Practical No. 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**

a. Variables and Data Types

Program:

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

namespace ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {
         int a = 20;
         bool b = true;
         double c = 5.5D;
         float d = 5.5F;
         string val = "Hello World";
         Console.WriteLine("Integer: " + a);
         Console.WriteLine("Boolean Value: " + b);
         Console.WriteLine("Decimal Value: " + c);
         Console.WriteLine("Float Value: " + d);
         Console.WriteLine("String Value: " + val);
         Console.ReadKey();
      }
   }
}
```

Output:

---

b. Object-Based Manipulation

Program:

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

namespace ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {
         string mystring;
```

```
int a = 100;
Console.WriteLine("Convert Number to String");
mystring = a.ToString();
Console.WriteLine("String is " + mystring);

string s = "    This is test string";

Console.WriteLine("\nBefore Trim() Method: " + s);
s = s.Trim();
Console.WriteLine("\nAfter Trim() Method: " + s);

s = s.Substring(0, 4);
Console.WriteLine("\nSubstring() Method: " + s);

s = s.ToUpper();
Console.WriteLine("\nUppercase String: " + s);

s = s.Replace("IS", "AT");
Console.WriteLine("\nReplace String: " + s);

int length = s.Length;
Console.WriteLine("\nLength of String is: " + length);

Console.WriteLine("\n**********************************");

Console.WriteLine("\nDateTime Object");
DateTime myDate = DateTime.Now;
Console.WriteLine("Today's date is: " + myDate);

myDate = myDate.AddDays(100);
Console.WriteLine("\nAfter 100 Days the Date is: " + myDate);

string dateString = myDate.Year.ToString();
Console.WriteLine("\nYear in String is: " + dateString);

DateTime myDate1 = DateTime.Now;
DateTime myDate2 = DateTime.Now.AddHours(3000);
Console.WriteLine("\nDate 1 : " + myDate1);
Console.WriteLine("\nDate 2 : " + myDate2);

TimeSpan difference;
difference = myDate2.Subtract(myDate1);
Console.WriteLine("\nDifference between 2 Dates: " + difference.Days.ToString()+" Days");

double numberOfMinutes;
numberOfMinutes = difference.TotalMinutes;
Console.WriteLine("\nNumber of Minutes: " + numberOfMinutes);

Console.WriteLine("\n**********************************");

Console.WriteLine("\nThe Array Type:");
int[] myArray = { 1, 2, 3, 4, 5 };
int numberOfElements;
```

```
        numberOfElements = myArray.Length;
        Console.WriteLine("\nTotal Elements in array:" + numberOfElements);

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

Output:

---

c. Conditional Logic

1. If…Else Condition

Program:

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

namespace ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {
         double percentage;
         Console.WriteLine("Enter your Percetage: ");
         percentage = Convert.ToDouble(Console.ReadLine());

         if (percentage >= 80.00)
         {
            Console.WriteLine("You get 'O' Grade.");
         }
         else if(percentage <= 79.99 && percentage >= 75.00)
         {
            Console.WriteLine("You get 'A' Grade.");
         }
         else if (percentage <= 74.99 && percentage >= 70.00)
         {
            Console.WriteLine("You get 'B' Grade.");
         }
         else if (percentage <= 69.99 && percentage >= 60.00)
         {
            Console.WriteLine("You get 'C' Grade.");
         }
         else if (percentage <= 59.99 && percentage >= 50.00)
         {
            Console.WriteLine("You get 'D' Grade.");
         }
         else if (percentage <= 49.99 && percentage >= 40.00)
         {
            Console.WriteLine("You get 'E' Grade.");
         }
```

```
        else
        {
            Console.WriteLine("You get 'F' Grade.");
        }
        Console.ReadKey();
    }
  }
}
```

Output:

2. Switch Case

Program:

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

namespace ConsoleApplication1
{
  class Program
  {
    static void Main(string[] args)
    {
        char op;
        int first, second, result;

        Console.Write("Enter first number: ");
        first = Convert.ToInt32(Console.ReadLine());
        Console.Write("\nEnter second number: ");
        second = Convert.ToInt32(Console.ReadLine());
        Console.Write("\nEnter operator (+, -, *, /): ");
        op = (char)Console.Read();

        switch (op)
        {
            case '+':
                result = first + second;
                Console.WriteLine("\n" + first + " + " + second + " = " + result);
                break;

            case '-':
                result = first - second;
                Console.WriteLine("\n" + first + " - " + second + " = " + result);
                break;

            case '*':
                result = first * second;
                Console.WriteLine("\n" + first + " * " + second + " = " + result);
                break;

            case '/':
```

```
                result = first / second;
                Console.WriteLine("\n" + first + " / " + second + " = " + result);
                break;

            default:
                Console.WriteLine("Invalid Operator");
                break;
        }
        Console.ReadKey();
    }
  }
}
```

Output:

d. Loops

1. For Loop

Program:

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

namespace ConsoleApplication1
{
  class Program
  {
    static void Main(string[] args)
    {
      int n = 10, sum = 0;
      for (int i = 1; i <= n; i++)
      {
        sum = sum + i;
      }
      Console.WriteLine("Sum of first {0} natural numbers = {1}", n, sum);
      Console.ReadKey();
    }
  }
}
```

