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

namespace Prac3
```

```
{
    public partial class Prac3a : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Label1.Text = "Button is Clicked";
        }
    }
}
```

B]

Prac3b.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac3b.aspx.cs"
Inherits="Prac3.Prac3b" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
                        Enter the Text Here :
            <asp:TextBox ID="txtInput" runat="server" AutoPostBack="true"
OnTextChanged="txtInput_TextChanged"></asp:TextBox>
            <br />
            <br />
                <asp:Label ID="Label4" runat="server" Text="Hobbies :"
AutoPostBack="true"></asp:Label>
    <asp:CheckBoxList ID="CheckBoxList1" runat="server" AutoPostBack="true"
OnSelectedIndexChanged="CheckBoxList1_SelectedIndexChanged">
        <asp:ListItem>Singing</asp:ListItem>
        <asp:ListItem>Writing</asp:ListItem>
        <asp:ListItem>Rafting</asp:ListItem>
        <asp:ListItem>Reading</asp:ListItem>
        <asp:ListItem>Gaming</asp:ListItem>
    </asp:CheckBoxList>
<p>
    <asp:Label ID="Label5" runat="server" Text="State : "></asp:Label>
    <asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="true"
OnSelectedIndexChanged="DropDownList1_SelectedIndexChanged">
        <asp:ListItem>Maharashtra</asp:ListItem>
        <asp:ListItem>Himachal</asp:ListItem>
        <asp:ListItem>Gujarat</asp:ListItem>
        <asp:ListItem>Assam</asp:ListItem>
        <asp:ListItem>Tamilnadu</asp:ListItem>
        <asp:ListItem>Kerala</asp:ListItem>
        <asp:ListItem>Andhra Pradesh</asp:ListItem>
    </asp:DropDownList>
</p>
            <p>
                 </p>
            <p>
            <asp:Label ID="textOutput" runat="server"></asp:Label>
```

```
</p>

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

Prac3b.aspx.cs

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

namespace Prac3
{
    public partial class Prac3b : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void CheckBoxList1_SelectedIndexChanged(object sender,
EventArgs e)
        {
            for (int i = 0; i < CheckBoxList1.Items.Count; i++)
            {
                if (CheckBoxList1.Items[i].Selected)
                    textOutput.Text += "&Hobbies=" + CheckBoxList1.Items[i];
            }
        }

        protected void txtInput_TextChanged(object sender, EventArgs e)
        {
            textOutput.Text = "Text changed: " + txtInput.Text;
        }

        protected void DropDownList1_SelectedIndexChanged(object sender,
EventArgs e)
        {
            textOutput.Text = "Text changed: " + DropDownList1.SelectedItem;
        }
    }

}
```

C]

WebForm1.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Practical3.WebForm1" %>

<!DOCTYPE html>

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

```
        <div>
            <asp:MultiView ID="MultiView1" runat="server"
OnActiveViewChanged="MultiView1_ActiveViewChanged" ActiveViewIndex="0">
<asp:View ID="View1" runat="server">
<table style="width:100%;" runat="server">
<tr>
<td>Roll no</td>
<td>Student Name</td>
<td>Age</td>
<td>Mobile</td>
</tr>
<tr>
<td>12</td>
<td>Prakash</td>
<td>20</td>
<td>9224519323</td>
</tr>
<tr>
<td>106</td>
<td>Ashish</td>
<td>19</td>
<td>9224513243</td>
</tr>
<tr>
<td>45</td>
<td>Prahlad</td>
<td>20</td>
<td>9212193234</td>
</tr>
<tr>
<td>102</td>
<td>Manish</td>
<td>20</td>
<td>9819193231</td>
</tr>
<tr>
<td>123</td>
<td>Harsh</td>
<td>20</td>
<td>9819243212</td>
</tr>
</table>
<asp:Button ID="view1_next_btn" runat="server" Text="Next"
OnClick="view1_next_btn_Click" />
<br />
<br />
</asp:View>
<asp:View ID="View2" runat="server">
<asp:ListBox ID="ListBox1" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="ListBox1_SelectedIndexChanged">
<asp:ListItem>Apple</asp:ListItem>
<asp:ListItem>Banana</asp:ListItem>
<asp:ListItem>Grapes</asp:ListItem>
<asp:ListItem>Almond</asp:ListItem>
<asp:ListItem>Nuts</asp:ListItem>
<asp:ListItem Value="Mango"></asp:ListItem>
</asp:ListBox>
<br />
<asp:Label ID="Label1" runat="server"></asp:Label>
<br />
<asp:Button ID="view2_prev_btn" runat="server" Text="Previous"
OnClick="view2_prev_btn_Click" />
 
```

```
<asp:Button ID="view2_next_btn" runat="server" Text="Next"
OnClick="view2_next_btn_Click" />
<br />
<br />
</asp:View>
<asp:View ID="View3" runat="server">
<asp:Calendar ID="Calendar1" runat="server" BackColor="White"
BorderColor="#3366CC" BorderWidth="1px" DayNameFormat="Shortest" Font-
Names="Verdana" Font-Size="8pt" ForeColor="#003399" Height="200px"
OnSelectionChanged="Calendar1_SelectionChanged" Width="220px" CellPadding="1">
<DayHeaderStyle BackColor="#99CCCC" Height="1px" ForeColor="#336666" />
<NextPrevStyle Font-Size="8pt" ForeColor="#CCCCFF" />
<OtherMonthDayStyle ForeColor="#999999" />
<SelectedDayStyle BackColor="#009999" Font-Bold="True" ForeColor="#CCFF99" />
<SelectorStyle BackColor="#99CCCC" ForeColor="#336666" />
<TitleStyle BackColor="#003399" Font-Bold="True" Font-Size="10pt"
ForeColor="#CCCCFF" BorderColor="#3366CC" BorderWidth="1px" Height="25px" />
<TodayDayStyle BackColor="#99CCCC" ForeColor="White" />
<WeekendDayStyle BackColor="#CCCCFF" />
</asp:Calendar>
<asp:Label ID="Label2" runat="server"></asp:Label>
<br />
<asp:Button ID="view3_prev_btn" runat="server" Text="Previous"
OnClick="view3_prev_btn_Click" />
  
<asp:Button ID="view3_next_btn" runat="server" Text="Next"
OnClick="view3_next_btn_Click" />
<br />
</asp:View>
<asp:View ID="View4" runat="server">
<asp:AdRotator ID="AdRotator1" runat="server"
                           AdvertisementFile="~/ads.xml"
                           Target="_blank"
                           Width="300"
                           Height="400"/>
<br />
<br />
<asp:Button ID="view4_prev_btn" runat="server" Text="Previous"
OnClick="view4_prev_btn_Click" />
<br />
<br />
</asp:View>
<br />
<br />
<br />
<br />
<br />
</asp:MultiView>
</div>
</form>
</body>
</html>
```

Webform1.apsx.cs:

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

```
namespace Practical3
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
        protected void MultiView1_ActiveViewChanged(object sender, EventArgs e)
        {


        }

        protected void ListBox1_SelectedIndexChanged(object sender, EventArgs e)
        {
            Label1.Text = "You have selected:" +
ListBox1.SelectedItem.ToString();
        }

        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
        {
            Label2.Text = "You have selected:" +
Calendar1.SelectedDate.ToString();
        }

        protected void view4_prev_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 1;
        }

        protected void view3_prev_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 2;
        }

        protected void view3_next_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 3;
        }

        protected void view2_prev_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 0;
        }

        protected void view2_next_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 2;
        }

        protected void view1_next_btn_Click(object sender, EventArgs e)
        {
            MultiView1.ActiveViewIndex = 1;
        }
    }
}
```

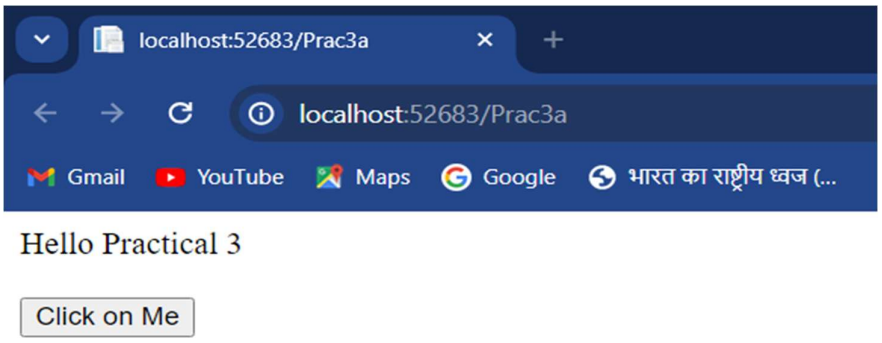
Ads.xml:

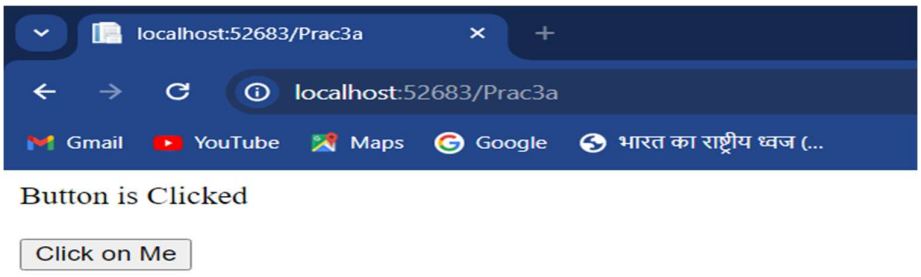
```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<Advertisements>
	<Ad>
		<ImageUrl>~/Images/car.jpg</ImageUrl>
		<NavigateUrl>https://www.carwale.com/new-cars/</NavigateUrl>
		<AlternateText>Ford Mustang</AlternateText>
		<Impressions>2</Impressions>
	</Ad>
	<Ad1>
		<ImageUrl>~/Images/bike.jpg</ImageUrl>
		<NavigateUrl>https://www.carwale.com/new-cars/</NavigateUrl>
		<AlternateText>Royal Enfield</AlternateText>
		<Impressions>5</Impressions>
	</Ad1>
</Advertisements>
```

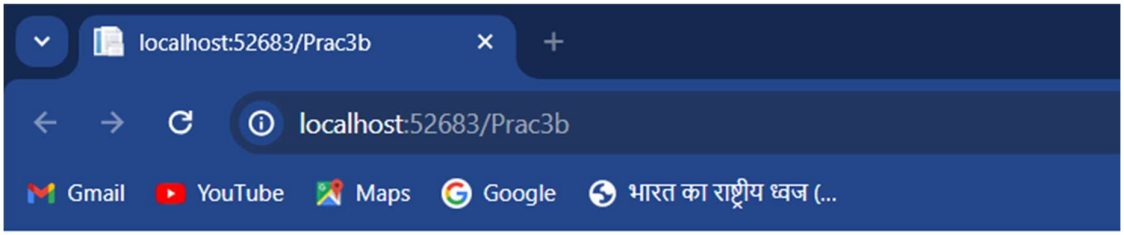
Output:

A]





B]



Enter the Text Here :

Hobbies :

- [ ] Singing
- [ ] Writing
- [ ] Rafting
- [ ] Reading
- [ ] Gaming

State : Maharashtra

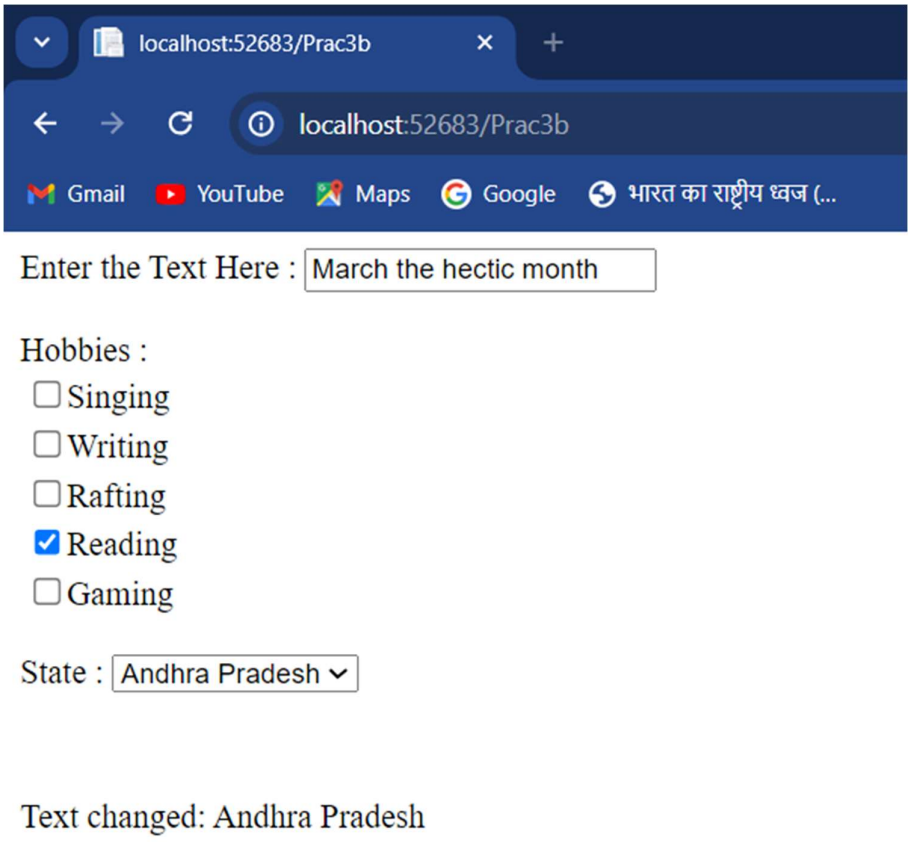
Enter the Text Here : March the hectic month

Hobbies :

- [ ] Singing
- [ ] Writing
- [ ] Rafting
- [x] Reading
- [ ] Gaming

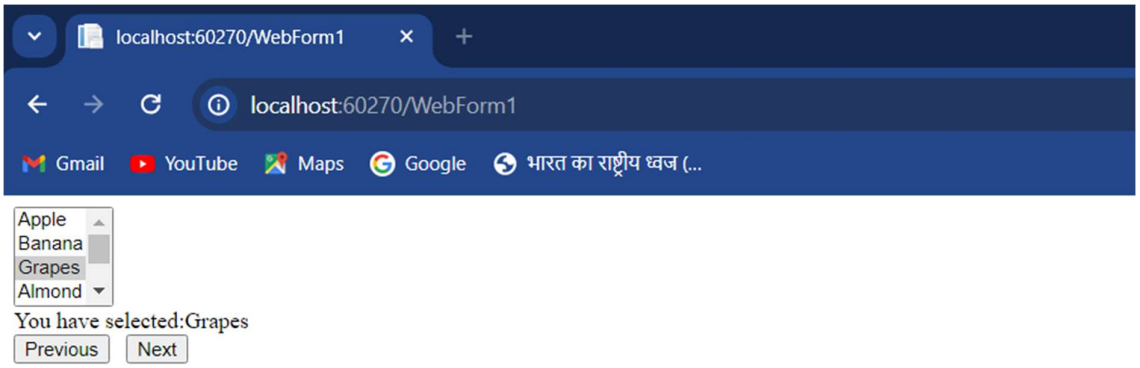
State : Maharashtra

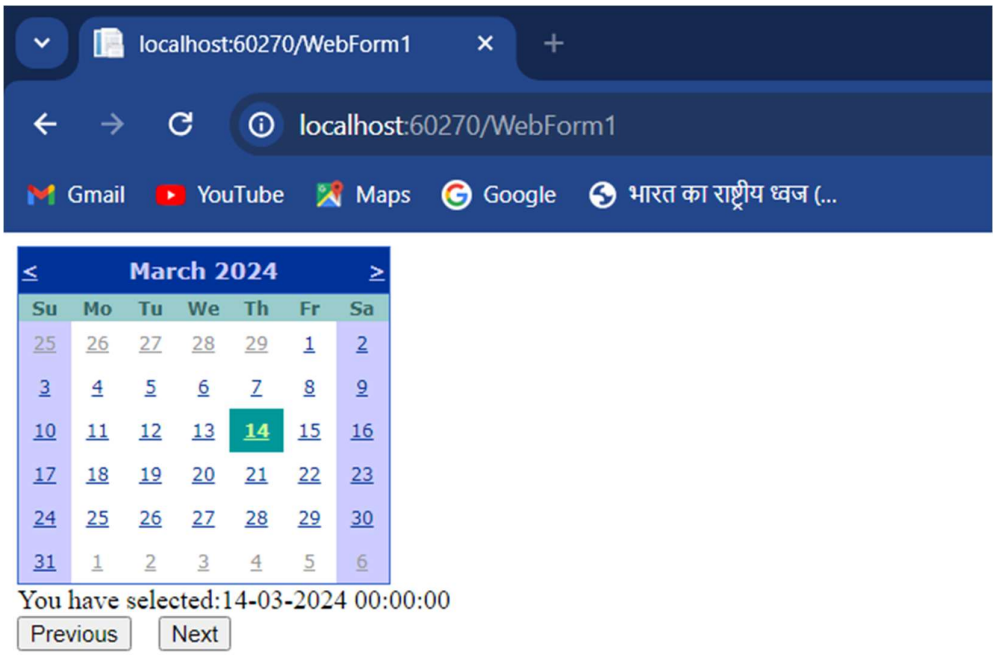
Text changed: March the hectic month&Hobbies=Reading

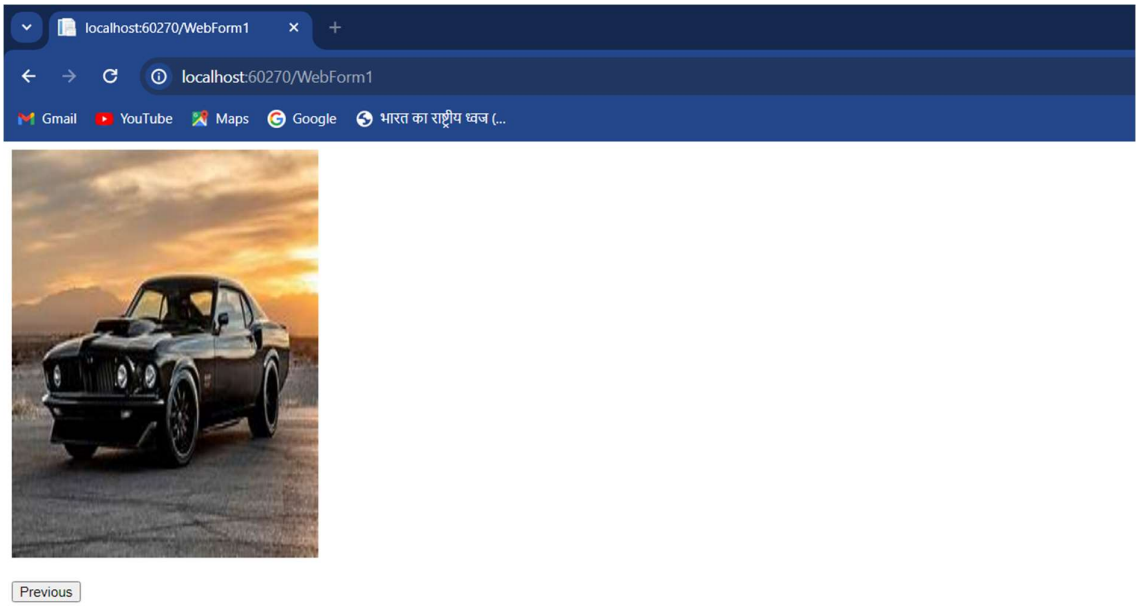

localhost:52683/Prac3b
localhost:52683/Prac3b
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
Enter the Text Here : March the hectic month
Hobbies :
Singing
Writing
Rafting
Reading
Gaming
State : Andhra Pradesh
Text changed: Andhra Pradesh

C]


localhost:60270/WebForm1
localhost:60270/WebForm1
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
Roll no
Student Name
Age
Mobile
12
Prakash
20
9224519323
106
Ashish
19
9224513243
45
Prahlad
20
9212193234
102
Manish
20
9819193231
123
Harsh
20
9819243212
Next


localhost:60270/WebForm1
localhost:60270/WebForm1
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
Apple
Banana
Grapes
Almond
You have selected:Grapes
Previous
Next


localhost:60270/WebForm1
localhost:60270/WebForm1
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
March 2024
Su Mo Tu We Th Fr Sa
25 26 27 28 29 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6
You have selected:14-03-2024 00:00:00
Previous
Next


localhost:60270/WebForm1
localhost:60270/WebForm1
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
Previous

Practical-4

Aim: Design ASP.NET Pages for State Management using a. Cookies b. Session State c. Application State

Code:

A]Viewstate

Prac4a.aspx

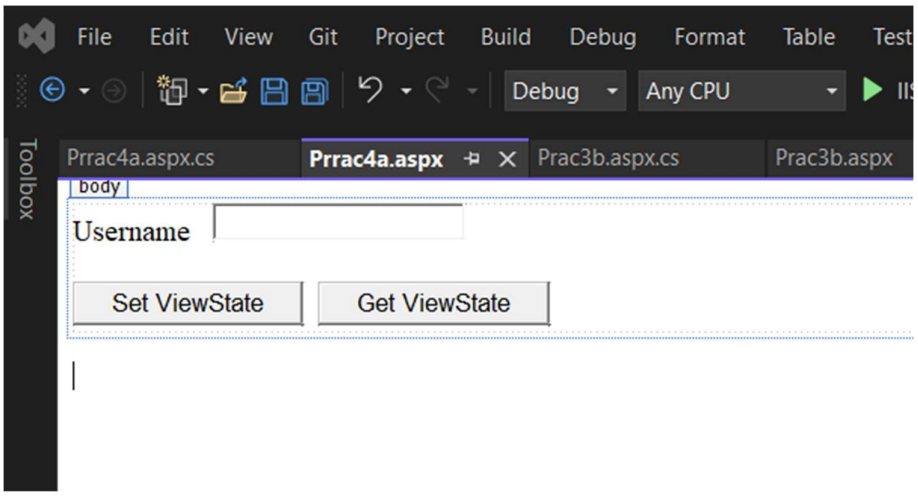
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prrac4a.aspx.cs"
Inherits="Prac3.Prrac4a" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
                        <asp:Label ID="Label1" runat="server"
Text="Username"></asp:Label>
  
            <asp:TextBox ID="TextBox1" runat="server" ></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="setV" runat="server" OnClick="setVClick" Text="Set
ViewState" />
         
            <asp:Button ID="logBtn0" runat="server" OnClick="getVClick" Text="Get
ViewState" />
        </div>
    </form>
</body>
</html>
```

Prac4a.aspx.cs

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

namespace Prac3
{
    public partial class Prrac4a : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }


        protected void setVClick(object sender, EventArgs e)
        {
            // Save value to ViewState
            ViewState["User"] = TextBox1.Text;
```

```
        }

        protected void getVClick(object sender, EventArgs e)
        {
            // Retrieve value from ViewState
            TextBox1.Text = ViewState["User"].ToString();
        }

    }
}
```

Ui:



B]Cookies:

Prac4b.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac4b.aspx.cs"
Inherits="Prac3.Prac4b" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Choice</h2>
            <asp:Label ID="lblMessage" runat="server" Text=""></asp:Label>
            <br />
            Color:
            <asp:DropDownList ID="ddlColor" runat="server">
                <asp:ListItem Text="Red" Value="Red"></asp:ListItem>
                <asp:ListItem Text="Green" Value="Green"></asp:ListItem>
                <asp:ListItem Text="Blue" Value="Blue"></asp:ListItem>
            </asp:DropDownList>
            <br />
            <asp:Button ID="btnSave" runat="server" Text="Save Choice"
OnClick="btnSave_Click" />

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

Prac4b.aspx.cs

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

namespace Prac3
{
    public partial class Prac4b : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                // Load saved preferences if available
                LoadChoice();
            }

        }

        protected void btnSave_Click(object sender, EventArgs e)
        {
            // Save preferences as a cookie
            SaveChoice();

            // Display a confirmation message
            lblMessage.Text = "Choice saved successfully!";
        }

        private void SaveChoice()
        {
            // Create a new cookie
            HttpCookie cookie = new HttpCookie("UserPreferences");

            // Set the values of user preferences
            cookie["Color"] = ddlColor.SelectedValue;

            // Set the expiration time of the cookie
            cookie.Expires = DateTime.Now.AddDays(7); // Expires in 7 days

            // Add the cookie to the response
            Response.Cookies.Add(cookie);
        }

        private void LoadChoice()
        {
            // Check if the cookie exists
            if (Request.Cookies["UserPreferences"] != null)
            {
                // Retrieve the saved preferences from the cookie
                string color = Request.Cookies["UserPreferences"]["Color"];

                // Set the selected value of the color dropdown list
                ddlColor.SelectedValue = color;
            }

        }
    }
```

C]Session State

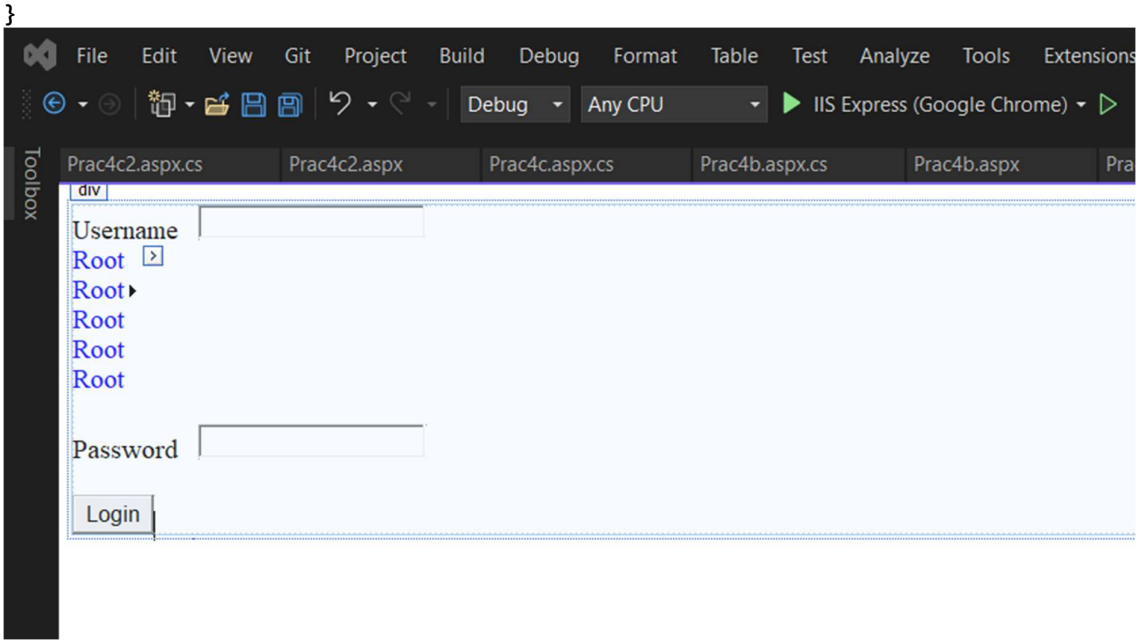
Prac4c.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac4c.aspx.cs"
Inherits="Prac3.Prac4c" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
                        <asp:Label ID="Label1" runat="server"
Text="Username"></asp:Label>
  
            <asp:TextBox ID="TextBox1" runat="server" ></asp:TextBox>
            <asp:Menu ID="Menu1" runat="server"
OnMenuItemClick="Menu1_MenuItemClick">
            </asp:Menu>
            <br />
            <asp:Label ID="Label2" runat="server" Text="Password"></asp:Label>
  
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="logBtn" runat="server" OnClick="logBtn_Click"
Text="Login" />

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

Prac4c.aspx.cs

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

namespace Prac3
{
    public partial class Prac4c : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
        protected void logBtn_Click(object sender, EventArgs e)
        {
            var username = TextBox1.Text;
            var password = TextBox2.Text;
            if (password.Equals("admin@123"))
            {
                Session["username"] = username;
                Response.Redirect("Prac4c2.aspx");
            }
            else
            {
                Response.Write("Please Enter the Default Password ");
```

```
            }

        }

        protected void Menu1_MenuItemClick(object sender, MenuEventArgs e)
        {

        }
    }
}
```



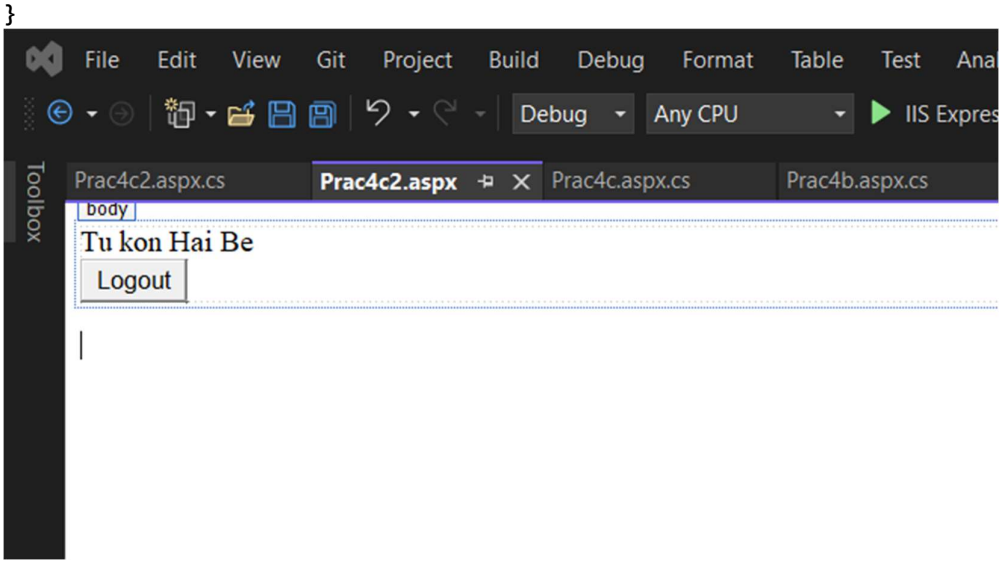
Prac4c2.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac4c2.aspx.cs"
Inherits="Prac3.Prac4c2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
                        <asp:Label ID="Label1" runat="server" Text="Tu kon Hai
Be"></asp:Label>
            <br />
        </div>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Logout" />
    </form>
</body>
</html>
```

Prac4c2.aspx.cs

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

```
namespace Prac3
{
    public partial class Prac4c2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                if (Session["username"] != null)
                {
                    Label1.Text = ("Welcome " + Session["username"]);

                }
                else
                {
                    Response.Redirect("WebForm1.aspx");
                }
            }

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Session["Username"] = null;
            Response.Redirect("Prac4c.aspx");
        }

    }

}
```

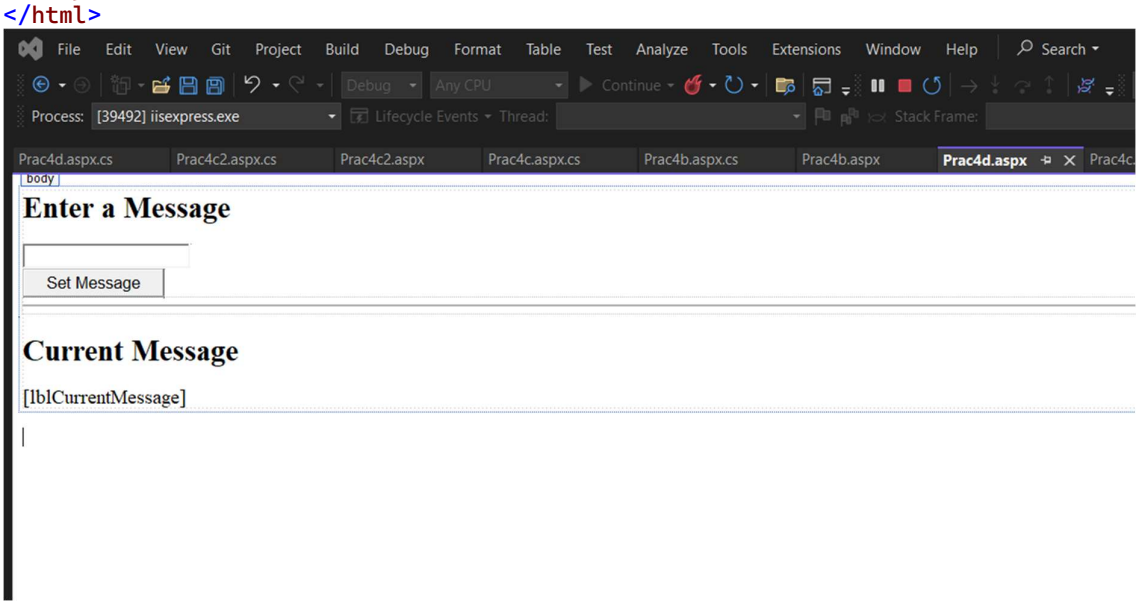


D]Application State

Prac4d.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Prac4d.aspx.cs"
Inherits="Prac3.Prac4d" %>

<!DOCTYPE html>

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

```
<body>
    <form id="form1" runat="server">
        <div>
        <h2>Enter a Message</h2>
            <asp:TextBox ID="txtMessage" runat="server"></asp:TextBox>
            <br />
            <asp:Button ID="btnSetMessage" runat="server" Text="Set Message"
OnClick="btnSetMessage_Click" />
        </div>
        <hr />
        <div>
            <h2>Current Message</h2>
            <asp:Label ID="lblCurrentMessage" runat="server" Text=""></asp:Label>
        </div>

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



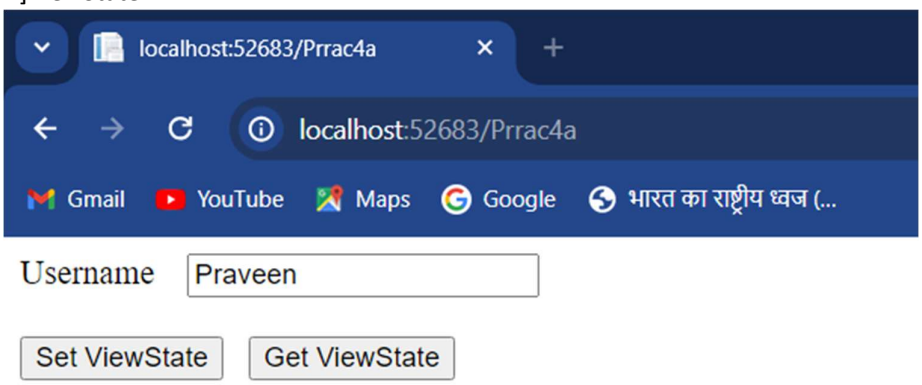
Prac4d.aspx.cs

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

namespace Prac3
{
    public partial class Prac4d : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                // Load the current message from Application State
                LoadCurrentMessage();
            }

        }
        protected void btnSetMessage_Click(object sender, EventArgs e)
        {
```

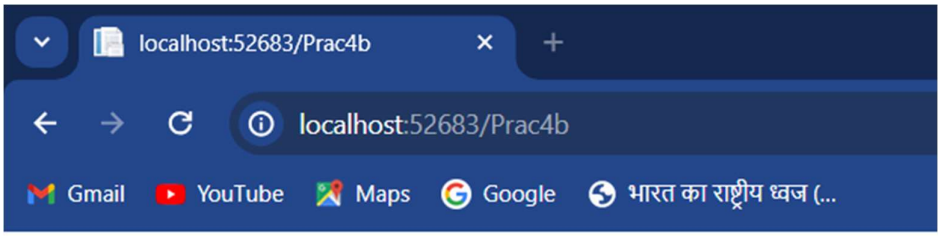
```
            // Set the message in Application State
            SetMessage();
        }

        private void SetMessage()
        {
            // Store the message in Application State
            Application["CurrentMessage"] = txtMessage.Text;

            // Update the label to display the current message
            lblCurrentMessage.Text = txtMessage.Text;
        }

        private void LoadCurrentMessage()
        {
            // Check if the message exists in Application State
            if (Application["CurrentMessage"] != null)
            {
                // Retrieve the message from Application State
                string currentMessage = Application["CurrentMessage"].ToString();

                // Update the label to display the current message
                lblCurrentMessage.Text = currentMessage;
            }
        }


    }
}
```

Output:

A]ViewState



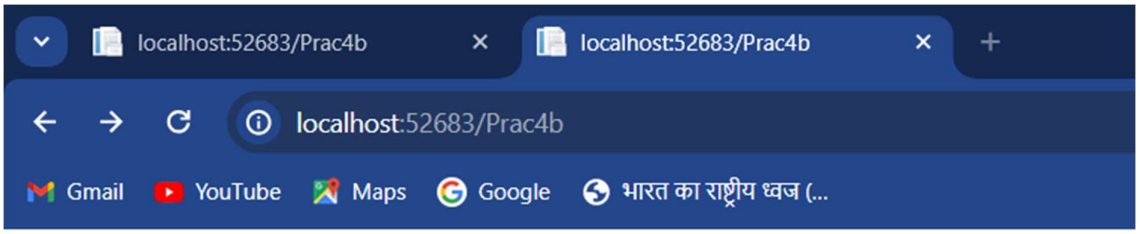
B]Cookies:



Choice

Choice saved successfully!
Color: Green
Save Choice

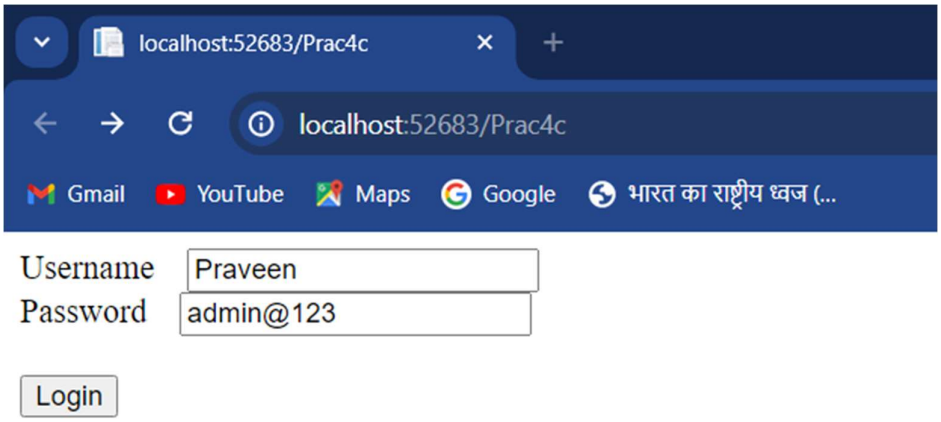
Revisiting the website:

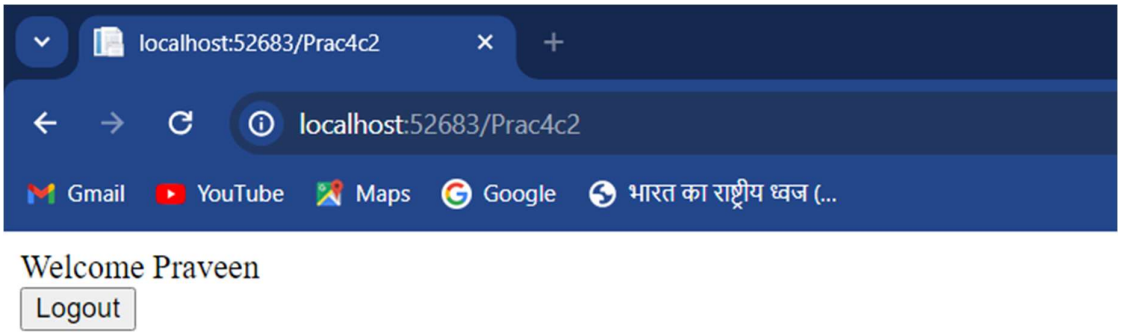


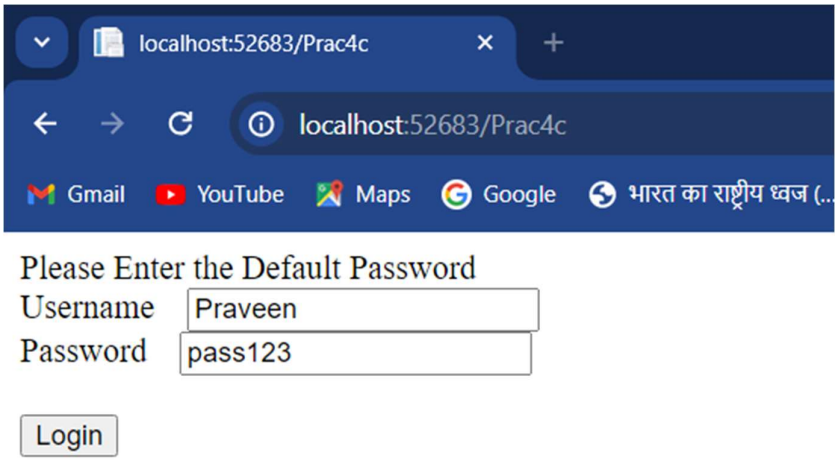
Choice

Color: Green
Save Choice

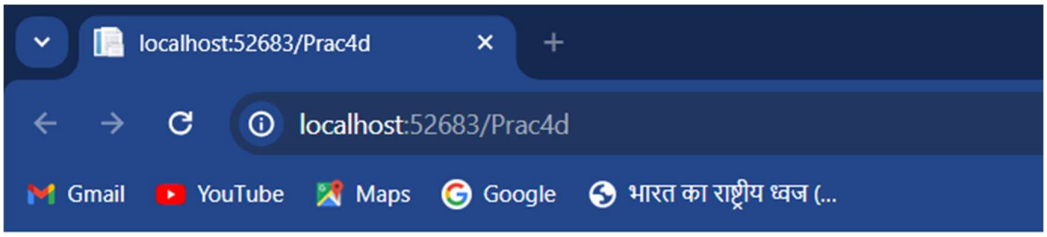
C]Session State







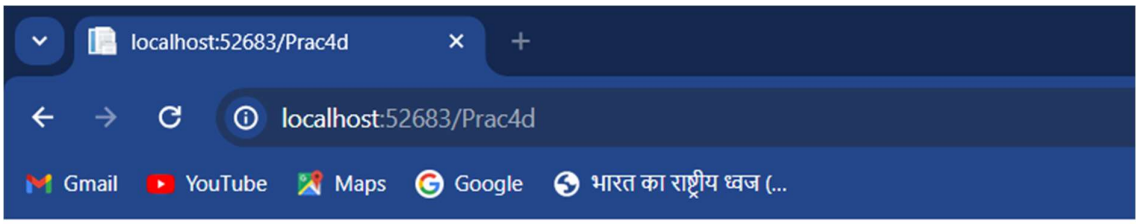
D]Application State



Enter a Message

Set Message

Current Message



Enter a Message

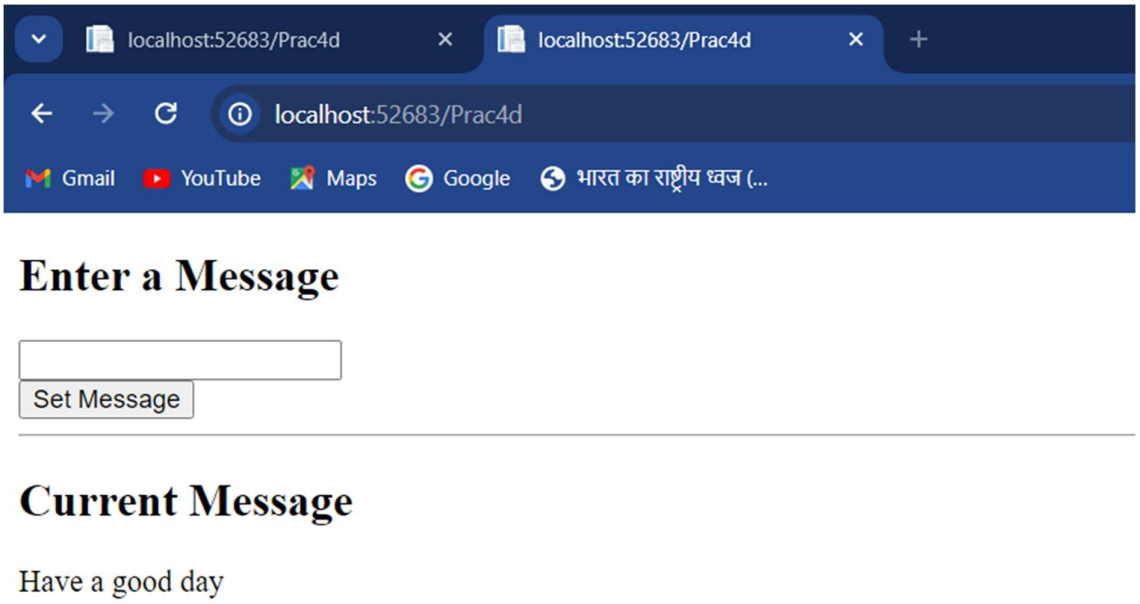
Have a good day

Set Message

Current Message

Have a good day

Opened in new tab:



Practical-5

Aim: Perform the following activities a. Design ASP.NET page and perform validation using various Validation Controls b. Design an APS.NET master web page and use it other (at least 2-3) content pages. c. Design ASP.NET Pages with various Navigation Controls

Code:

a]Validation

Webform2.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="Practical3.WebForm2" %>

<!DOCTYPE html>

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

             &nb
sp;         
            Registration Form<br />
<br />
<br />
<asp:Label ID="Label1" runat="server" Text="Name:"></asp:Label>
             &nb
sp;       
<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
           
<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ControlToValidate="TextBox1" ErrorMessage="Cannot be
Empty"></asp:RequiredFieldValidator>
<br />
<br />
<asp:Label ID="Label2" runat="server" Text="Password:"></asp:Label>
             &nb
sp;
<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
           
<asp:CompareValidator ID="CompareValidator1" runat="server"
ControlToCompare="TextBox3" ControlToValidate="TextBox2" ErrorMessage="Password
Missmatch"></asp:CompareValidator>
<br />
<br />
<asp:Label ID="Label3" runat="server" Text="Confirm Password:"></asp:Label>
 <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
   
<br />
<br />
<asp:Label ID="Label4" runat="server" Text="Age:"></asp:Label>
             &nb
sp;         
<asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
            
```

```
<asp:RangeValidator ID="RangeValidator1" runat="server"
ControlToValidate="TextBox4" ErrorMessage="Age should be between 20-
40"></asp:RangeValidator>
<br />
<br />
<asp:Label ID="Label5" runat="server" Text="Email:"></asp:Label>
             &nb
sp;     
<asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
           
<asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ControlToValidate="TextBox5" ErrorMessage="Invalid Email"
ValidationExpression="\w+([-+.']\w+)*@\w+([-.]\w+)*\.\w+([-
.]\w+)*"></asp:RegularExpressionValidator>
<br />
<br />

Username:             
<asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>
             
<asp:CustomValidator ID="CustomValidator1" runat="server"
ControlToValidate="TextBox6" ErrorMessage="Length!=10"
OnServerValidate="CustomValidator1_ServerValidate"></asp:CustomValidator>
<br />
<br />
<br />
             &nb
sp;         
<asp:Button ID="submit_btn" runat="server" OnClick="submit_btn_Click"
Text="Submit" />
<br />
<br />
        </div>
    </form>
</body>
</html>
```