2. While Loop

Program:

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

namespace ConsoleApplication1
{
  class Program
  {
```

```
    static void Main(string[] args)
    {
        int n = 10, sum = 0, i = 1;

        while (i <= n)
        {
            sum = sum + i;
            i++;
        }
        Console.WriteLine("Sum of first {0} natural numbers = {1}", n, sum);
        Console.ReadKey();
    }
  }
}
```

Output:

3. Foreach Loop

Program:

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

namespace ConsoleApplication1
{
  class Program
  {
    static void Main(string[] args)
    {
        int sum = 0;
        int[] n = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };

        foreach (int number in n)
        {
            sum = sum + number;
        }
        Console.WriteLine("Sum of first {0} natural numbers = {1}", n.Length.ToString(), sum);
        Console.ReadKey();
    }
  }
}
```

Output:

---

e. Methods (Method Overloading)

Program:

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

```
namespace ConsoleApplication1
{
   class Program
   {
      void calculate(int r)
      {
         double area,pi=3.14;
         area = pi * r * r;
         Console.WriteLine("Area of Circle: " + area);
      }
      void calculate(int l, int b)
      {
         double area;
         area = l * b;
         Console.WriteLine("Area of Rectangle " + area);
      }
      static void Main(string[] args)
      {
         Program p = new Program();

         int r, l, b;

         Console.WriteLine("Enter radius: ");
         r = Convert.ToInt32(Console.ReadLine());
         p.calculate(r);
         Console.WriteLine("\n----------------------------------\n");

         Console.WriteLine("Enter Length: ");
         l = Convert.ToInt32(Console.ReadLine());
         Console.WriteLine("Enter Breadth: ");
         b = Convert.ToInt32(Console.ReadLine());
         p.calculate(l, b);
         Console.WriteLine("\n-------------------------------------\n");

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

Output:

Practical No. 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**

a. Program using Classes

Program:

```
using System;
namespace sycs
{
   class Employee
   {
      public string name;
      public void work(string work)
      {
         Console.WriteLine("Work: " + work);
      }
   }

   class EmployeeDrive
   {
      static void Main(string[] args)
      {
         // create Employee object
         Employee e1 = new Employee();

         Console.WriteLine("Employee 1");

         // set name of the Employee
         e1.name = "Gloria";
         Console.WriteLine("Name: " + e1.name);

         //call method of the Employee
         e1.work("Coding");

         Console.ReadLine();

      }
   }
}
```

Output:

---

b. Constructor and Function Overloading

1. Constructor Overloading

Program:

```
using System;
namespace sycs
{
   class gamescore
   {
```

```
    string user;
    int age;
    //Default Constructor
    public gamescore()
    {
        user = "John";
        age = 25;
        Console.WriteLine("\nPrevious User {0} and he was {1} year old", user, age);
    }

    //Parameterized Constructor
    public gamescore(string name, int age1)
    {
        user = name;
        age = age1;
        Console.WriteLine("\nCurrent User {0} and he is {1} year old", user, age);
    }
  }

  class sycs
  {
    static void Main(string[] args)
    {
        //Default Constructor Called
        gamescore gs = new gamescore();


        //Overloaded Constructor.
        gamescore gs1 = new gamescore("Ram", 30);
        Console.ReadLine();
    }

  }
}
```

Output:

2. Function Overloading

Program:

```
using System;
namespace sycs
{
  class shape
  {
    public void Area(int side)
    {
        int square_area = side * side;
        Console.WriteLine("\nThe Area of Square is :" + square_area);
    }
    public void Area(int length, int breadth)
    {

        int rect_area = length * breadth;
```

```
        Console.WriteLine("\nThe Area of Rectangle is :" + rect_area);
    }

    public void Area(double radius)
    {
        double circle_area = 3.14 * radius * radius;
        Console.WriteLine("\nThe Area of Circle is :" + circle_area);
    }
}
class sycs
{
    static void Main(string[] args)
    {
        shape s = new shape();
        s.Area(10);
        s.Area(10, 20);
        s.Area(10.8);
        Console.ReadKey();
    }
}
```

Output:

---

c. Inheritance:

Program:

```
using System;
namespace sycs
{
    class sycs
    {
        static void Main(string[] args)
        {
            Scooter sc = new Scooter();
            sc.ScooterType();

            Car c = new Car();
            c.CarType();

            Console.ReadKey();
        }
    }

    //Creating Base Class
    class Tyre
    {
        protected void TyreType()
        {
            Console.WriteLine("This is Tubeless Tyre");
        }
    }
    //Creating Child Class
```

```
   class Scooter : Tyre
   {
      public void ScooterType()
      {
         Console.WriteLine("\nScooter Color is Red");
         TyreType();
      }
   }
   //Creating Child Class
   class Car : Tyre
   {
      public void CarType()
      {
         Console.WriteLine("\n\nCar Type : Ferrari");
         TyreType();
      }
   }
}
```

Output:

---

d. Namespacses:

1. Example of namespace in C# where one namespace program accesses another namespace program.

Program:

```
using System;
namespace First
{
   public class Hello
   {
      public void sayHello()
      {
         Console.WriteLine("Hello First Namespace");
      }
   }
}
namespace Second
{
   public class Hello
   {
      public void sayHello()
      {
         Console.WriteLine("Hello Second Namespace");
      }
   }
}
public class TestNamespace
{
   public static void Main(String[] args)
   {
      First.Hello h1 = new First.Hello();
      Second.Hello h2 = new Second.Hello();
      h1.sayHello();
```

```
        h2.sayHello();
    }
}
```

Output:

2. Example of namespace where we are using "using" keyword so that we don't have to use a complete name for accessing a namespace program.

Program:

```
using System;
using First;
using Second;
namespace First
{
    public class Hello
    {
        public void sayHello()
        {
            Console.WriteLine("Hello Namespace");
        }
    }
}
namespace Second
{
    public class Welcome
    {
        public void sayWelcome()
        {
            Console.WriteLine("Welcome Namespace");
        }
    }
}
public class TestNamespace
{
    public static void Main(String[] args)
    {
        Hello h1 = new Hello();
        Welcome w1 = new Welcome();
        h1.sayHello();
        w1.sayWelcome();
    }
}
```

Output:

Practical No. 3
Aim: Design ASP.NET Pages with Server Controls

Default.aspx Page:

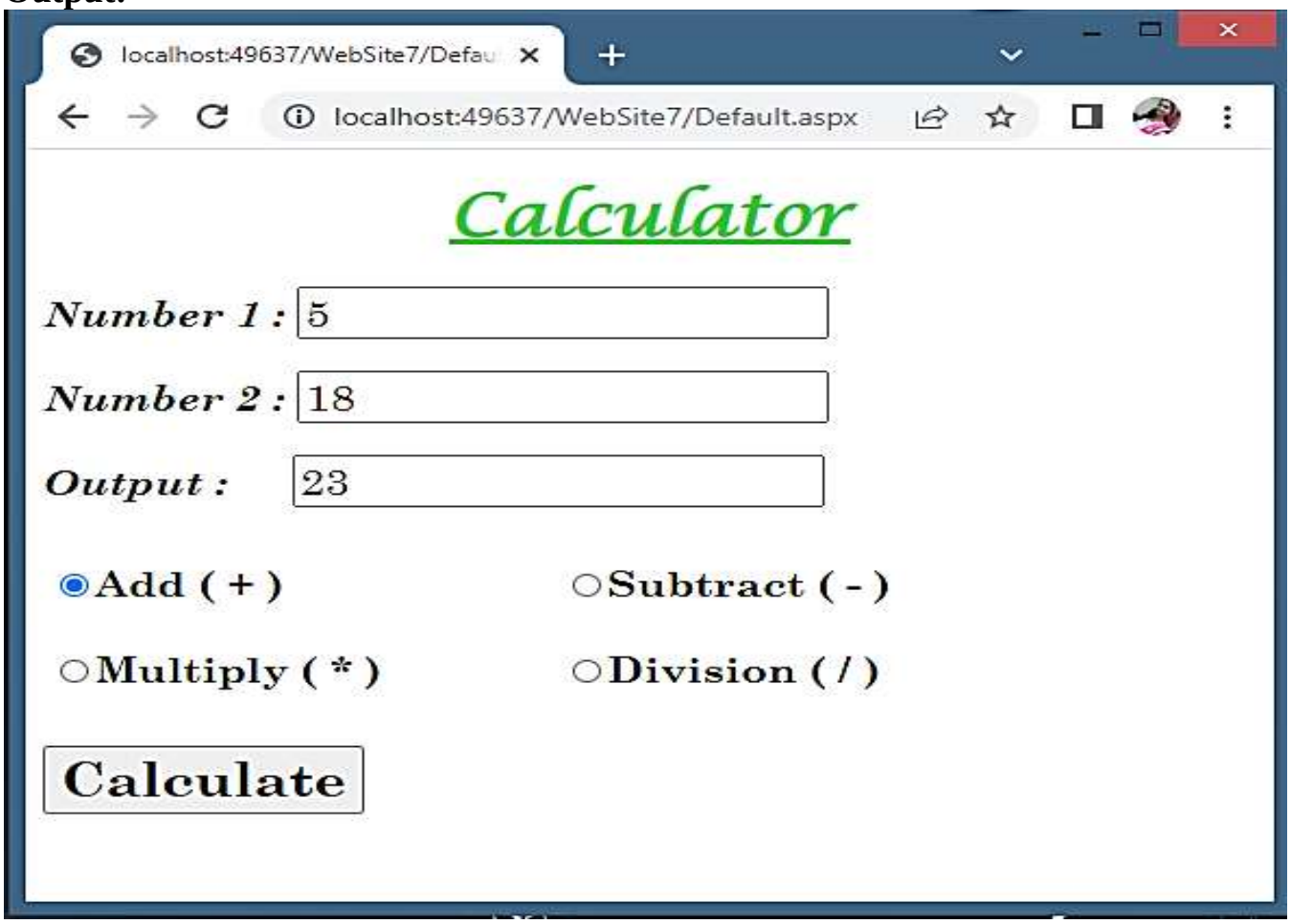
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits="_Default" %>

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

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">            <title></title>            </head>
<body>
   <form id="form1" runat="server">
   <div align="left">
   <p align="center">
   <asp:Label ID="Label1" runat="server" Text="Calculator" Font-Bold="True" Font-Italic="True"
Font-Names="Lucida Calligraphy" Font-Size="30pt" Font-Underline="True" ForeColor="#33CC33"> </asp:Label>
   </p>
      <asp:Label ID="Label2" runat="server" Text="Number 1 : " Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="20pt"> </asp:Label>
      <asp:TextBox ID="TextBox1" runat="server" Font-Names="Century Schoolbook" Font-Size="20pt">
</asp:TextBox>
      <br /><br />
      <asp:Label ID="Label3" runat="server" Text="Number 2 : " Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="20pt"> </asp:Label>
      <asp:TextBox ID="TextBox2" runat="server" Font-Names="Century Schoolbook" Font-Size="20pt">
</asp:TextBox>
      <br /><br />
      <asp:Label ID="Label4" runat="server" Text="Output : " Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="20pt"> </asp:Label>
             
      <asp:TextBox ID="TextBox3" runat="server" ReadOnly="True" Font-Names="Century Schoolbook"
Font-Size="20pt"> </asp:TextBox>
      <br /><br />
      <asp:RadioButtonList ID="RadioButtonList1" runat="server" Font-Bold="True"
         Font-Names="Century Schoolbook" Font-Size="20pt">
         <asp:ListItem Value="Add">Add ( + )</asp:ListItem>
         <asp:ListItem Value="Subtract">Subtract ( - )</asp:ListItem>
         <asp:ListItem Value="Multiply">Multiply ( * )</asp:ListItem>
         <asp:ListItem Value="Division">Division ( / )</asp:ListItem>
      </asp:RadioButtonList>
      <br />
      <asp:Button ID="Button1" runat="server" Text="Calculate" Font-Bold="True"
         Font-Names="Century Schoolbook" Font-Size="20pt" onclick="Button1_Click" />

   </div>
```