Webform2.aspx.cs

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

namespace Practical3
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
        protected void CustomValidator1_ServerValidate(object source,
ServerValidateEventArgs args)
        {
            string username = args.Value.ToString();
            args.IsValid = true;
            if (username.Length != 10)
                args.IsValid = false;

        }
```

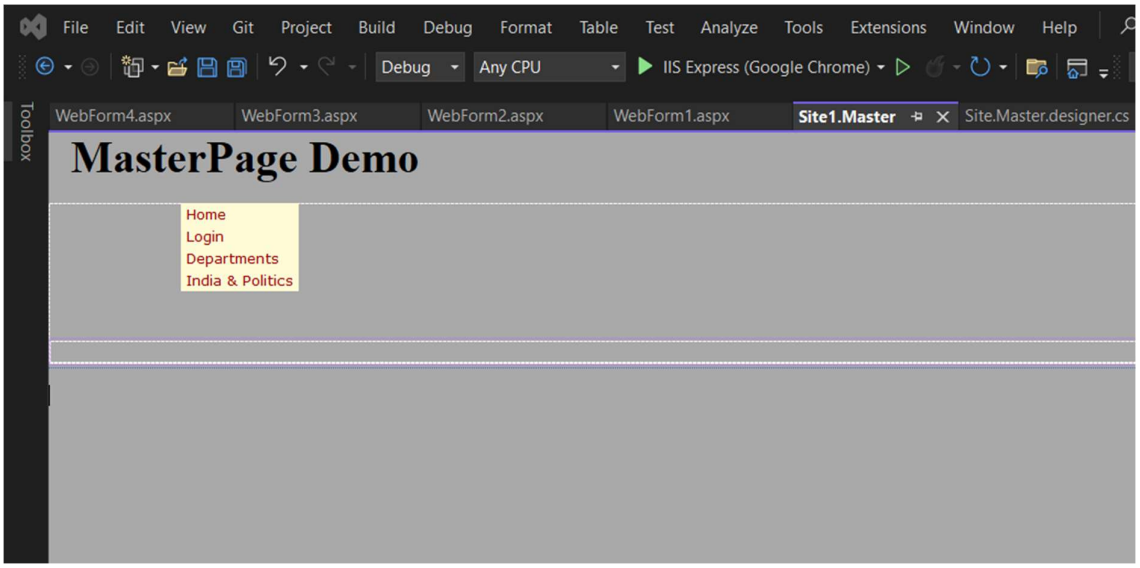
```
        protected void submit_btn_Click(object sender, EventArgs e)
        {
            if (!Page.IsValid)
                Response.Write("invalid Data");
            else
                Response.Write("Valid Data");
        }
    }
}
```

B]Master Pages

Site1.master

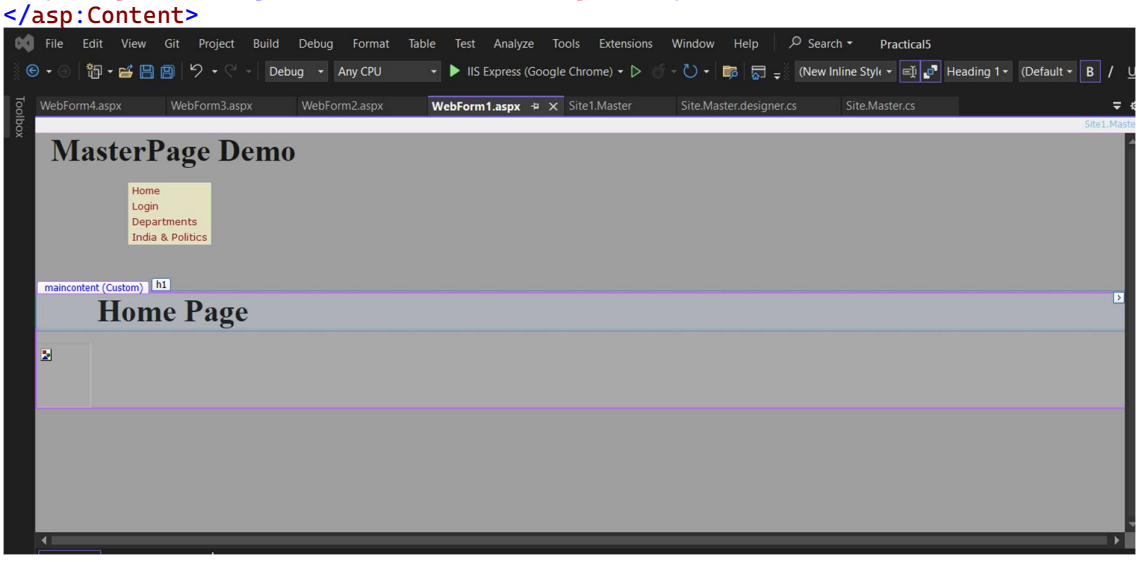
```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="Practical5.Site1" %>

<!DOCTYPE html>

<html>
<head runat="server">
    <title></title>
    <asp:ContentPlaceHolder ID="head" runat="server">
    </asp:ContentPlaceHolder>
</head>
<body style="margin:auto; background-color:darkgray">
    <h1>   MasterPage Demo</h1>

<form id="form1" runat="server">
        <div style="margin-left: 120px">
            <asp:Menu ID="Menu1" runat="server" BackColor="#FFFBD6"
DynamicHorizontalOffset="2" Font-Names="Verdana" Font-Size="0.8em"
ForeColor="#990000" StaticSubMenuIndent="10px" >
                <DynamicHoverStyle BackColor="#990000" BorderColor="#CC66FF"
ForeColor="White" />
                <DynamicMenuItemStyle HorizontalPadding="5px"
VerticalPadding="2px" />
                <DynamicMenuStyle BackColor="#FFFBD6" />
                <DynamicSelectedStyle BackColor="#FFCC66" />
                <Items>
                    <asp:MenuItem Text="Home" Value="Home"
NavigateUrl="~/WebForm1.aspx"></asp:MenuItem>
                    <asp:MenuItem Text="Login" Value="Login"
NavigateUrl="~/WebForm2.aspx"></asp:MenuItem>
                    <asp:MenuItem Text="Departments" Value="Departments"
NavigateUrl="~/WebForm3.aspx"></asp:MenuItem>
                    <asp:MenuItem Text="India & Politics" Value="Food Court"
NavigateUrl="~/WebForm4.aspx"></asp:MenuItem>
                </Items>
                <StaticHoverStyle BackColor="#990000" ForeColor="White" />
                <StaticMenuItemStyle HorizontalPadding="5px"
VerticalPadding="2px" />
                <StaticSelectedStyle BackColor="#FFCC66" />
            </asp:Menu>
        </div>
 <div style="margin-left: 80px">
  
            </div>
        <div>
            <asp:ContentPlaceHolder ID="maincontent" runat="server">
            </asp:ContentPlaceHolder>
        </div>
    </form>
```

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



Webform1.aspx

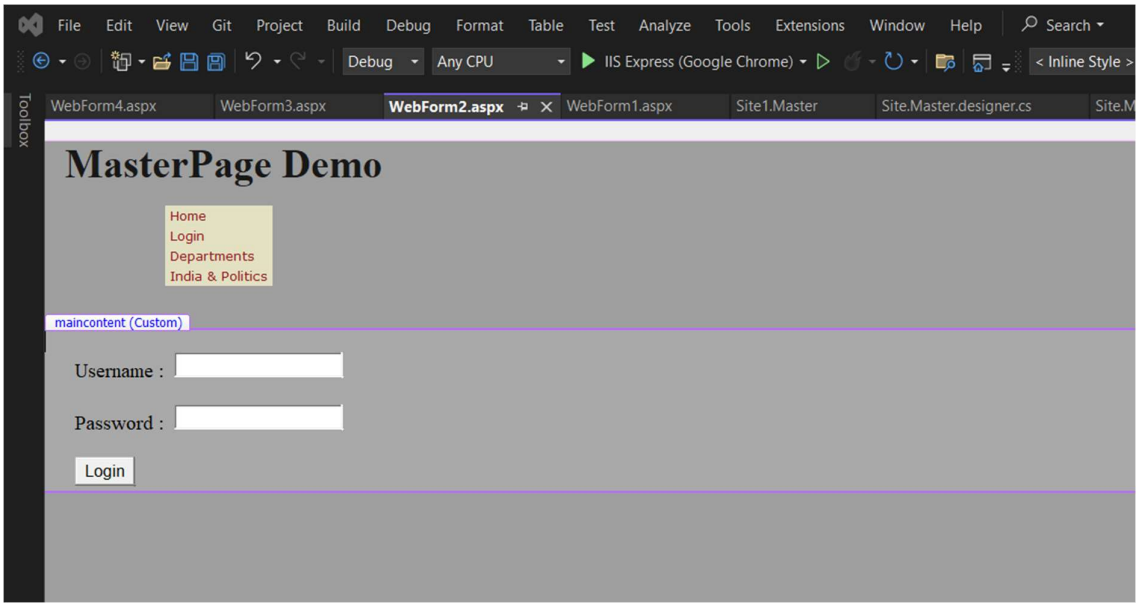
```
<%@ Page Language="C#" MasterPageFile="~/Site1.Master"  AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="Practical5.WebForm1" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="maincontent" runat="server">
    <div><h1>        Home Page</h1>
    </div>
<asp:Image ID="Image1" runat="server" Height="83px" />
</asp:Content>
```



Webform2.aspx

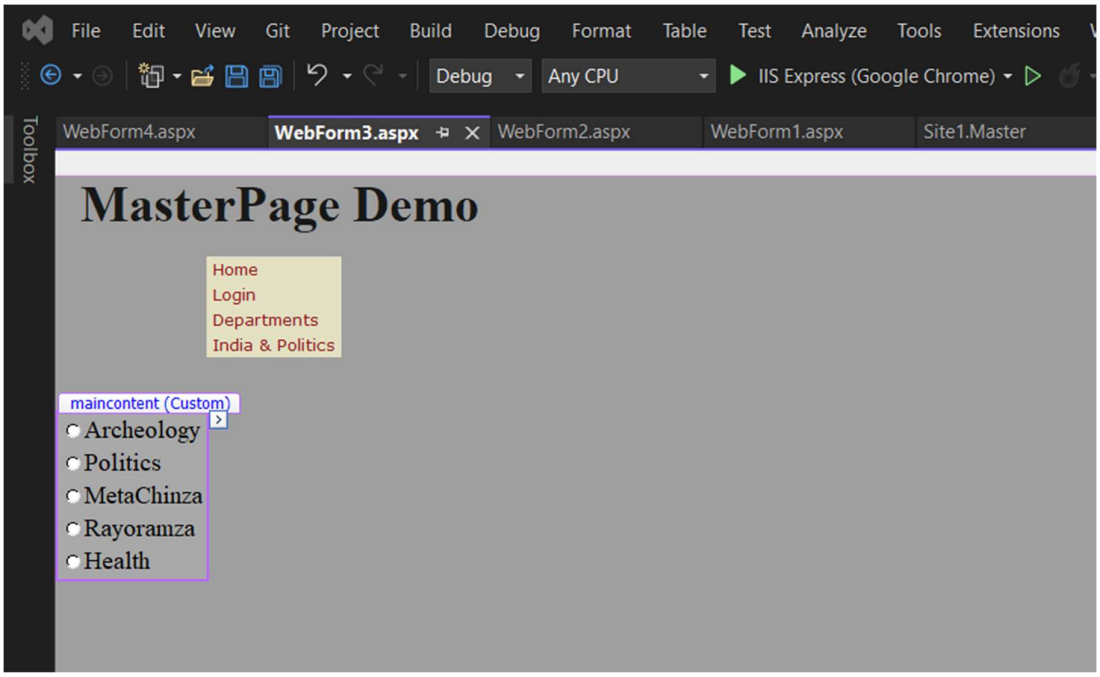
```
<%@ Page Language="C#" MasterPageFile="~/Site1.Master"   AutoEventWireup="true"
CodeBehind="WebForm2.aspx.cs" Inherits="Practical5.WebForm2" %>

<asp:Content ID="Content2" ContentPlaceHolderID="maincontent" runat="server">
```

```
    <br />
      Username : 
<asp:TextBox ID="TextBox1" runat="server" ></asp:TextBox>
    <br />
   
    <br />
      Password : 
<asp:TextBox ID="TextBox2" runat="server" ></asp:TextBox>
    <br />
<br />
     
<asp:Button ID="Button1" runat="server" Text="Login"  />
<br />

</asp:Content>
```



Webform3.aspx

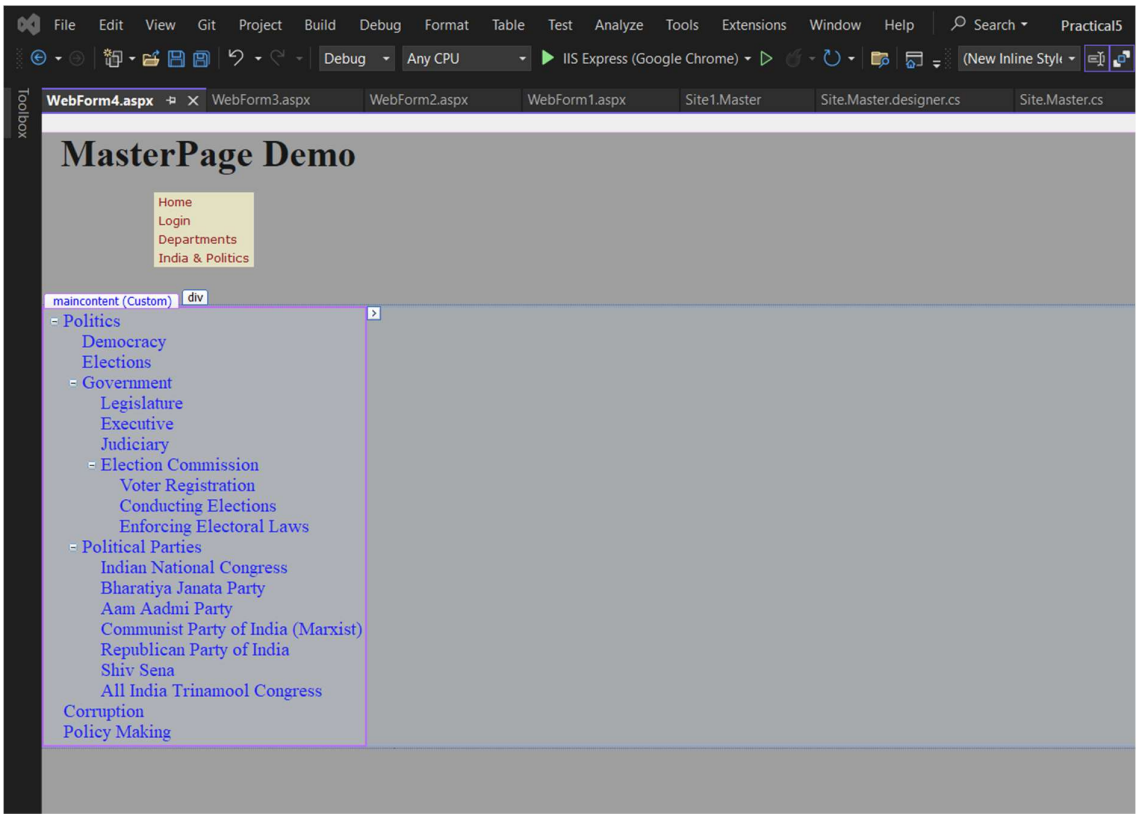
```
<%@ Page Language="C#"  MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="WebForm3.aspx.cs" Inherits="Practical5.WebForm3" %>

<asp:Content ID="Content2" ContentPlaceHolderID="maincontent" runat="server">
    <asp:RadioButtonList ID="RadioButtonList1" runat="server">
    <asp:ListItem>Archeology </asp:ListItem>
    <asp:ListItem>Politics</asp:ListItem>
    <asp:ListItem>MetaChinza</asp:ListItem>
    <asp:ListItem>Rayoramza</asp:ListItem>
    <asp:ListItem>Health</asp:ListItem>
</asp:RadioButtonList>
</asp:Content>
```



Webform4.aspx

```
<%@ Page Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="WebForm4.aspx.cs" Inherits="Practical5.WebForm4" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="maincontent" runat="server">

    <div>
        <asp:TreeView ID="TreeView1" runat="server">
            <Nodes>
                <asp:TreeNode Text="Politics" Value="Politics">
                    <asp:TreeNode Text="Democracy"
Value="Democracy"></asp:TreeNode>
                    <asp:TreeNode Text="Elections"
Value="Elections"></asp:TreeNode>
                    <asp:TreeNode Text="Government" Value="Government">
                        <asp:TreeNode Text="Legislature"
Value="Legislature"></asp:TreeNode>
                        <asp:TreeNode Text="Executive"
Value="Executive"></asp:TreeNode>
                        <asp:TreeNode Text="Judiciary"
Value="Judiciary"></asp:TreeNode>
                        <asp:TreeNode Text="Election Commission" Value="Election
Commission">
                            <asp:TreeNode Text="Voter Registration" Value="Voter
Registration"></asp:TreeNode>
                            <asp:TreeNode Text="Conducting Elections"
Value="Conducting Elections"></asp:TreeNode>
                            <asp:TreeNode Text="Enforcing Electoral Laws"
Value="Enforcing Electoral Laws"></asp:TreeNode>
                        </asp:TreeNode>
                    </asp:TreeNode>
                    <asp:TreeNode Text="Political Parties" Value="Political
Parties">
                        <asp:TreeNode Text="Indian National Congress"
Value="Indian National Congress"></asp:TreeNode>
```

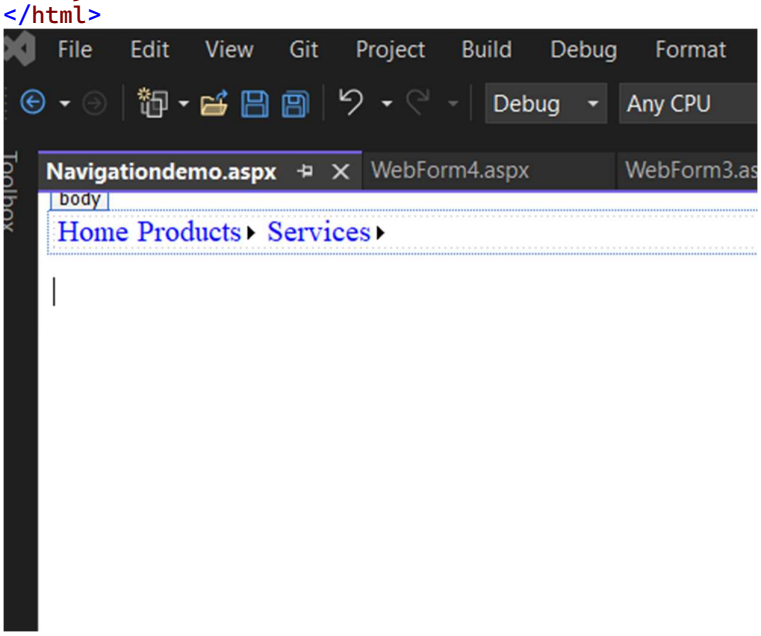
```
                        <asp:TreeNode Text="Bharatiya Janata Party"
Value="Bharatiya Janata Party"></asp:TreeNode>
                        <asp:TreeNode Text="Aam Aadmi Party" Value="Aam Aadmi
Party"></asp:TreeNode>
                        <asp:TreeNode Text="Communist Party of India (Marxist)"
Value="Communist Party of India (Marxist)"></asp:TreeNode>
                        <asp:TreeNode Text="Republican Party of India"
Value="Republican Party of India"></asp:TreeNode>
                        <asp:TreeNode Text="Shiv Sena" Value="Shiv
Sena"></asp:TreeNode>
                        <asp:TreeNode Text="All India Trinamool Congress"
Value="All India Trinamool Congress"></asp:TreeNode>
                    </asp:TreeNode>
                </asp:TreeNode>
                <asp:TreeNode Text="Corruption"
Value="Corruption"></asp:TreeNode>
                <asp:TreeNode Text="Policy Making" Value="Policy
Making"></asp:TreeNode>

            </Nodes>
        </asp:TreeView>
    </div>
</asp:Content>
```



C]Navigation

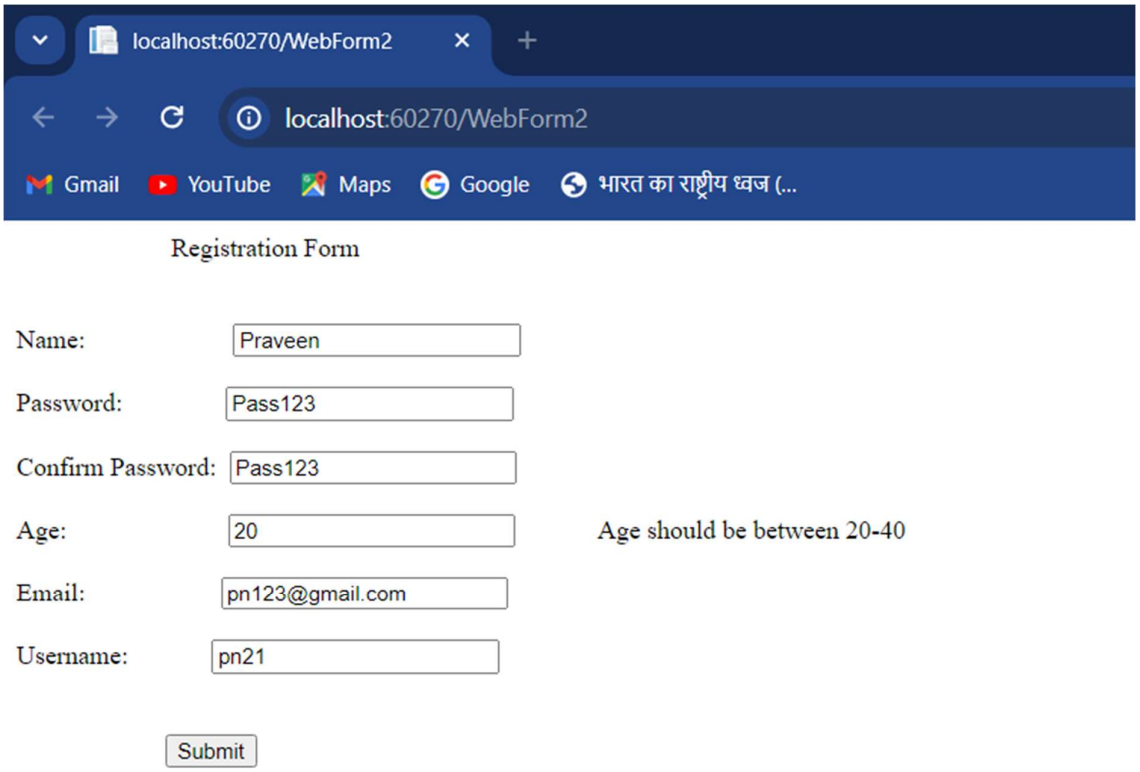
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Navigationdemo.aspx.cs"
Inherits="Practical5.Navigationdemo" %>

<!DOCTYPE html>
```