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

Default.aspx.cs Page:

```
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)
   {
      double number1, number2,output;
      number1 = Convert.ToDouble(TextBox1.Text);
      number2 = Convert.ToDouble(TextBox2.Text);

      string s;
      s = RadioButtonList1.SelectedValue.ToString();
      if (s == "Add")
      {
         output = number1 + number2;
         TextBox3.Text = output.ToString();
      }
      else if(s == "Subtract")
      {
         output = number1 - number2;
         TextBox3.Text = output.ToString();
      }
      else if (s == "Multiply")
      {
         output = number1 * number2;
         TextBox3.Text = output.ToString();
      }
      else if (s == "Division")
      {
         output = number1 / number2;
         TextBox3.Text = output.ToString();
      }
   }
}
```

Output:


localhost:49637/WebSite7/Defau
localhost:49637/WebSite7/Default.aspx
Calculator
Number 1 : 5
Number 2 : 18
Output : 23
Add (+)
Subtract (-)
Multiply (*)
Division (/)
Calculate

Practical No. 4

Aim: Design ASP.NET Pages with Web controls and demonstrate the use of AutoPostBack.

Default.aspx Page:

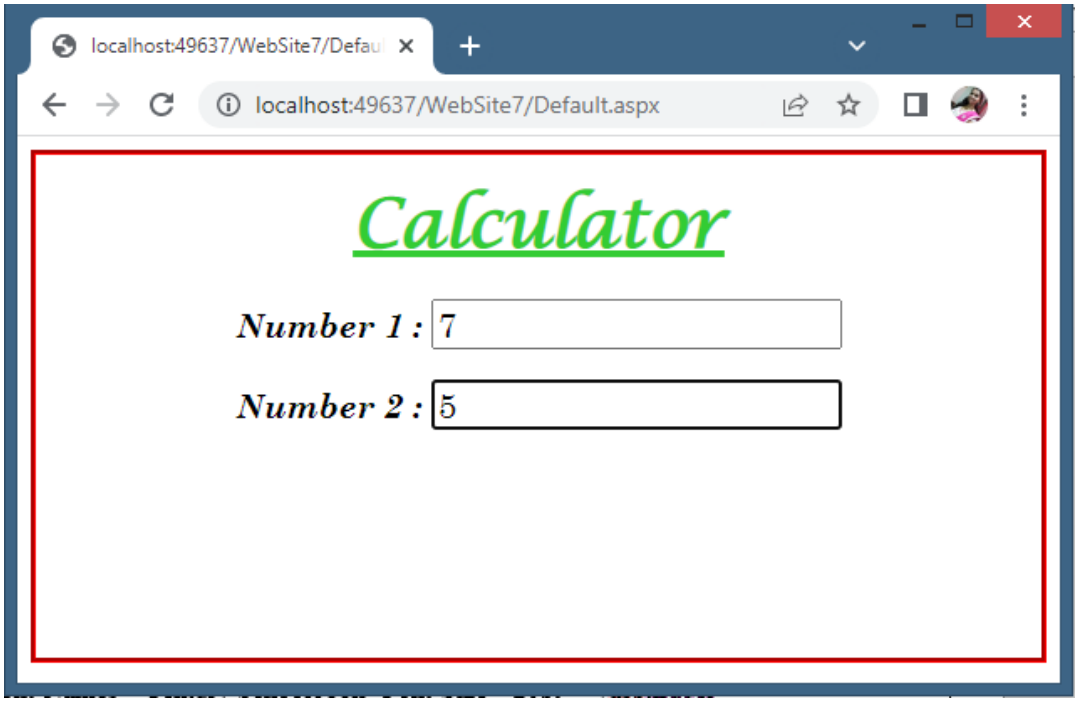
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits="_Default" %>