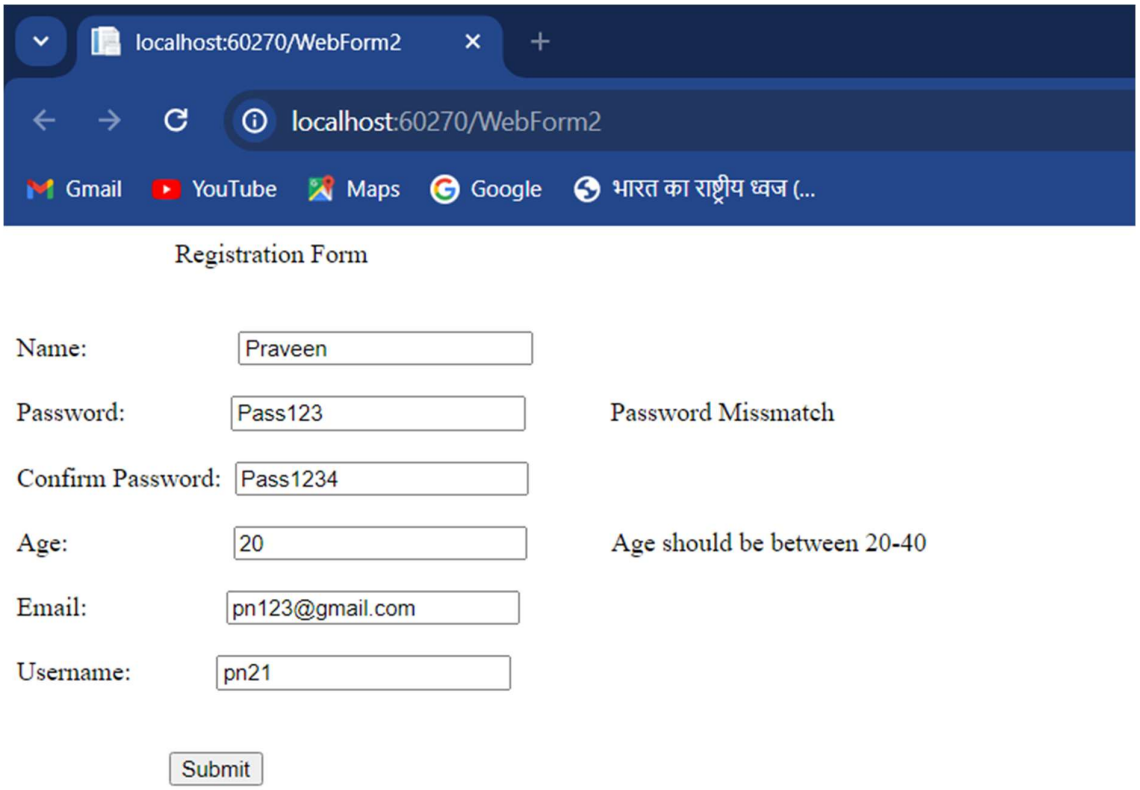
```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Menu ID="MainMenu" runat="server" Orientation="Horizontal"
OnMenuItemClick="MainMenu_MenuItemClick">
    <Items>
        <asp:MenuItem Text="Home" NavigateUrl="~/Default.aspx"></asp:MenuItem>
        <asp:MenuItem Text="Products">
            <asp:MenuItem Text="Product 1"
NavigateUrl="~/Products/Product1.aspx"></asp:MenuItem>
            <asp:MenuItem Text="Product 2"
NavigateUrl="~/Products/Product2.aspx"></asp:MenuItem>
        </asp:MenuItem>
        <asp:MenuItem Text="Services">
            <asp:MenuItem Text="Service 1"
NavigateUrl="~/Services/Service1.aspx"></asp:MenuItem>
            <asp:MenuItem Text="Service 2"
NavigateUrl="~/Services/Service2.aspx"></asp:MenuItem>
        </asp:MenuItem>
    </Items>
</asp:Menu>

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



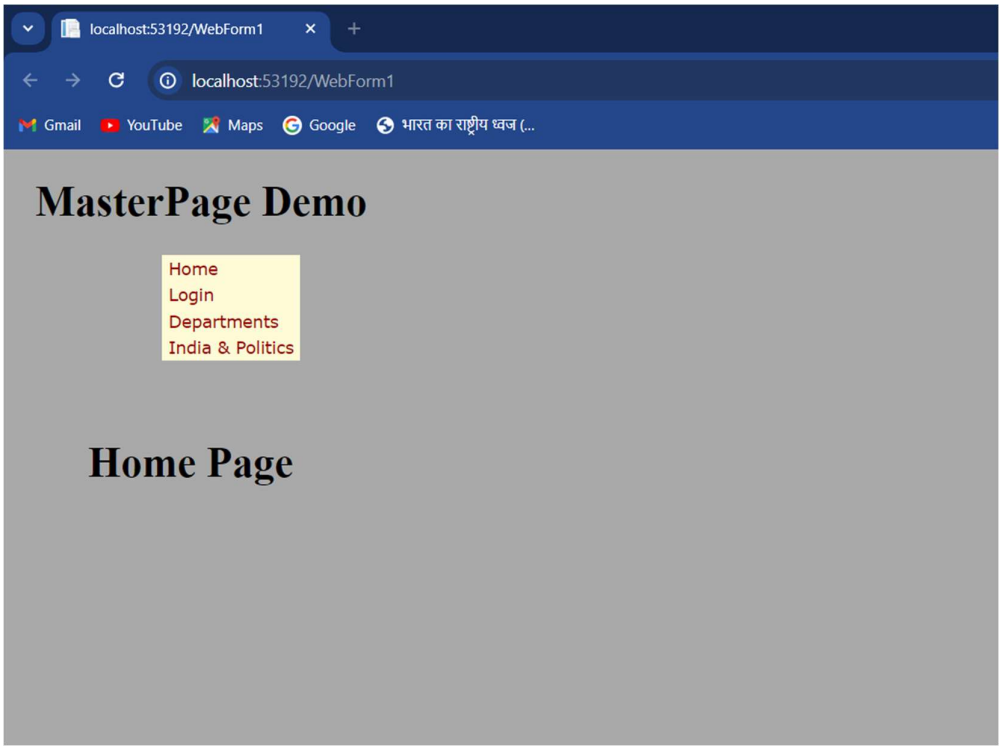
Output:

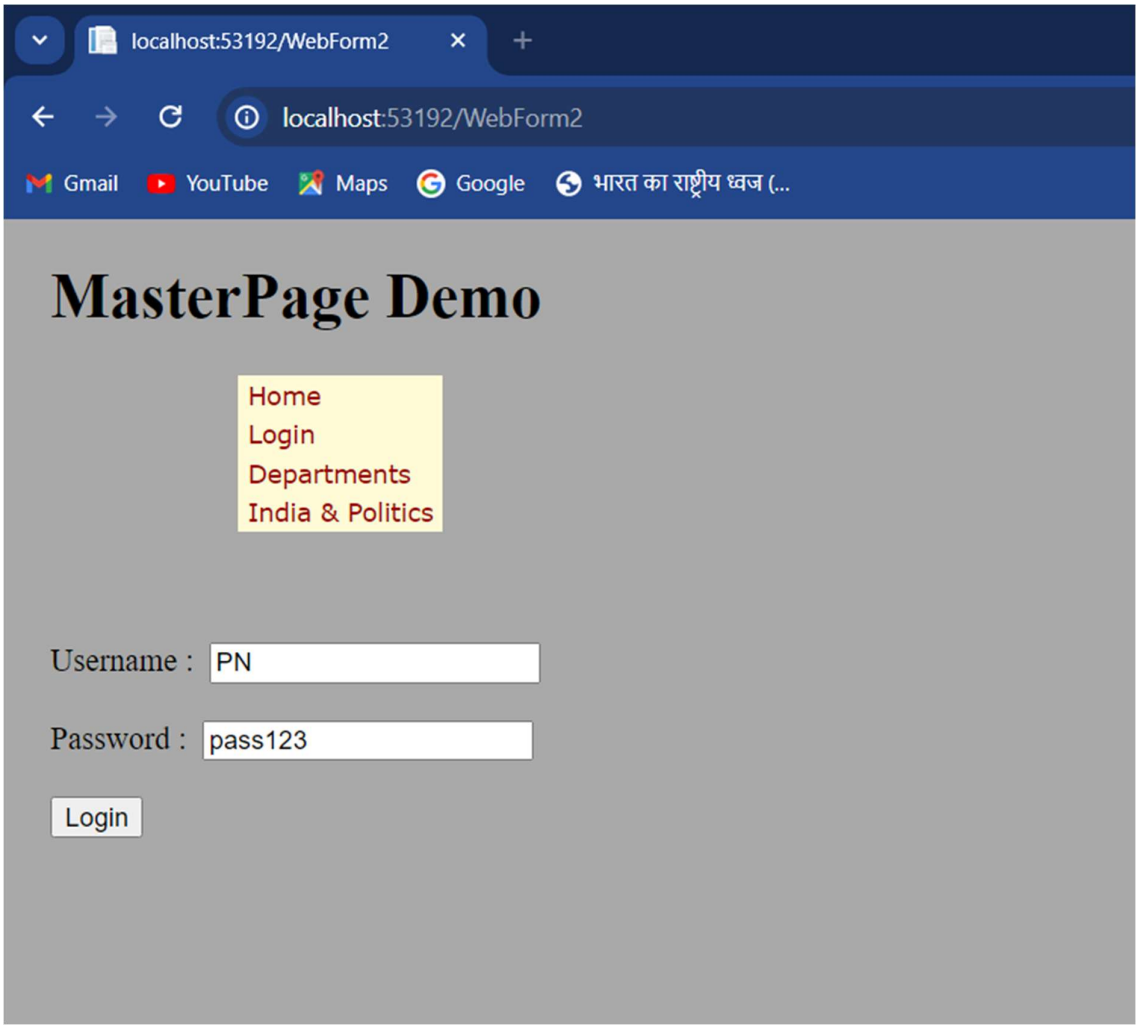
A]Validation

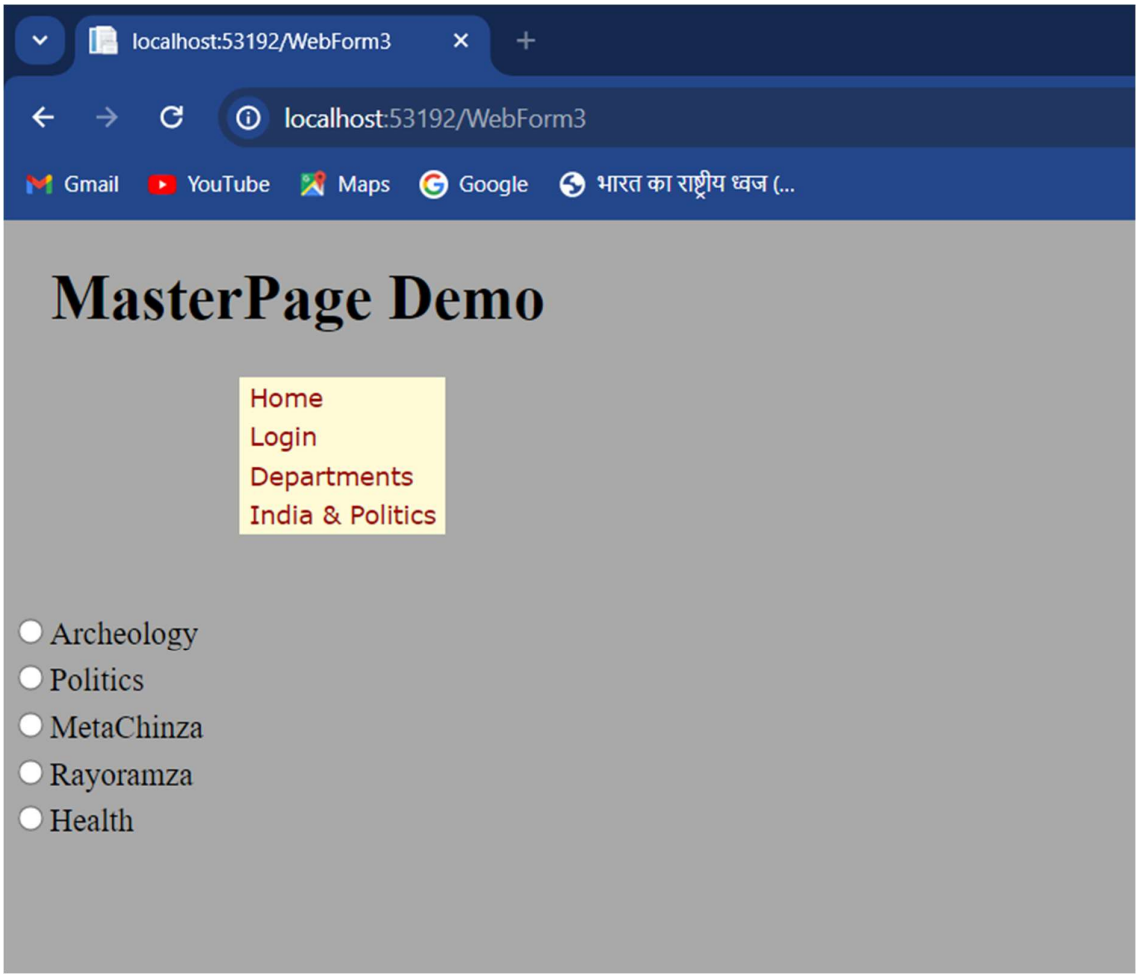


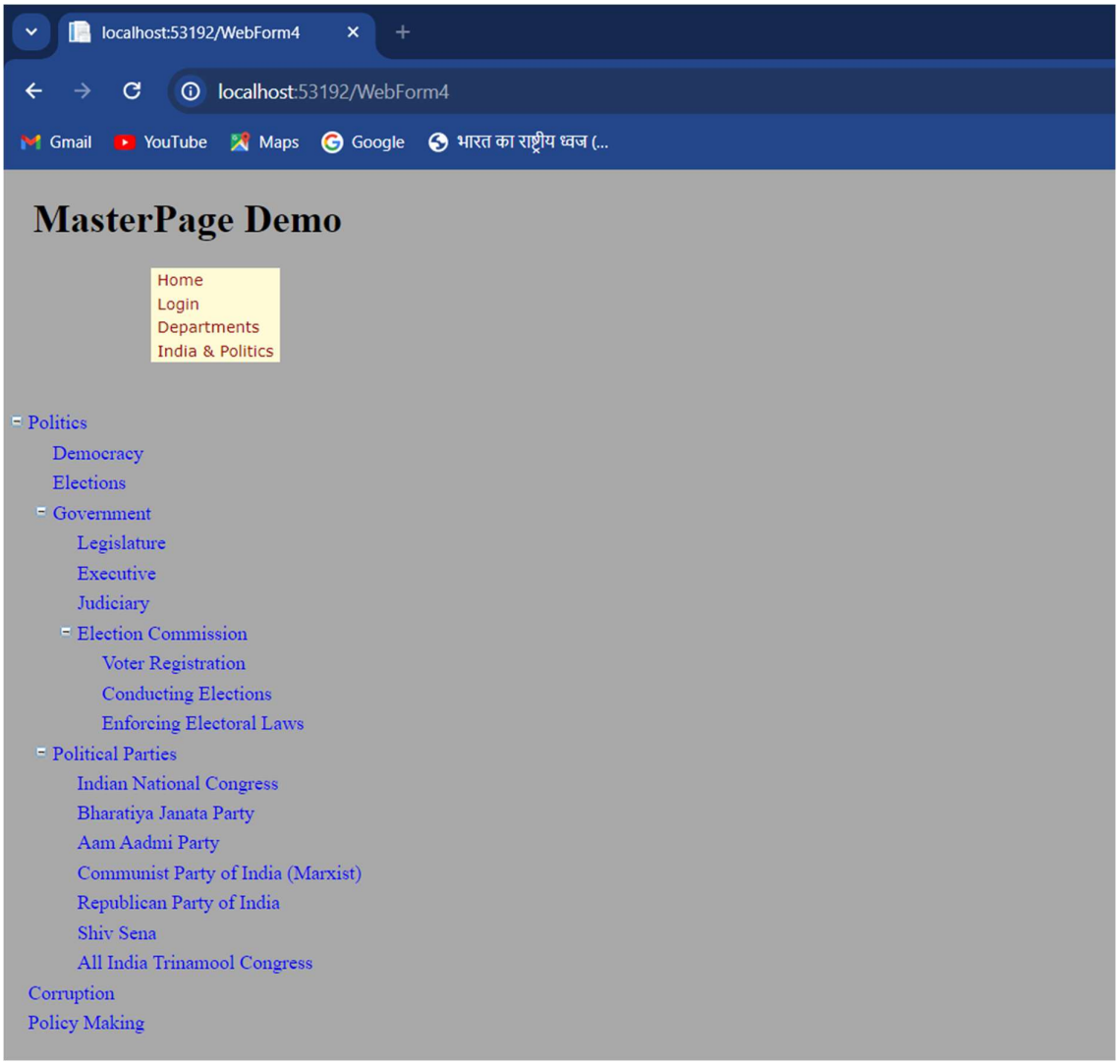

localhost:60270/WebForm2
localhost:60270/WebForm2
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
Registration Form
Name:
Praveen
Password:
Pass123
Password Missmatch
Confirm Password:
Pass1234
Age:
20
Age should be between 20-40
Email:
pn123@gmail.com
Username:
pn21
Submit

b]

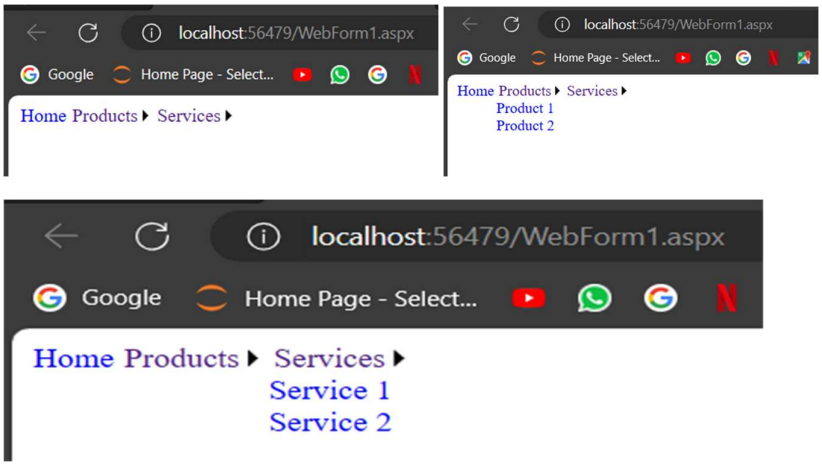

localhost:53192/WebForm1
localhost:53192/WebForm1
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
MasterPage Demo
Home
Login
Departments
India & Politics
Home Page


localhost:53192/WebForm2
localhost:53192/WebForm2
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
MasterPage Demo
Home
Login
Departments
India & Politics
Username :
PN
Password :
pass123
Login


localhost:53192/WebForm3
localhost:53192/WebForm3
Gmail
YouTube
Maps
Google
भारत का राष्ट्रीय ध्वज (...
MasterPage Demo
Home
Login
Departments
India & Politics
Archeology
Politics
MetaChinza
Rayoramza
Health



C] Navigation:

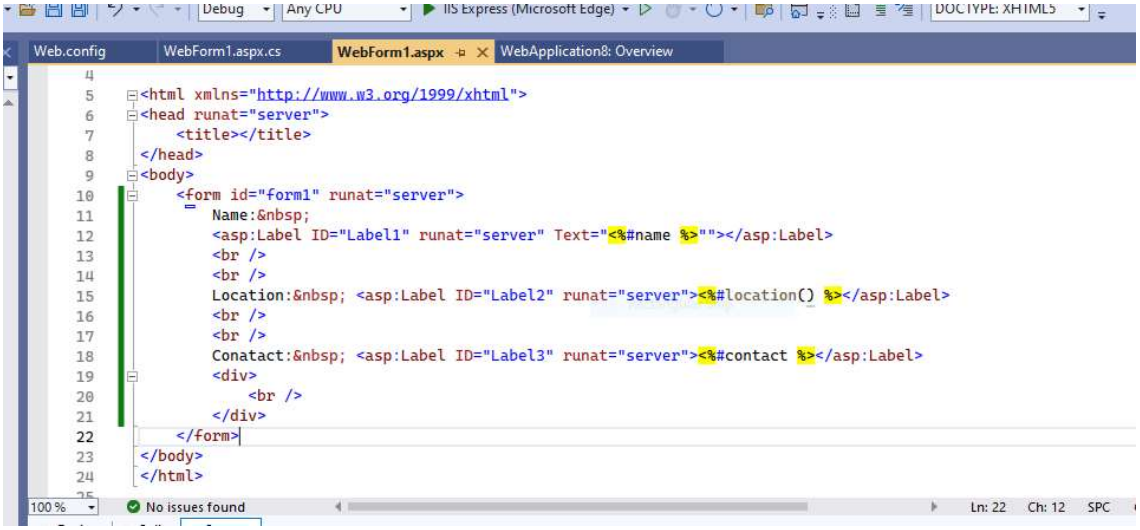


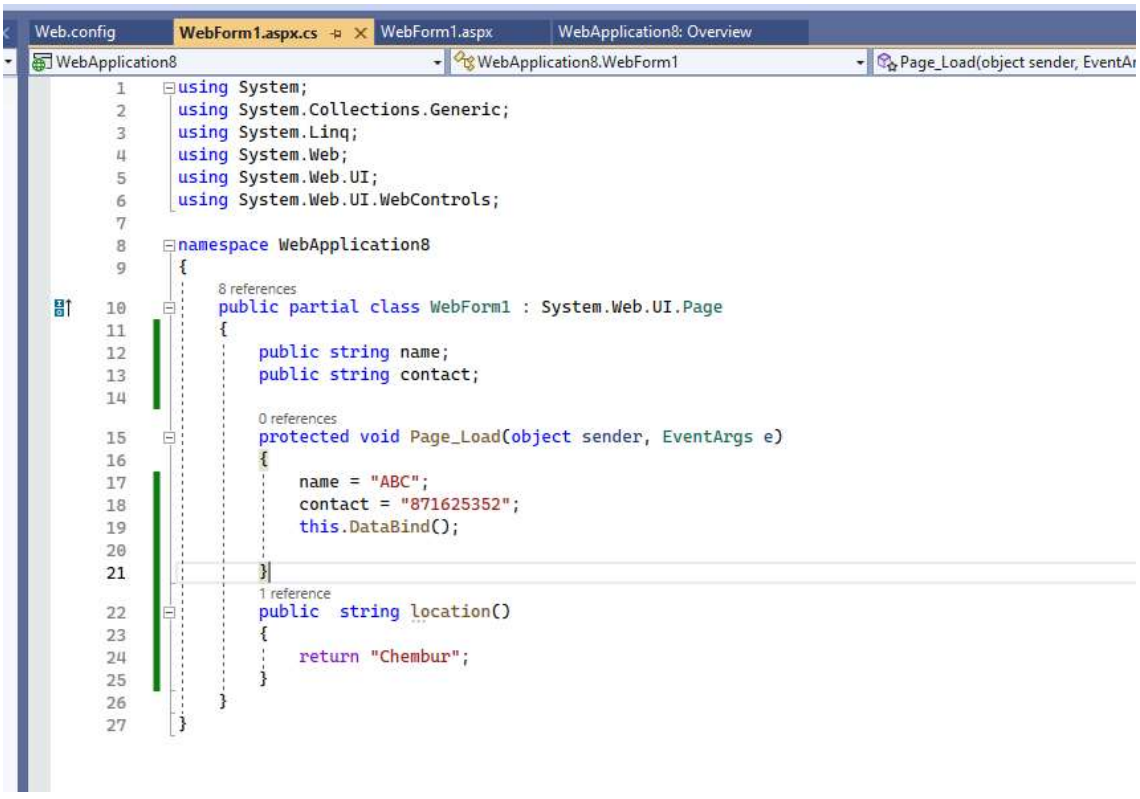
Practical-6

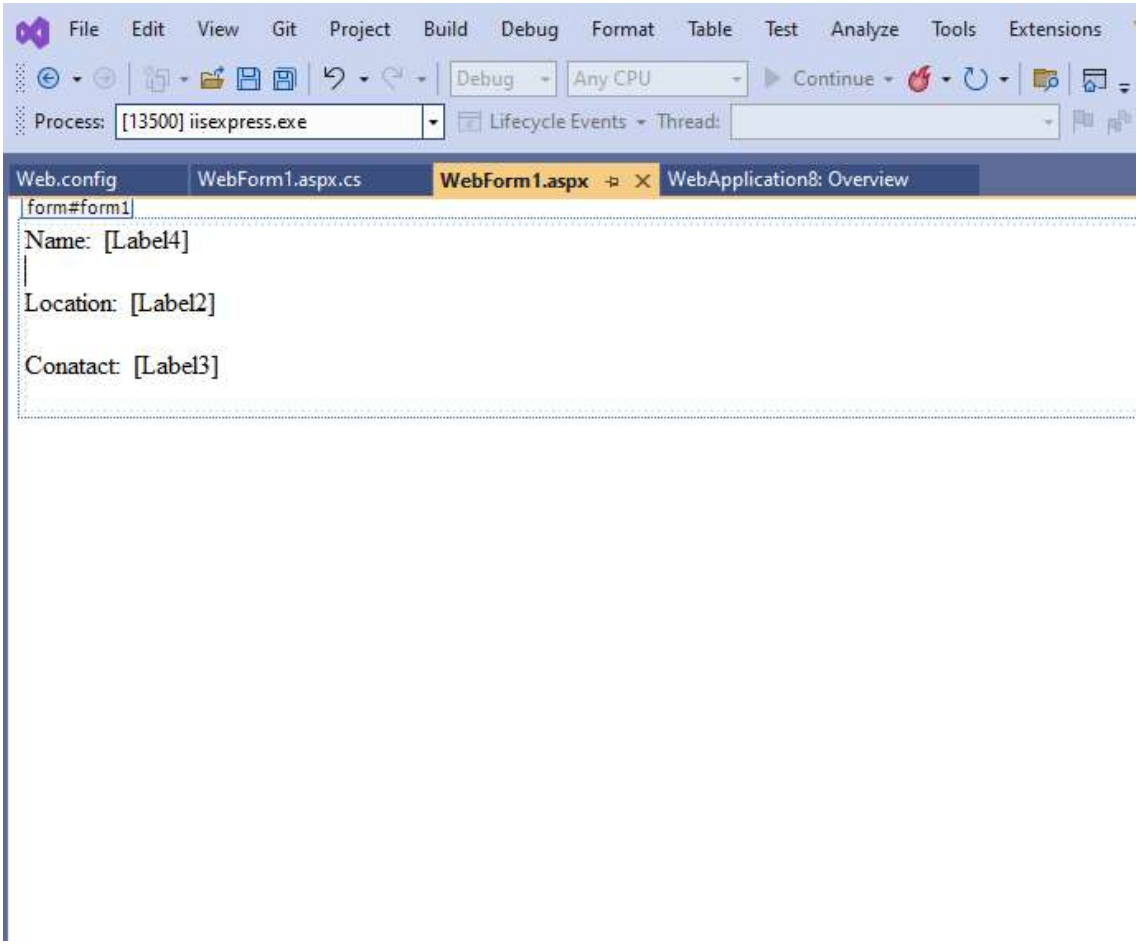
Aim: Performing ADO.NET data access in ASP.NET for a. Simple Data Binding b. Repeated Value Data Binding

Code:

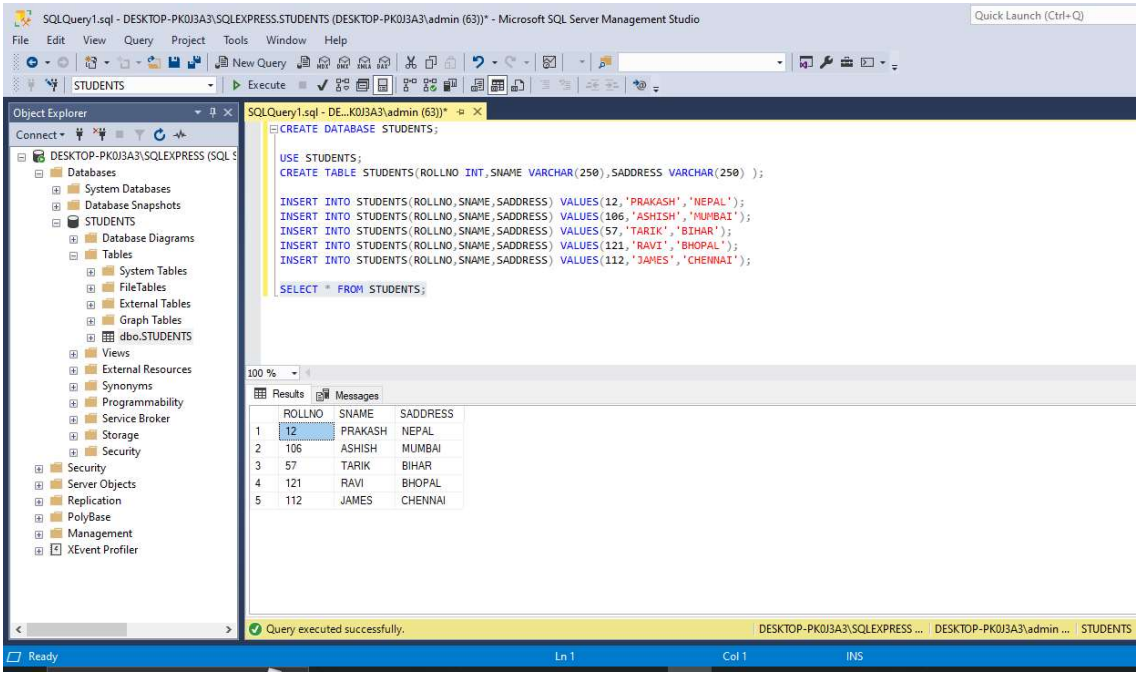
a]Simple Data Binding



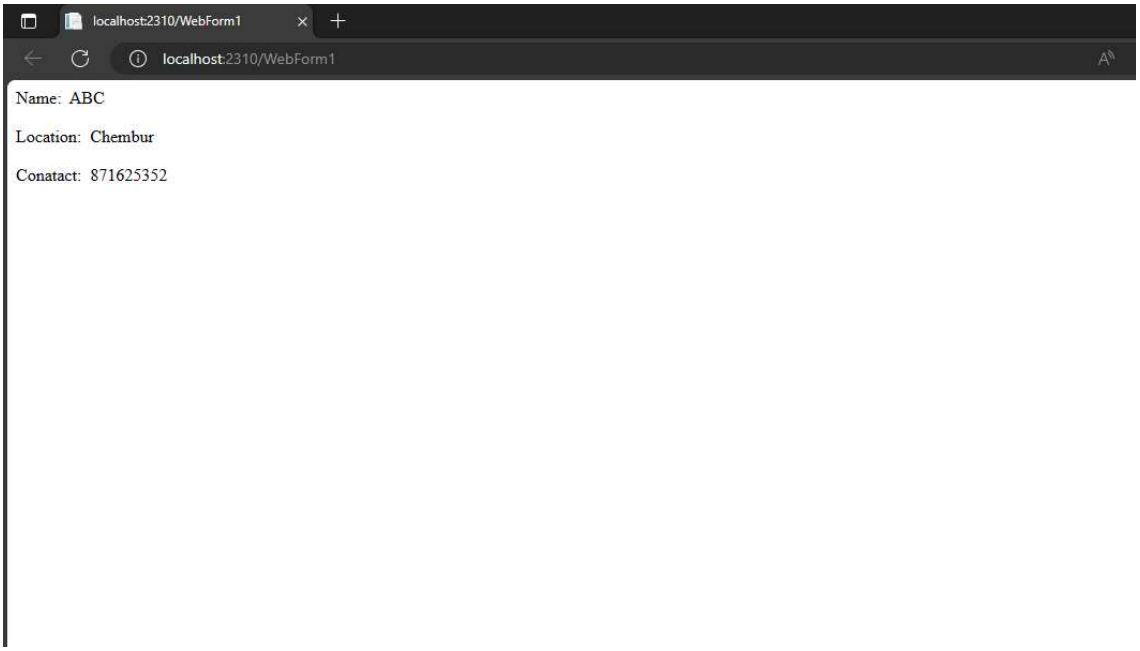



File Edit View Git Project Build Debug Format Table Test Analyze Tools Extensions
Debug
Any CPU
Continue
Process: [13500] iisexpress.exe
Lifecycle Events
Thread:
Web.config
WebForm1.aspx.cs
WebForm1.aspx
WebApplication8: Overview
form#form1
Name: [Label4]
Location: [Label2]
Conatact: [Label3]

Database:

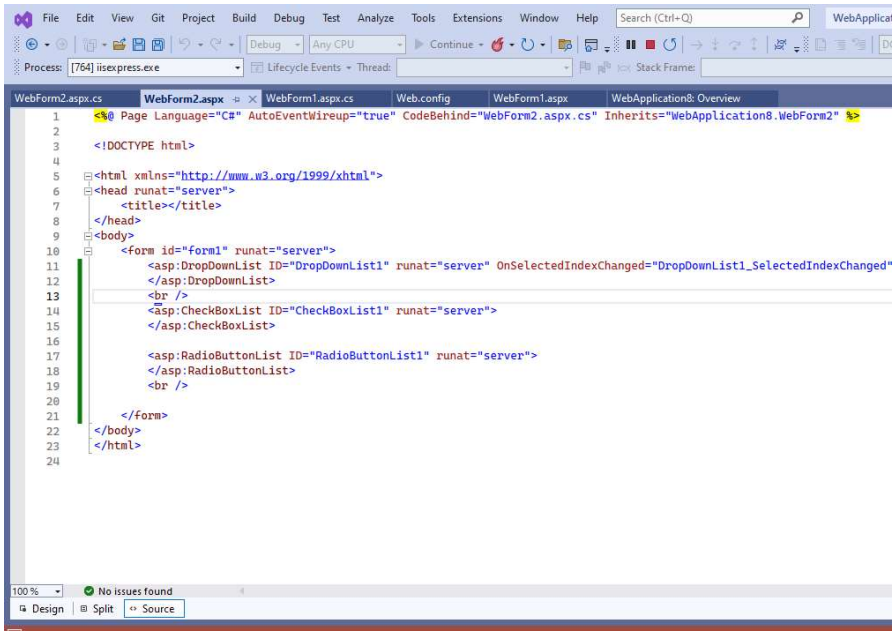

SQLQuery1.sql - DESKTOP-PK0J3A3\SQLEXPRESS.STUDENTS (DESKTOP-PK0J3A3\admin (63))* - Microsoft SQL Server Management Studio
Quick Launch (Ctrl+Q)
File Edit View Query Project Tools Window Help
New Query
STUDENTS
Execute
Object Explorer
Connect
DESKTOP-PK0J3A3\SQLEXPRESS (SQL S
Databases
System Databases
Database Snapshots
STUDENTS
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.STUDENTS
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Security
Security
Server Objects
Replication
PolyBase
Management
XEvent Profiler
SQLQuery1.sql - DE...K0J3A3\admin (63))*
CREATE DATABASE STUDENTS;
USE STUDENTS;
CREATE TABLE STUDENTS(ROLLNO INT,SNAME VARCHAR(250),SADDRESS VARCHAR(250));
INSERT INTO STUDENTS(ROLLNO,SNAME,SADDRESS) VALUES(12,'PRAKASH','NEPAL');
INSERT INTO STUDENTS(ROLLNO,SNAME,SADDRESS) VALUES(106,'ASHISH','MUMBAI');
INSERT INTO STUDENTS(ROLLNO,SNAME,SADDRESS) VALUES(57,'TARIK','BIHAR');
INSERT INTO STUDENTS(ROLLNO,SNAME,SADDRESS) VALUES(121,'RAVI','BHOPAL');
INSERT INTO STUDENTS(ROLLNO,SNAME,SADDRESS) VALUES(112,'JAMES','CHENNAI');
SELECT * FROM STUDENTS;
100 %
Results
Messages
ROLLNO SNAME SADDRESS
1 12 PRAKASH NEPAL
2 106 ASHISH MUMBAI
3 57 TARIK BIHAR
4 121 RAVI BHOPAL
5 112 JAMES CHENNAI
Query executed successfully.
DESKTOP-PK0J3A3\SQLEXPRESS ...
DESKTOP-PK0J3A3\admin ...
STUDENTS
Ready
Ln 1
Col 1
INS

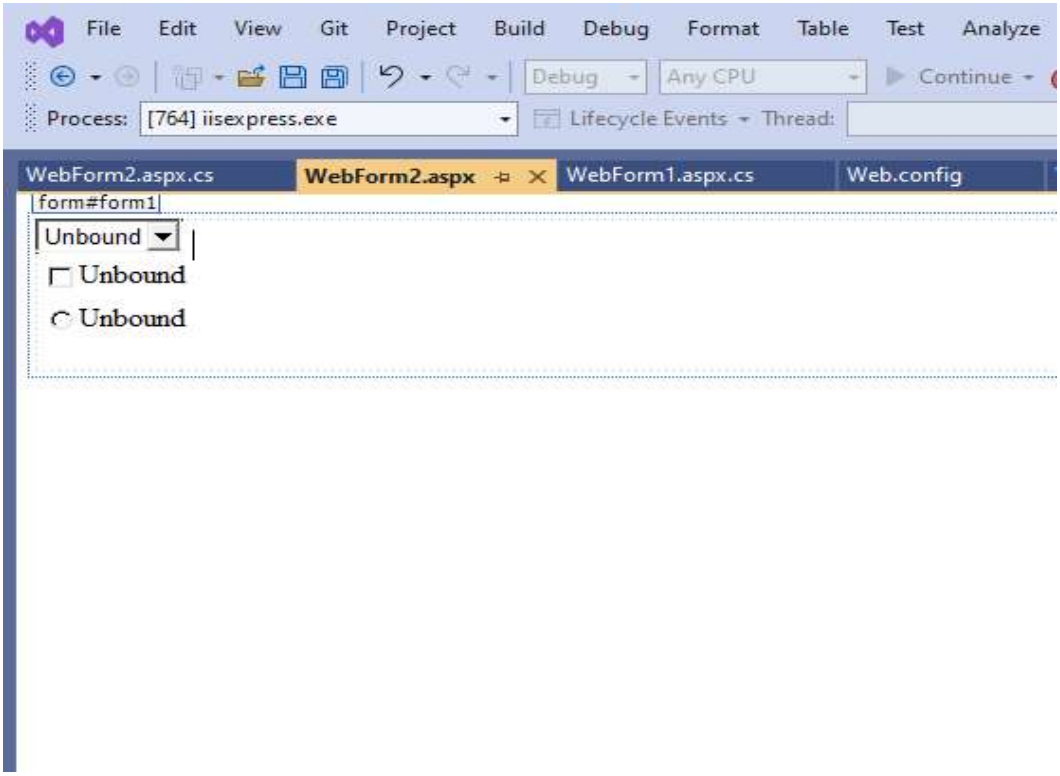
Output:

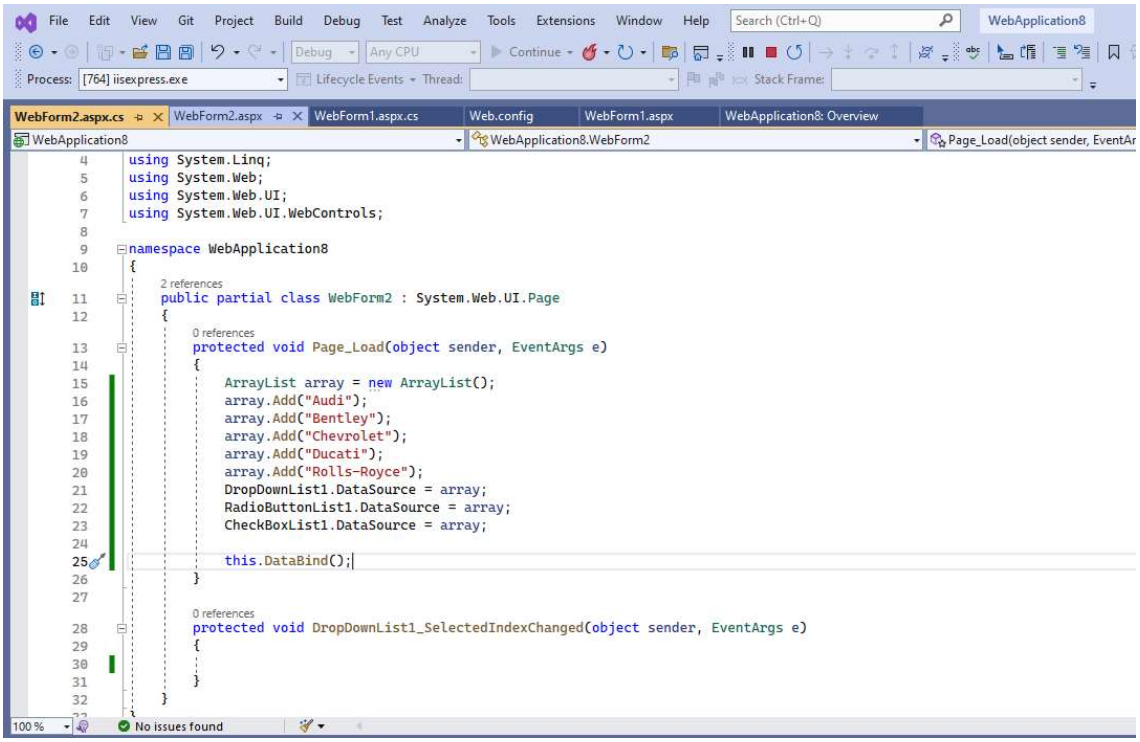


b]Repeatedvalue data binding:

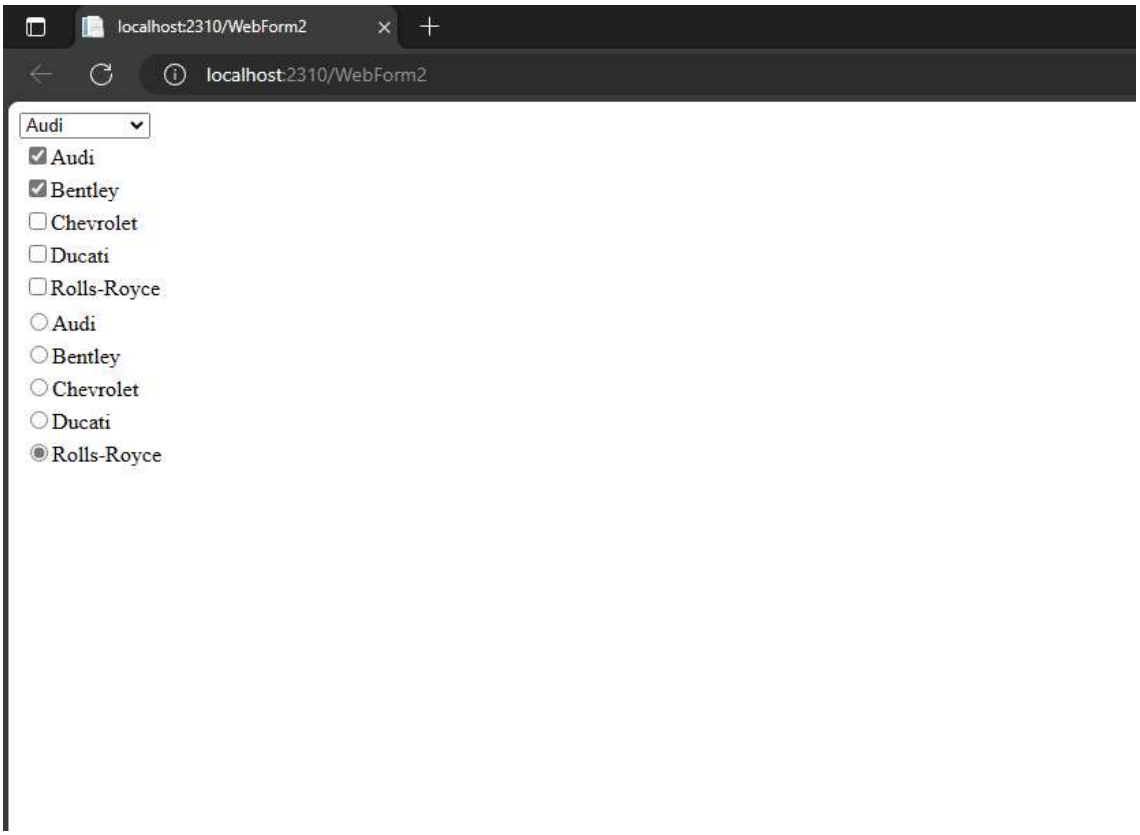
Code:




File Edit View Git Project Build Debug Format Table Test Analyze
Debug
Any CPU
Continue
Process: [764] iisexpress.exe
Lifecycle Events
Thread:
WebForm2.aspx.cs
WebForm2.aspx
WebForm1.aspx.cs
Web.config
form#form1
Unbound
Unbound
Unbound

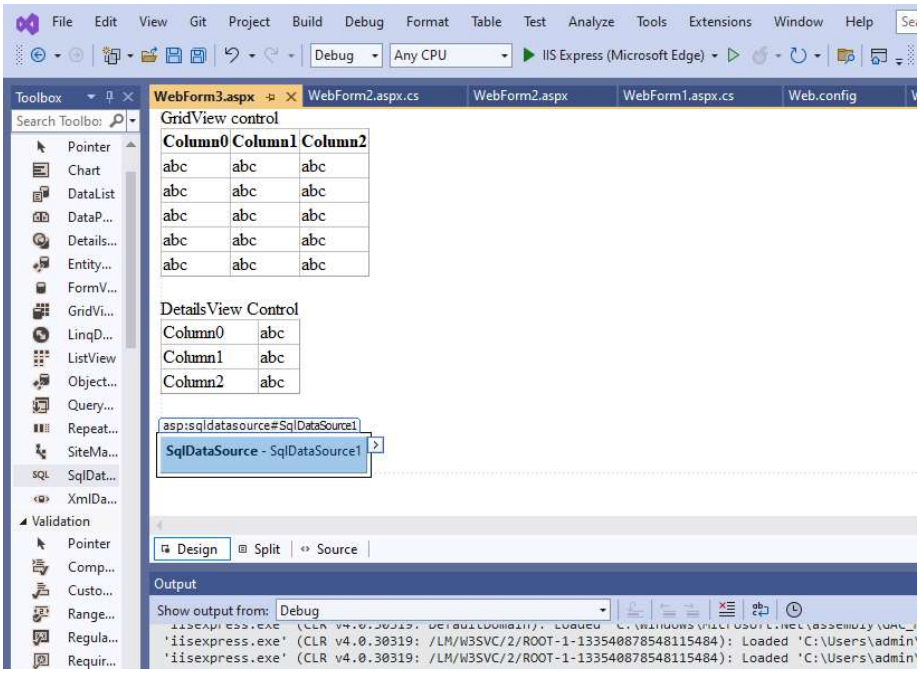

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search (Ctrl+Q)
WebApplication8
Debug
Any CPU
Continue
Process: [764] iisexpress.exe
Lifecycle Events
Thread:
Stack Frame:
WebForm2.aspx.cs
WebForm2.aspx
WebForm1.aspx.cs
Web.config
WebForm1.aspx
WebApplication8: Overview
WebApplication8
WebApplication8.WebForm2
Page_Load(object sender, EventAr
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace WebApplication8
{
2 references
public partial class WebForm2 : System.Web.UI.Page
{
0 references
protected void Page_Load(object sender, EventArgs e)
{
ArrayList array = new ArrayList();
array.Add("Audi");
array.Add("Bentley");
array.Add("Chevrolet");
array.Add("Ducati");
array.Add("Rolls-Royce");
DropDownList1.DataSource = array;
RadioButtonList1.DataSource = array;
CheckBoxList1.DataSource = array;
this.DataBind();
}
0 references
protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
{
}
}
}
100 %
No issues found

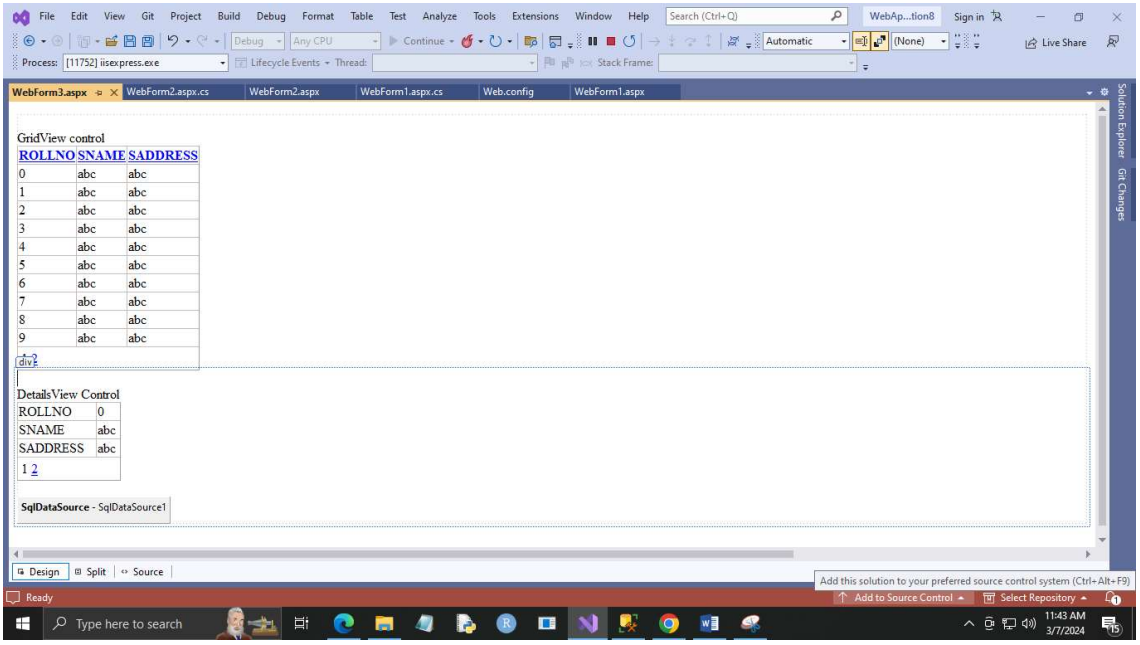
Output:



c]Database binding:

Code:





Web.config file:

```
//Add this <connectionStrings></connectionStrings>.
<configuration>
	<connectionStrings>
		<add name="constr" providerName="System.Data.SqlClient"
connectionString="Data source=DESKTOP-
PK0J3A3\SQLEXPRESS;Database=STUDENTS;Integrated Security=True"></add>
	</connectionStrings>
	<appSettings>
		<add key="ValidationSettings:UnobtrusiveValidationMode"
value="None"/>
	</appSettings>
```

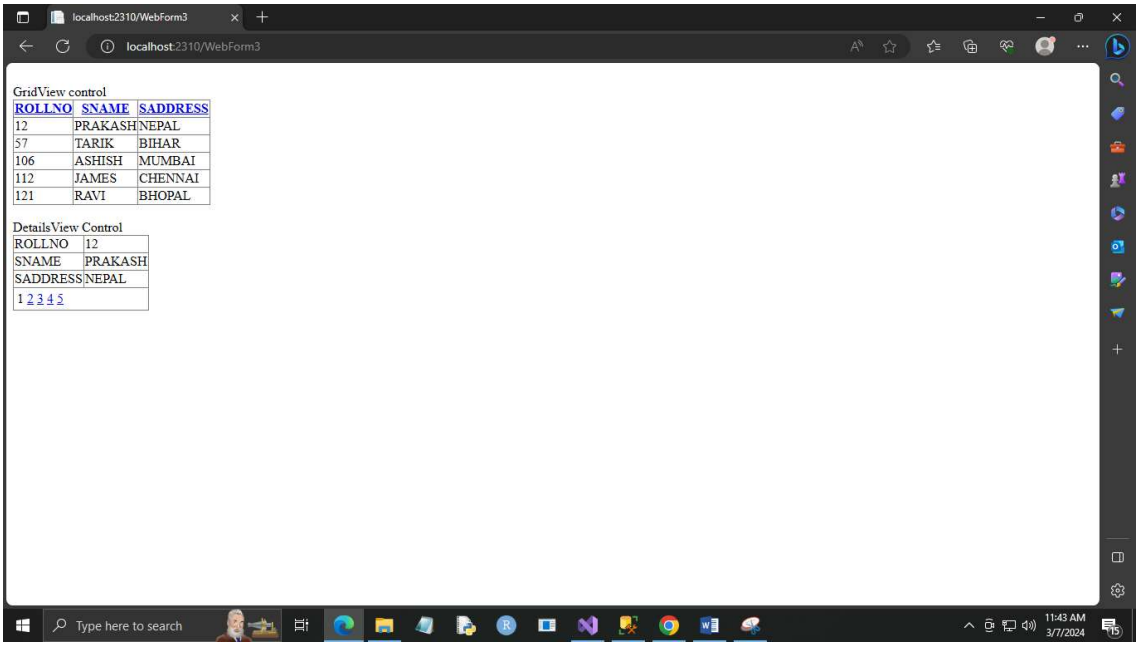
Code :

Webform3.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="WebApplication8.WebForm3" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <br />
        GridView control<asp:GridView ID="GridView1" runat="server"
AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False"
DataSourceID="SqlDataSource1">
            <Columns>
                <asp:BoundField DataField="ROLLNO" HeaderText="ROLLNO"
SortExpression="ROLLNO" />
                <asp:BoundField DataField="SNAME" HeaderText="SNAME"
SortExpression="SNAME" />
```

```
                <asp:BoundField DataField="SADDRESS" HeaderText="SADDRESS"
SortExpression="SADDRESS" />
            </Columns>
        </asp:GridView>
        <div>
            <br />
            DetailsView Control<asp:DetailsView ID="DetailsView1" runat="server"
Height="50px" Width="125px" AllowPaging="True" AutoGenerateRows="False"
DataSourceID="SqlDataSource1">
                <Fields>
                    <asp:BoundField DataField="ROLLNO" HeaderText="ROLLNO"
SortExpression="ROLLNO" />
                    <asp:BoundField DataField="SNAME" HeaderText="SNAME"
SortExpression="SNAME" />
                    <asp:BoundField DataField="SADDRESS" HeaderText="SADDRESS"
SortExpression="SADDRESS" />
                </Fields>
            </asp:DetailsView>
            <br />
            <asp:SqlDataSource ID="SqlDataSource1" runat="server"
ConnectionString="<%$ ConnectionStrings:constr %>" SelectCommand="SELECT * FROM
[STUDENTS]"></asp:SqlDataSource>
        </div>
    </form>
</body>
</html>
```

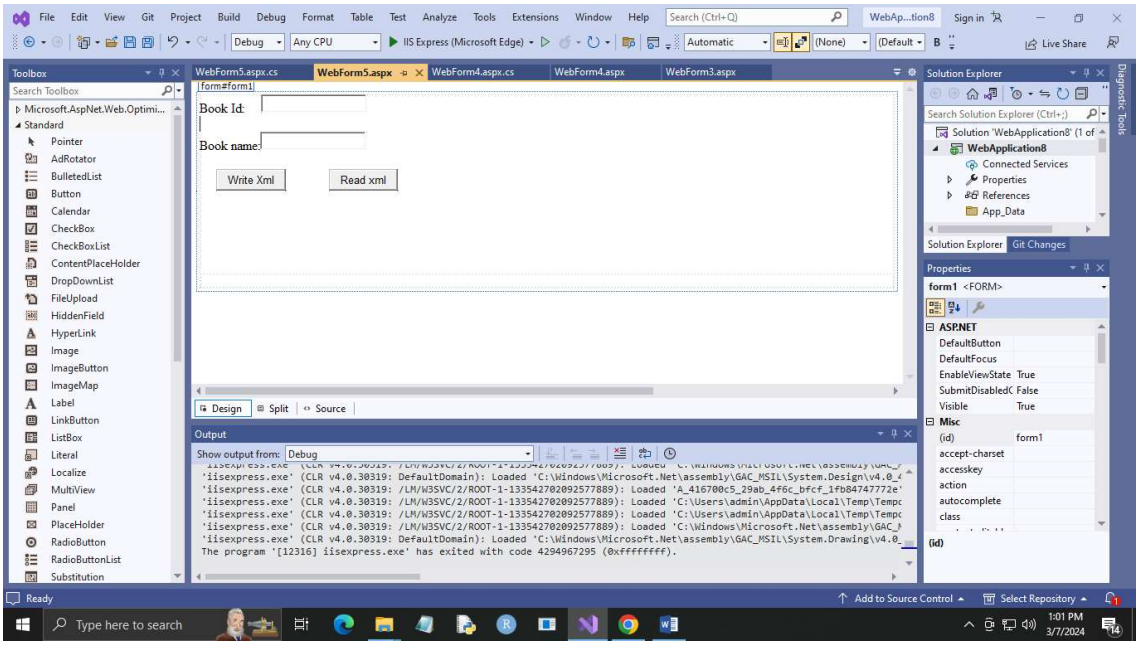
Output:



Practical-7

Aim: Design ASP.NET application for Interacting (Reading / Writing) with XML documents

UI:



Code:

Webform5.aspx.cs

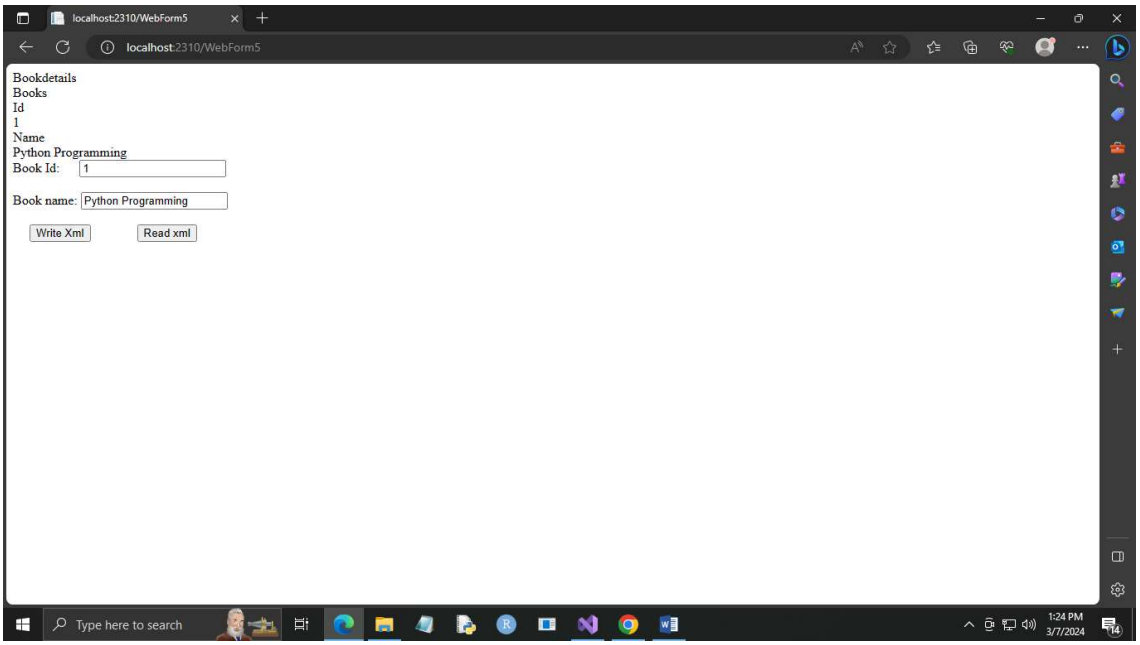
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Xml;

namespace WebApplication8
{
    public partial class WebForm5 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            XmlTextWriter wrt = new
XmlTextWriter(Server.MapPath("myfile.xml"),null);
            //
            wrt.WriteStartElement("Bookdetails");
            wrt.WriteStartElement("Books");
            wrt.WriteElementString("Id",TextBox1.Text);
            wrt.WriteElementString("Name",TextBox2.Text);
            wrt.WriteEndElement();
```

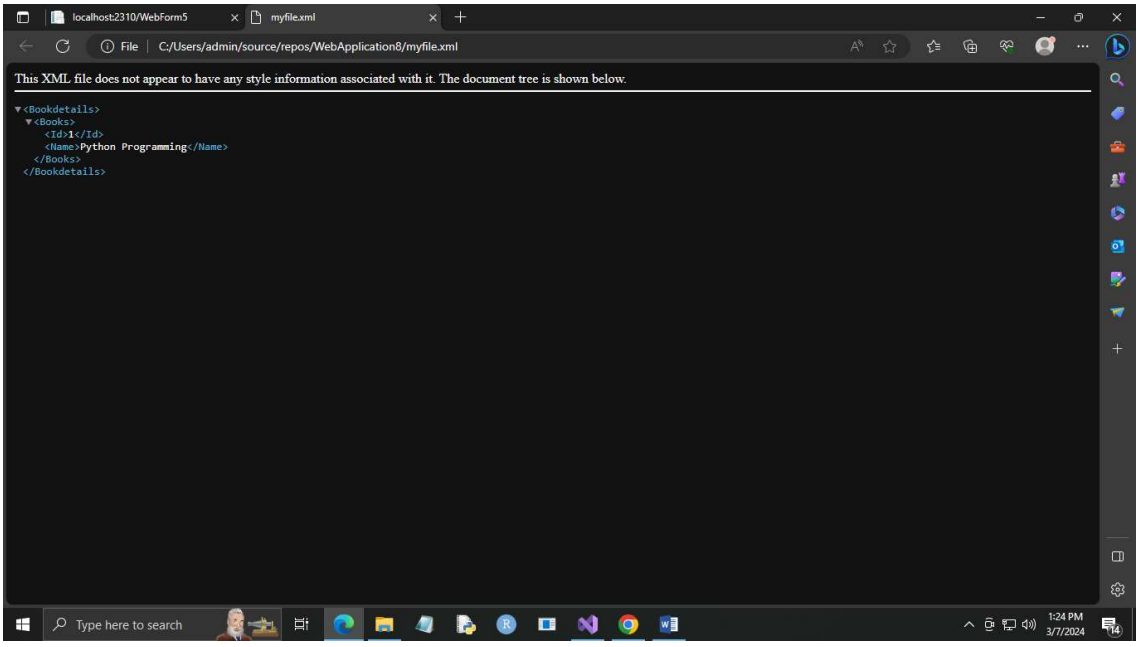
```
            wrt.WriteEndElement();
            wrt.Close();
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            XmlTextReader rdr = new XmlTextReader(Server.MapPath("myfile.xml"));
            while(rdr.Read())
            {
                switch(rdr.NodeType)
                {
                    case XmlNodeType.Element:
                        Response.Write(rdr.Name + "<br>");
                        break;
                    case XmlNodeType.Text:
                        Response.Write(rdr.Value + "<br>");
                        break;
                }
            }
        }
    }
}
```

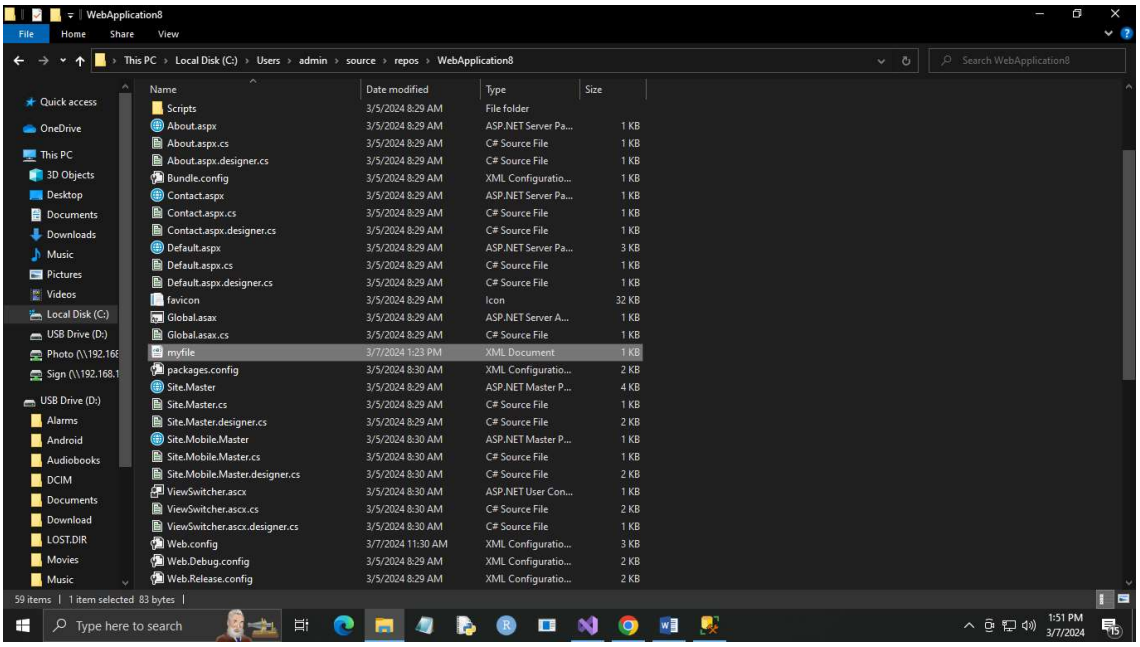
Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm5.aspx.cs"
Inherits="WebApplication8.WebForm5" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:Label ID="Label1" runat="server" Text="Book Id:"></asp:Label>
    
        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        <br />
        <br />
        <asp:Label ID="Label2" runat="server" Text="Book name:"></asp:Label>
        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
        <br />
  
        <br />
    
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Write Xml" />
           
        <asp:Button ID="Button2" runat="server" OnClick="Button2_Click"
Text="Read xml" />
        <br />
        <br />
        <br />
        <br />
        <br />
        <div>
        </div>
    </form>
</body>
</html>
```

Output:


localhost:2310/WebForm5
Bookdetails
Books
Id
1
Name
Python Programming
Book Id: 1
Book name: Python Programming
Write Xml
Read xml


localhost:2310/WebForm5
myfile.xml
File | C:/Users/admin/source/repos/WebApplication8/myfile.xml
This XML file does not appear to have any style information associated with it. The document tree is shown below.
<Bookdetails>
<Books>
<Id>1</Id>
<Name>Python Programming</Name>
</Books>
</Bookdetails>


WebApplication8
File
Home
Share
View
This PC › Local Disk (C:) › Users › admin › source › repos › WebApplication8
Search WebApplication8
Quick access
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
USB Drive (D:)
USB Drive (D:)
Alarms
Android
Audiobooks
DCIM
Documents
Download
LOST.DIR
Movies
Music
Name
Date modified
Type
Size
Scripts 3/5/2024 8:29 AM File folder
About.aspx 3/5/2024 8:29 AM ASP.NET Server Pa... 1 KB
About.aspx.cs 3/5/2024 8:29 AM C# Source File 1 KB
About.aspx.designer.cs 3/5/2024 8:29 AM C# Source File 1 KB
Bundle.config 3/5/2024 8:29 AM XML Configuratio... 1 KB
Contact.aspx 3/5/2024 8:29 AM ASP.NET Server Pa... 1 KB
Contact.aspx.cs 3/5/2024 8:29 AM C# Source File 1 KB
Contact.aspx.designer.cs 3/5/2024 8:29 AM C# Source File 1 KB
Default.aspx 3/5/2024 8:29 AM ASP.NET Server Pa... 3 KB
Default.aspx.cs 3/5/2024 8:29 AM C# Source File 1 KB
Default.aspx.designer.cs 3/5/2024 8:29 AM C# Source File 1 KB
favicon 3/5/2024 8:29 AM Icon 32 KB
Global.asax 3/5/2024 8:29 AM ASP.NET Server A... 1 KB
Global.asax.cs 3/5/2024 8:29 AM C# Source File 1 KB
myfile 3/7/2024 1:23 PM XML Document 1 KB
packages.config 3/5/2024 8:30 AM XML Configuratio... 2 KB
Site.Master 3/5/2024 8:29 AM ASP.NET Master P... 4 KB
Site.Master.cs 3/5/2024 8:29 AM C# Source File 1 KB
Site.Master.designer.cs 3/5/2024 8:29 AM C# Source File 2 KB
Site.Mobile.Master 3/5/2024 8:30 AM ASP.NET Master P... 1 KB
Site.Mobile.Master.cs 3/5/2024 8:30 AM C# Source File 1 KB
Site.Mobile.Master.designer.cs 3/5/2024 8:30 AM C# Source File 2 KB
ViewSwitcher.ascx 3/5/2024 8:30 AM ASP.NET User Con... 1 KB
ViewSwitcher.ascx.cs 3/5/2024 8:30 AM C# Source File 2 KB
ViewSwitcher.ascx.designer.cs 3/5/2024 8:30 AM C# Source File 1 KB
Web.config 3/7/2024 11:30 AM XML Configuratio... 3 KB
Web.Debug.config 3/5/2024 8:29 AM XML Configuratio... 2 KB
Web.Release.config 3/5/2024 8:29 AM XML Configuratio... 2 KB
59 items | 1 item selected 83 bytes
Type here to search
1:51 PM
3/7/2024

Practical-8

Aim:Design ASP.NET Pages for Performance improvement using Caching.

A]Output Caching:

Code:

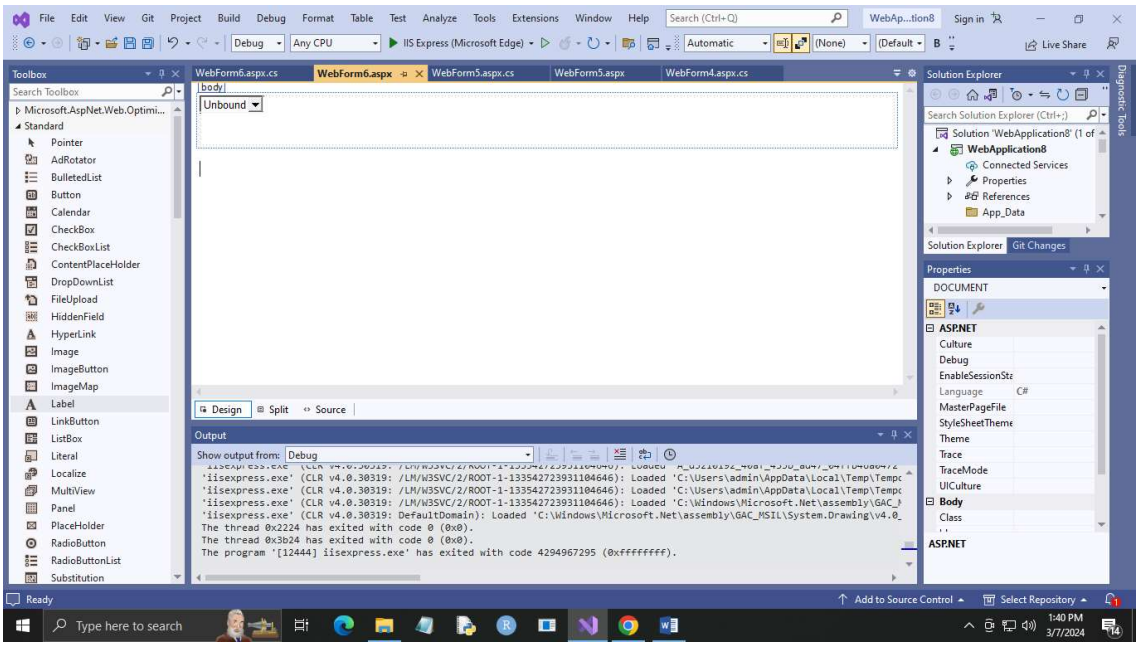
Webform6.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm6.aspx.cs"
Inherits="WebApplication8.WebForm6" %>
<%@ OutputCache Duration="20" VaryByParam="None" %>
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:DropDownList ID="DropDownList1" runat="server">
            </asp:DropDownList>
            <br />
            <br />
            <script>
                document.write(Date())
            </script>
        </div>
    </form>
</body>
</html>
```

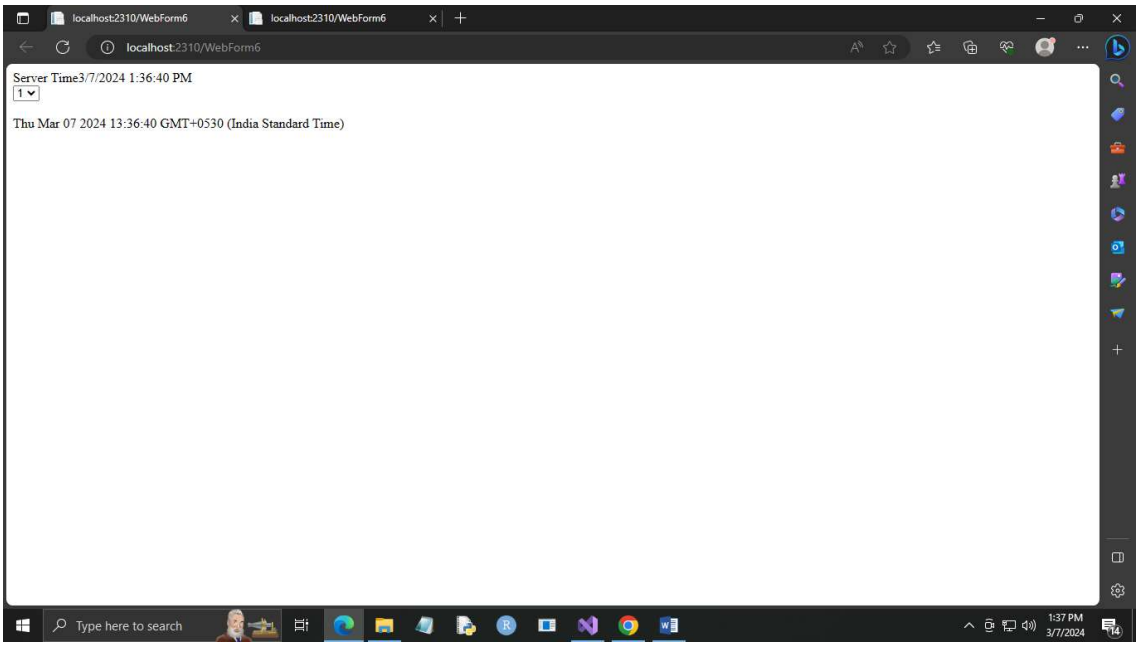
Webform6.aspx.cs

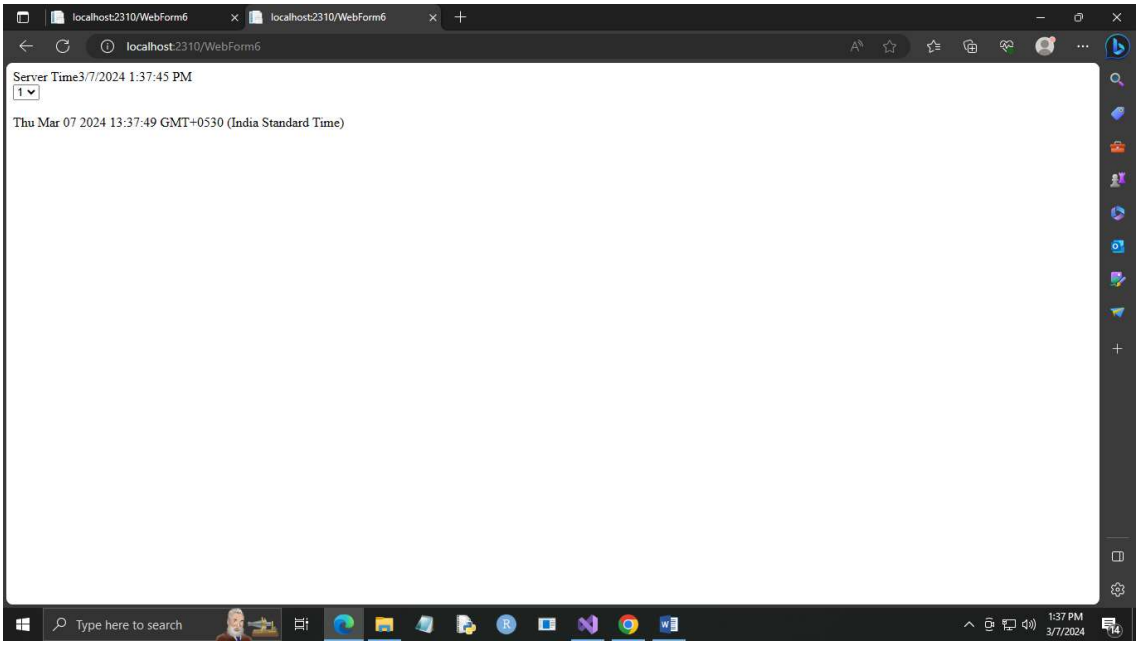
```
using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication8
{
    public partial class WebForm6 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            ArrayList arr= new ArrayList(); //it is system.collectons namespace;
            arr.Add("1");
            arr.Add("2");
            arr.Add("3");
            DropDownList1.DataSource = arr;
            DropDownList1.DataBind();
            Response.Write("Server Time" + DateTime.Now.ToString());
        }
    }
}
```

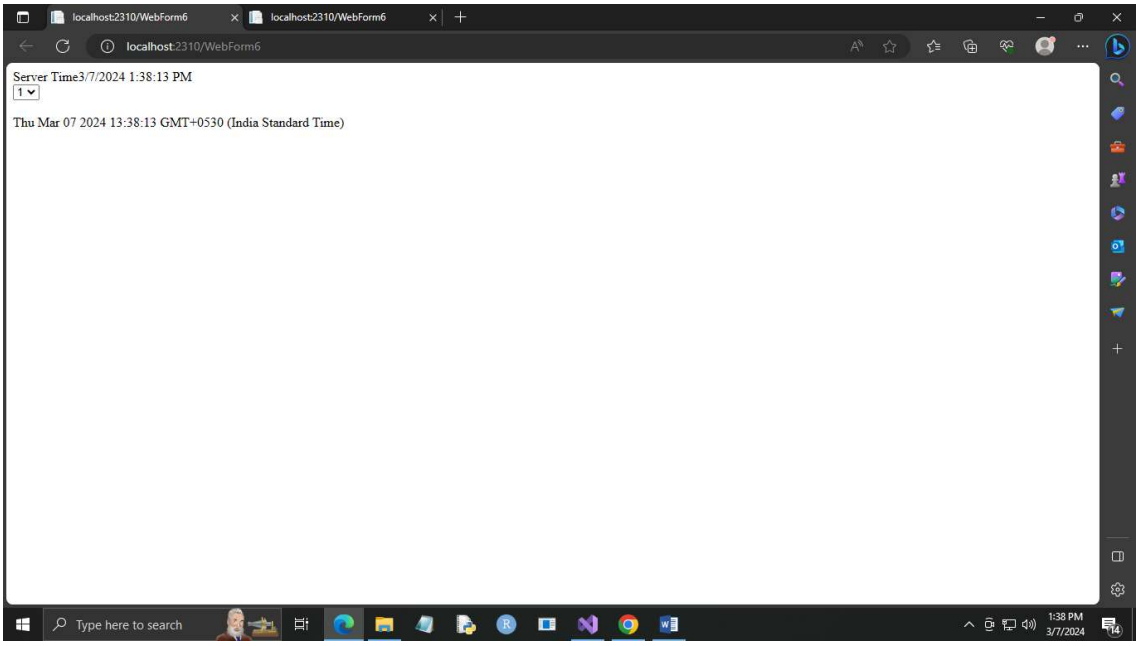
Ui:

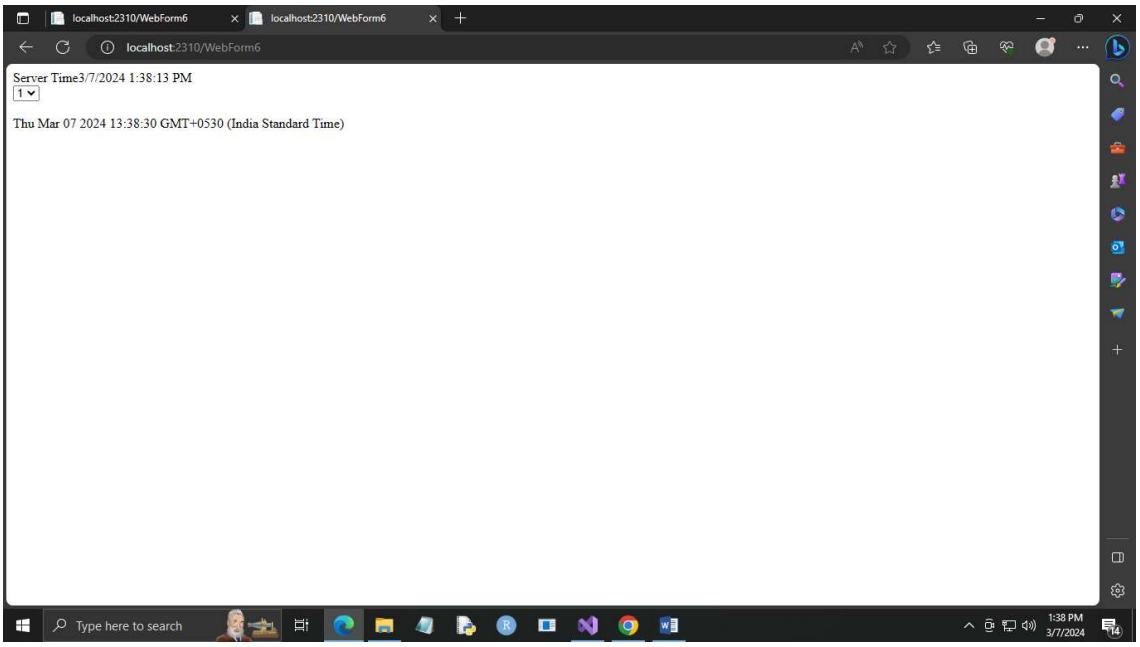


Output:


localhost:2310/WebForm6
Server Time3/7/2024 1:36:40 PM
1
Thu Mar 07 2024 13:36:40 GMT+0530 (India Standard Time)

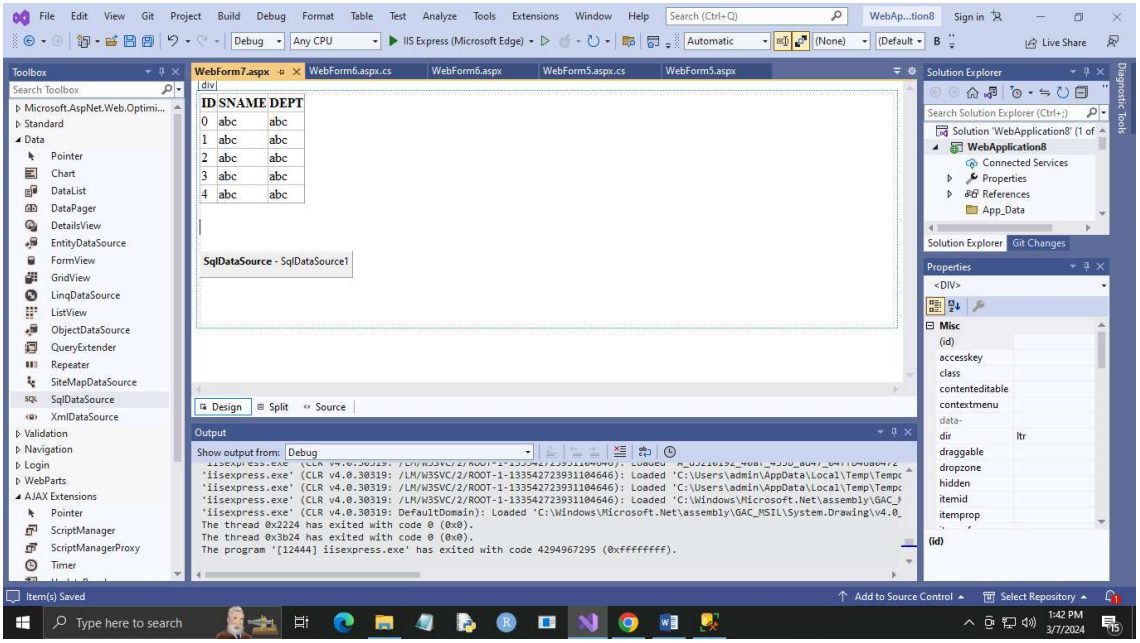

localhost:2310/WebForm6
localhost:2310/WebForm6
localhost:2310/WebForm6
Server Time3/7/2024 1:37:45 PM
1
Thu Mar 07 2024 13:37:49 GMT+0530 (India Standard Time)
Type here to search
1:37 PM
3/7/2024


localhost:2310/WebForm6
localhost:2310/WebForm6
localhost:2310/WebForm6
Server Time3/7/2024 1:38:13 PM
1
Thu Mar 07 2024 13:38:13 GMT+0530 (India Standard Time)
Type here to search
1:38 PM
3/7/2024



B]DataSource Caching:

Ui:



Code:

Webform7.aspx.cs

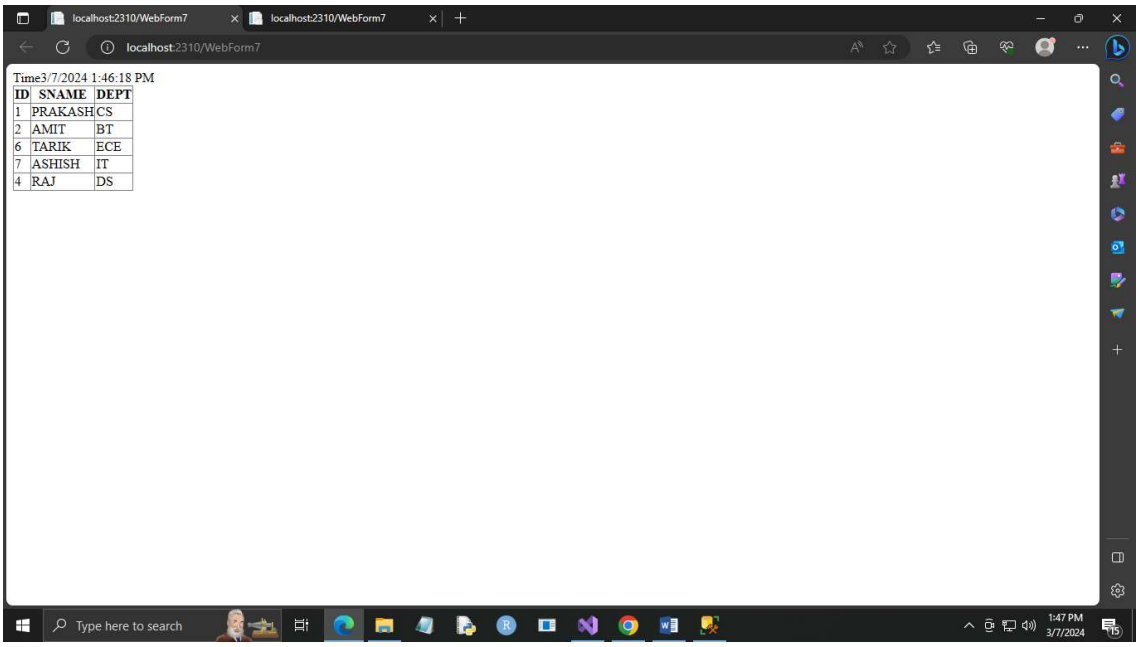
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
```