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

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">      <title></title>         </head>
<body>
   <form id="form1" runat="server">
   <div align="center" style="border: medium groove #FF0000; width: 600px; height: 300px;">
   <p align="center">
   <asp:Label ID="Label1" runat="server" Text="Calculator" Font-Bold="True" Font-Italic="True" Font-
Names="Lucida Calligraphy" Font-Size="30pt" Font-Underline="True" ForeColor="#33CC33"></asp:Label>
   </p>
      <asp:Label ID="Label2" runat="server" Text="Number 1 : " Font-Bold="True"
         Font-Italic="True" Font-Names="Century Schoolbook" Font-Size="15pt"></asp:Label>
      <asp:TextBox ID="TextBox1" runat="server" Font-Names="Century Schoolbook"
         Font-Size="15pt"></asp:TextBox>
      <br /><br />
      <asp:Label ID="Label3" runat="server" Text="Number 2 : " Font-Bold="True"
         Font-Italic="True" Font-Names="Century Schoolbook" Font-Size="15pt"></asp:Label>
      <asp:TextBox ID="TextBox2" runat="server" Font-Names="Century Schoolbook"
         Font-Size="15pt" AutoPostBack="True" ontextchanged="TextBox2_TextChanged"></asp:TextBox>
      <br /><br />
      <asp:Label ID="Label4" runat="server" Text="" Font-Bold="True"
         Font-Italic="True" Font-Names="Century Schoolbook" Font-Size="15pt"></asp:Label>
   </div>
   </form>
</body>
</html>
```

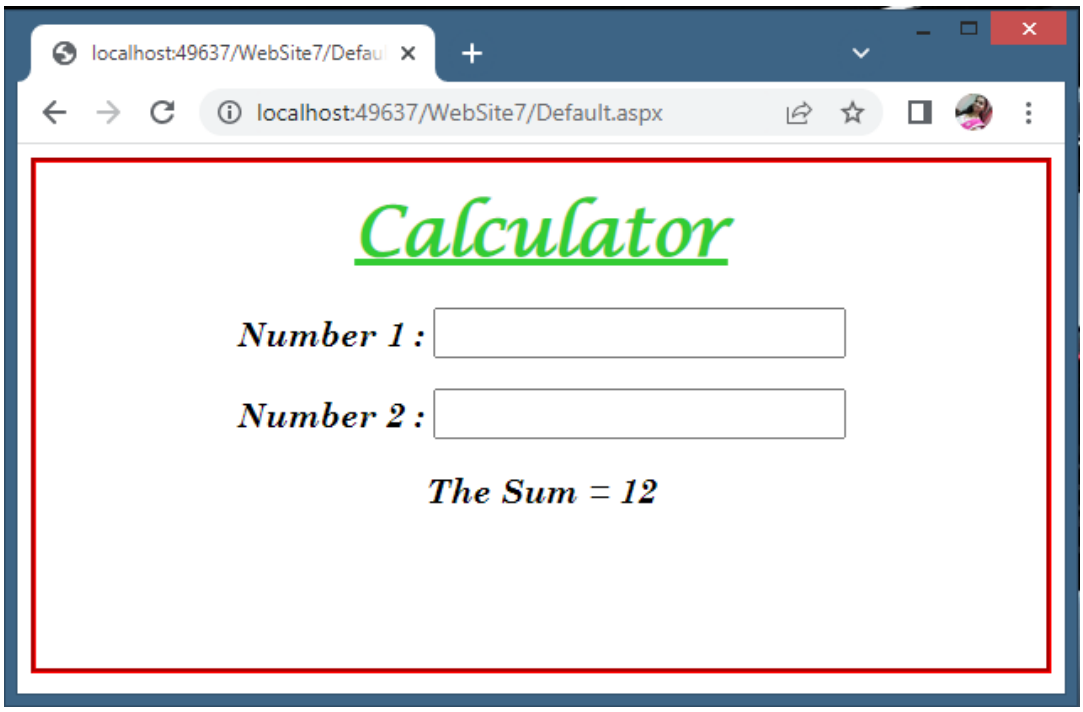
Default.aspx.CS Page:

```
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 TextBox2_TextChanged(object sender, EventArgs e)
    {
        int sum = Convert.ToInt32(TextBox1.Text) + Convert.ToInt32(TextBox2.Text);
        Label4.Text = "The Sum = " + sum.ToString();
        TextBox1.Text = "";
        TextBox2.Text = "";
    }
}
```

Output:





Practical No. 5
Aim: Design ASP.NET Pages with Rich Controls (Calendar Control)

Default.aspx Page:

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

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

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">      <title></title>         </head>
<body>
   <form id="form1" runat="server">
   <div>
      <asp:Label ID="Label1" runat="server" Text="Rich Controls (Calendar)"
         Font-Bold="True" Font-Italic="True" Font-Names="Century Schoolbook"
         Font-Size="20pt" Font-Underline="True" ForeColor="#336600"></asp:Label>
      <br /><br />
      <asp:Calendar ID="Calendar1" runat="server" BackColor="White"
         BorderColor="Black" BorderStyle="Solid" CellSpacing="1" Font-Names="Verdana"
         Font-Size="12pt" ForeColor="Black" Height="250px" NextPrevFormat="ShortMonth" Width="330px">
         <DayHeaderStyle Font-Bold="True" Font-Size="8pt" ForeColor="#333333" Height="8pt" />
         <DayStyle BackColor="#CCCCCC" />
         <NextPrevStyle Font-Bold="True" Font-Size="8pt" ForeColor="White" />
         <OtherMonthDayStyle ForeColor="#999999" />
         <SelectedDayStyle BackColor="#333399" ForeColor="White" />
         <TitleStyle BackColor="#333399" BorderStyle="Solid" Font-Bold="True"
            Font-Size="12pt" ForeColor="White" Height="12pt" />
         <TodayDayStyle BackColor="#999999" ForeColor="White" />
      </asp:Calendar>
      <br />
      <asp:Label ID="Label2" runat="server" Font-Names="Times New Roman" Font-Size="15pt" Text = "Todays
Date: "></asp:Label>
      <br /><br />
      <asp:Label ID="Label3" runat="server" Font-Names="Times New Roman" Font-Size="15pt"
Text="Select Your Birth Date: "></asp:Label>
      <br /><br />
      <asp:Label ID="Label4" runat="server" Font-Names="Times New Roman" Font-Size="15pt" Text="Days
remaining for Yor Birthday: "></asp:Label>
      <br /><br />
      <asp:Label ID="Label5" runat="server" Font-Names="Times New Roman" Font-Size="15pt" Text="Days
Remaining for NEW YEAR: "></asp:Label>
      <br /><br />
      <asp:Button ID="Button1" runat="server" Text="Result" Font-Italic="False"
         Font-Names="Times New Roman" Font-Size="15pt" Font-Bold="True"
```

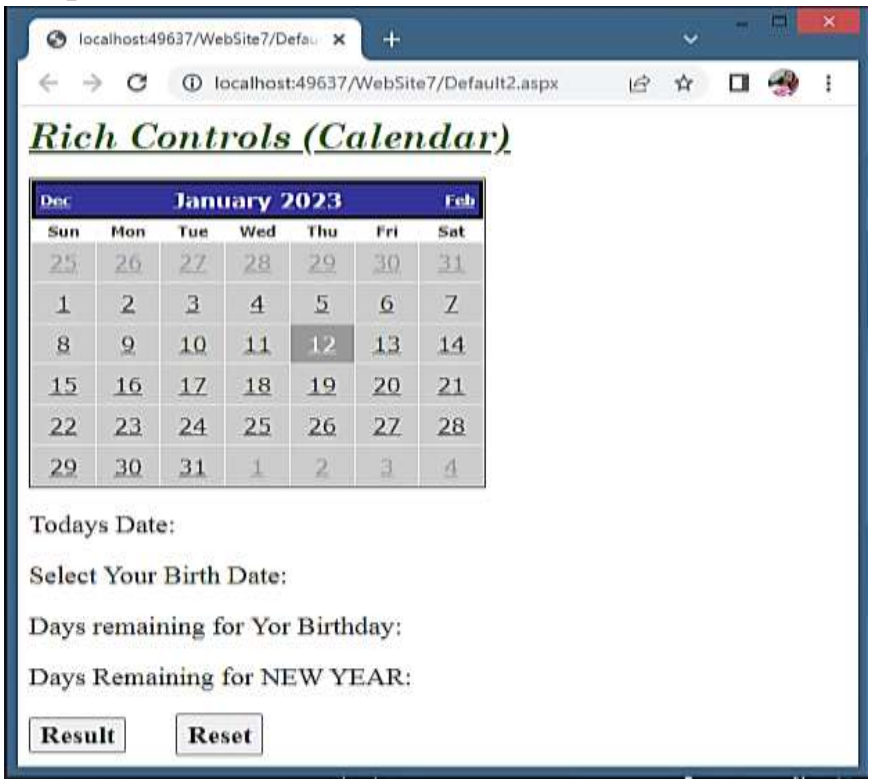
```
        onclick="Button1_Click" />
             
      <asp:Button ID="Button2" runat="server" Text="Reset" Font-Italic="False"
        Font-Names="Times New Roman" Font-Size="15pt" Font-Bold="True"
        Height="34px" onclick="Button2_Click" />
      <br />
   </div>
   </form>
</body>
</html>
```

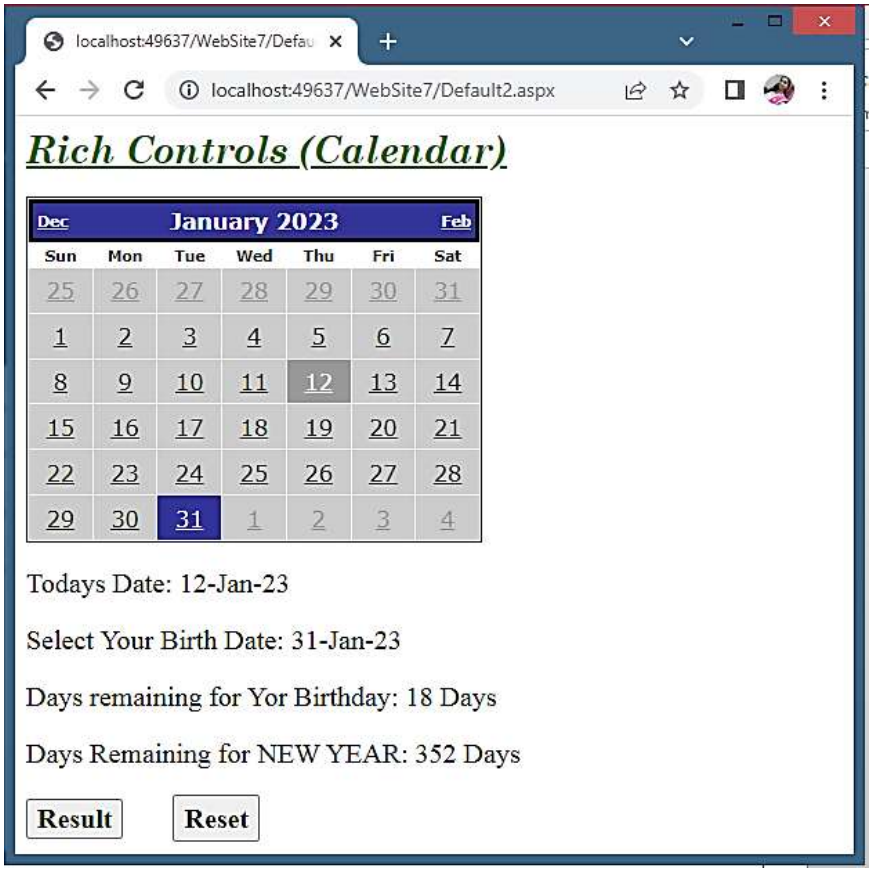
Default.aspx.cs Page:

```
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)
   {
      //Current Date
      Label2.Text = Label2.Text + " " + Calendar1.TodaysDate.ToShortDateString();

      //Birthday
      Label3.Text = Label3.Text + " " + Calendar1.SelectedDate.Date.ToShortDateString();

      //Calculation
      int year = Calendar1.SelectedDate.Year;
      int month = Calendar1.SelectedDate.Month;
      int day = Calendar1.SelectedDate.Day;
      TimeSpan d = new DateTime(year,month,day) - DateTime.Now;
      Label4.Text = Label4.Text + " " + d.Days.ToString() + " Days";

      //New Year
      TimeSpan d1 = new DateTime(2023, 12, 31) - DateTime.Now;
      Label5.Text = Label5.Text + " " + d1.Days.ToString() + " Days";
   }
   protected void Button2_Click(object sender, EventArgs e)
   {
      Response.Redirect("http://localhost:49637/WebSite7/Default2.aspx");
```

```
    }
}
```

Output:


localhost:49637/WebSite7/Defau
localhost:49637/WebSite7/Default2.aspx
Rich Controls (Calendar)
Dec
January 2023
Feb
Sun Mon Tue Wed Thu Fri Sat
25 26 27 28 29 30 31
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
Todays Date:
Select Your Birth Date:
Days remaining for Yor Birthday:
Days Remaining for NEW YEAR:
Result
Reset


localhost:49637/WebSite7/Defau
localhost:49637/WebSite7/Default2.aspx
Rich Controls (Calendar)
Dec
January 2023
Feb
Sun Mon Tue Wed Thu Fri Sat
25 26 27 28 29 30 31
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
Todays Date: 12-Jan-23
Select Your Birth Date: 31-Jan-23
Days remaining for Yor Birthday: 18 Days
Days Remaining for NEW YEAR: 352 Days
Result
Reset

Practical No. 6

Aim: Design ASP.NET Pages with Rich Controls (AdRotator Control)

XMLFile.xml:

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
 <Ad>
  <ImageUrl>computer-science-education.jpg</ImageUrl>
  <NavigateUrl>https://www.google.co.in</NavigateUrl>
  <AlternateText>Computer Science 1</AlternateText>
  <Impressions>5</Impressions>
  <Keyword>Hello 1</Keyword>
 </Ad>
 <Ad>
  <ImageUrl>image (2).png</ImageUrl>
  <NavigateUrl>https://www.google.co.in</NavigateUrl>
  <AlternateText>Computer Science 2</AlternateText>
  <Impressions>5</Impressions>
  <Keyword>Hello 2</Keyword>
 </Ad>
 <Ad>
  <ImageUrl>image.png</ImageUrl>
  <NavigateUrl>https://www.google.co.in</NavigateUrl>
  <AlternateText>Computer Science 3</AlternateText>
  <Impressions>5</Impressions>
  <Keyword>Hello 3</Keyword>
 </Ad>
 <Ad>
  <ImageUrl>nULE0k.jpg</ImageUrl>
  <NavigateUrl>https://www.google.co.in</NavigateUrl>
  <AlternateText>Computer Science 4</AlternateText>
  <Impressions>5</Impressions>
  <Keyword>Hello 4</Keyword>
 </Ad>
</Advertisements>
```

Default.aspx Page:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default3.aspx.cs" Inherits="Default3" %>

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

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">      <title></title>         </head>
<body>
   <form id="form1" runat="server">
   <div>
      <asp:AdRotator ID="AdRotator1" runat="server" AdvertisementFile="~/XMLFile.xml"
         BorderStyle="Solid" Height="300px" Width="500px" />
   </div>
   </form>
</body>
</html>
```