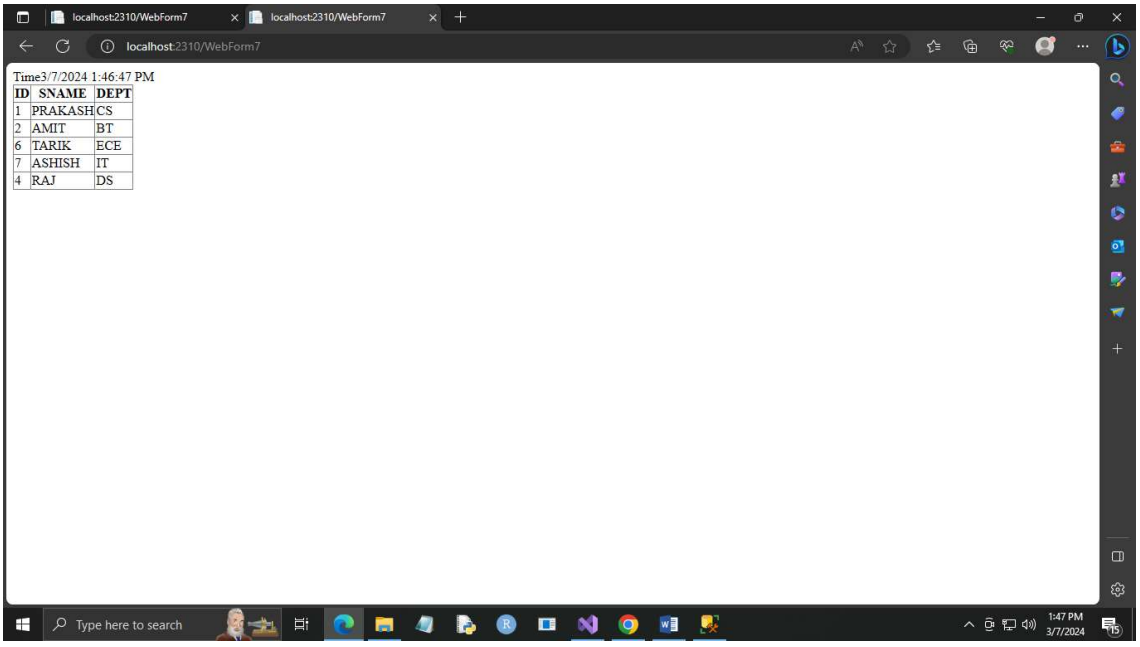
```
namespace WebApplication8
{
    public partial class WebForm7 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            Response.Write("Time:" + DateTime.Now.ToString());
        }
    }
}
```

Webform7.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm7.aspx.cs"
Inherits="WebApplication8.WebForm7" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server"
AutoGenerateColumns="False" DataSourceID="SqlDataSource1">
                <Columns>
                    <asp:BoundField DataField="ID" HeaderText="ID"
SortExpression="ID" />
                    <asp:BoundField DataField="SNAME" HeaderText="SNAME"
SortExpression="SNAME" />
                    <asp:BoundField DataField="DEPT" HeaderText="DEPT"
SortExpression="DEPT" />
                </Columns>
            </asp:GridView>
            <br />
            <br />
            <asp:SqlDataSource ID="SqlDataSource1" runat="server"
CacheDuration="20" ConnectionString="<%$ ConnectionStrings:constr %>"
EnableCaching="True" SelectCommand="SELECT * FROM [STAFF]"></asp:SqlDataSource>
            <br />
            <br />
        </div>
    </form>
</body>
</html>
```

Output:

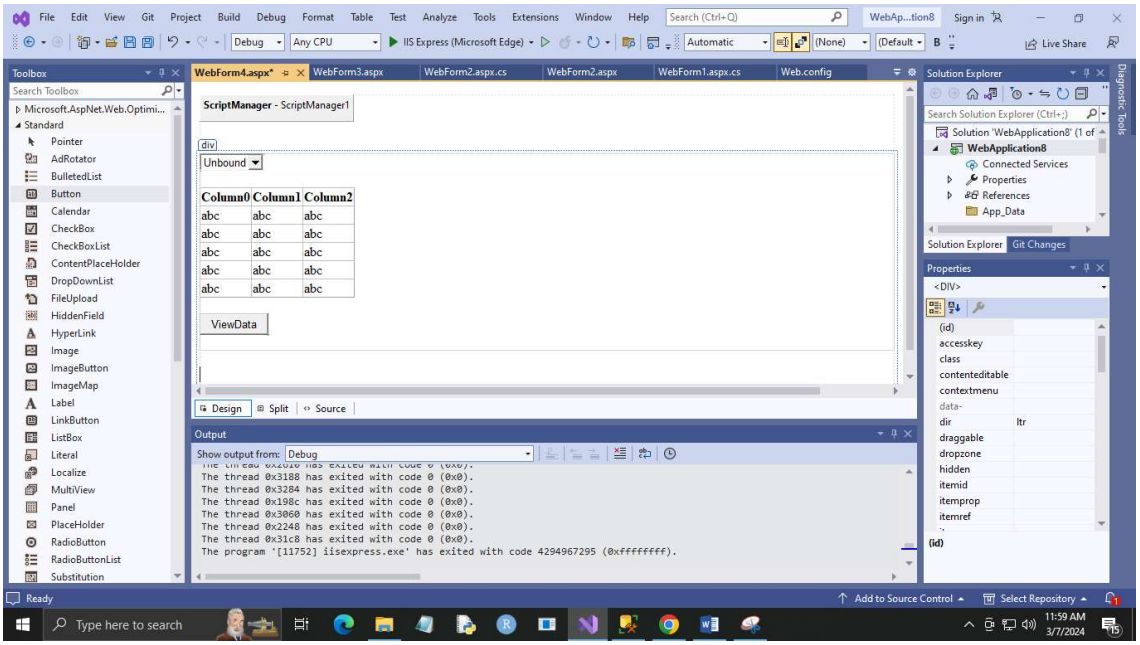

localhost:2310/WebForm7
localhost:2310/WebForm7
localhost:2310/WebForm7
Time3/7/2024 1:46:18 PM
ID SNAME DEPT
1 PRAKASH CS
2 AMIT BT
6 TARIK ECE
7 ASHISH IT
4 RAJ DS
Type here to search
1:47 PM
3/7/2024


localhost:2310/WebForm7
localhost:2310/WebForm7
localhost:2310/WebForm7
Time3/7/2024 1:46:47 PM
ID SNAME DEPT
1 PRAKASH CS
2 AMIT BT
6 TARIK ECE
7 ASHISH IT
4 RAJ DS
Type here to search
1:47 PM
3/7/2024

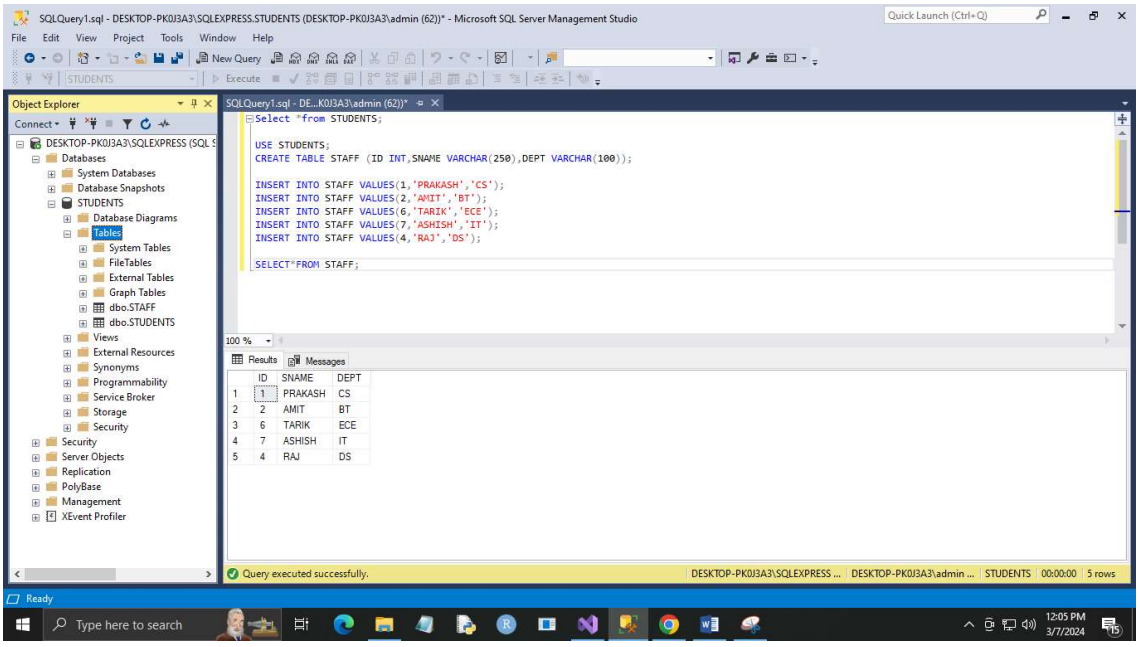
Practical-9

Aim: Design and use AJAX based ASP.NET pages.

UI:



Database table:



Code:

Webform4.aspx.cs

```
using System;
```

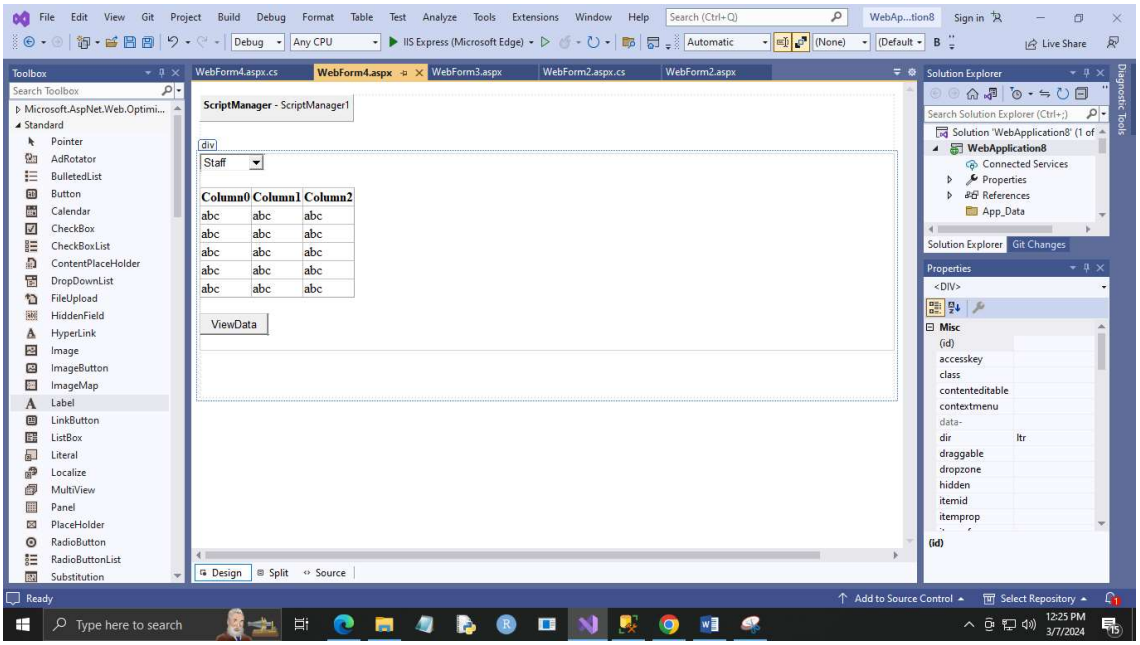
```
using System.Collections.Generic;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication8
{
    public partial class WebForm4 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            string cs = "Data source=DESKTOP-PK0J3A3\\SQLEXPRESS;
Database=STUDENTS;Integrated security=True";
            SqlConnection conn = new SqlConnection(cs);
            SqlCommand cmd = null;
            conn.Open();
            if (DropDownList1.SelectedValue == "Staff")
                cmd = new SqlCommand("SELECT *FROM STAFF", conn);
            if (DropDownList1.SelectedValue == "Students")
                cmd = new SqlCommand("SELECT * FROM STUDENTS", conn);
            GridView1.DataSource = cmd.ExecuteReader();
            GridView1.DataBind();
            conn.Close();

        }
    }
}
```

Webform4.aspx

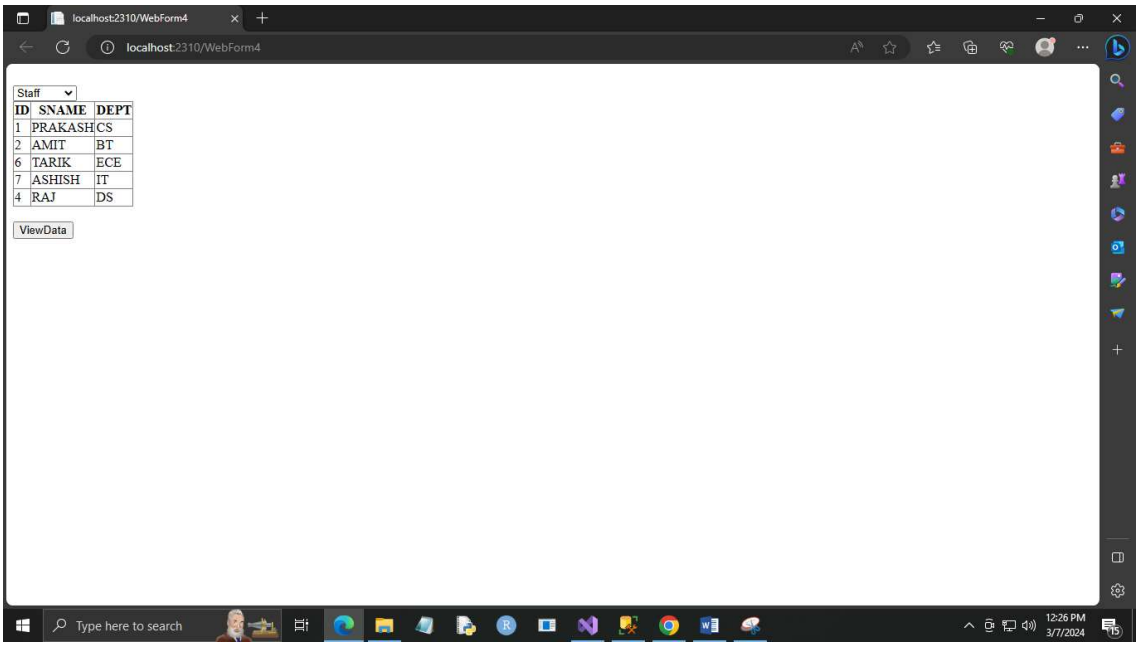
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm4.aspx.cs"
Inherits="WebApplication8.WebForm4" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <asp:ScriptManager ID="ScriptManager1" runat="server">
        </asp:ScriptManager>
        <br />
        <div>
            <asp:UpdatePanel ID="UpdatePanel1" runat="server">
                <ContentTemplate>
                    <asp:DropDownList ID="DropDownList1" runat="server">
                        <asp:ListItem>Staff</asp:ListItem>
                        <asp:ListItem>Students</asp:ListItem>
                    </asp:DropDownList>
<br />
                    <asp:GridView ID="GridView1" runat="server">
                    </asp:GridView>
                    <br />
```

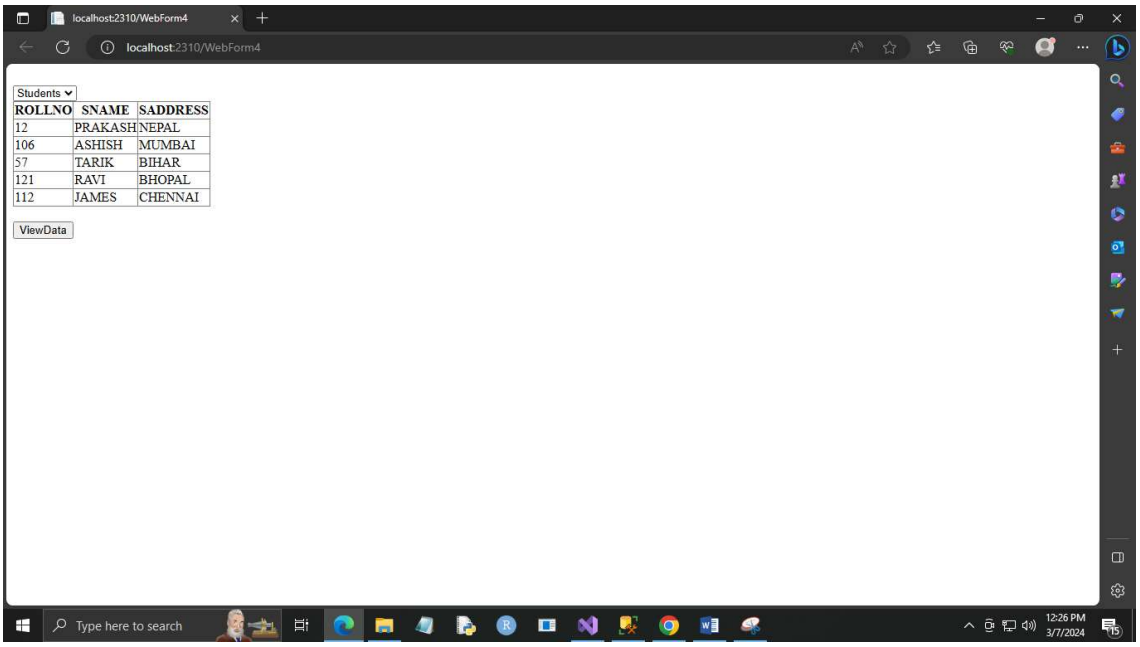
```
                    <asp:Button ID="Button1" runat="server"
OnClick="Button1_Click" Text="ViewData" />
                    <br />
                </ContentTemplate>
            </asp:UpdatePanel>
            <br />
            <br />
        </div>
    </form>
</body>
</html>
```

Design for webform4.aspx



Output:




localhost:2310/WebForm4
localhost:2310/WebForm4
Students
ROLLNO SNAME SADDRESS
12 PRAKASH NEPAL
106 ASHISH MUMBAI
57 TARIK BIHAR
121 RAVI BHOPAL
112 JAMES CHENNAI
ViewData
Type here to search
12:26 PM
3/7/2024