Output:

After refreshing page…

Practical No. 7

Aim: Design ASP.NET Pages for State Management using Cookies

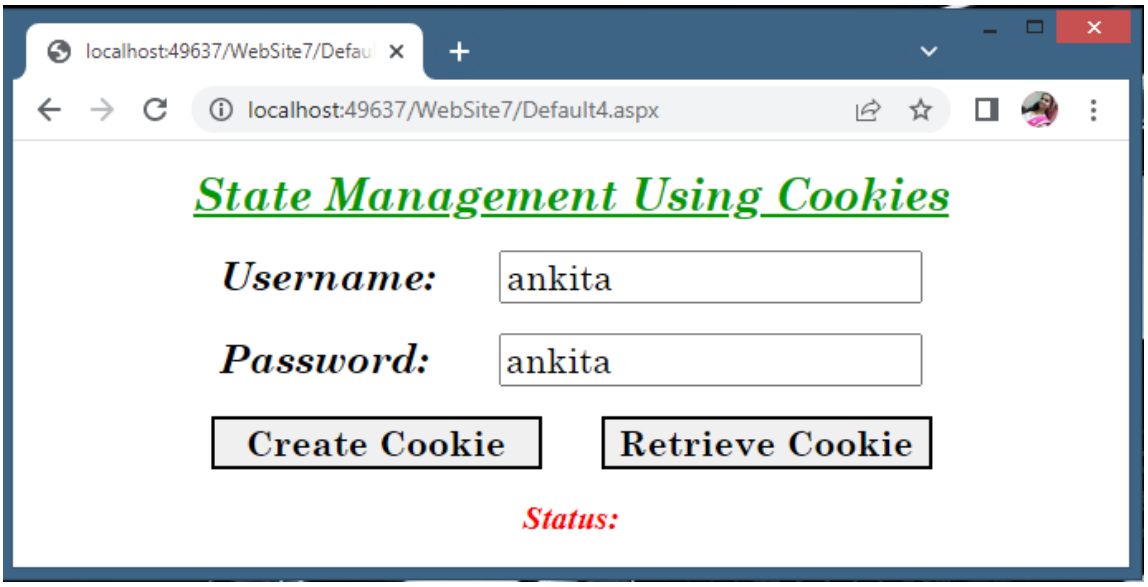
Default.aspx Page:

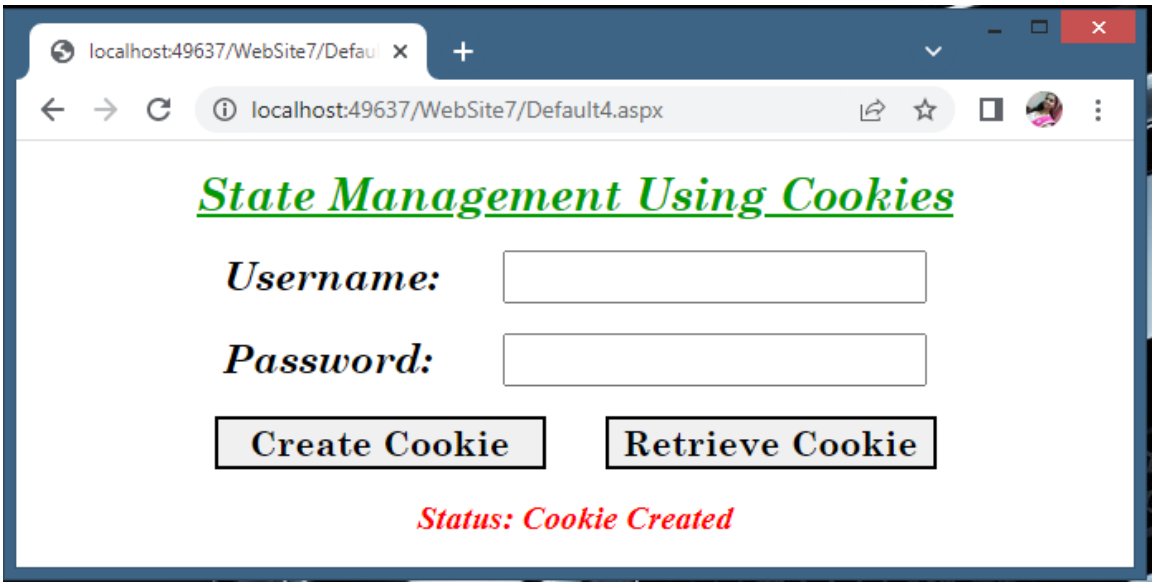
```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default4.aspx.cs" Inherits="Default4" %>

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

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">    <title></title>          </head>
<body>
   <form id="form1" runat="server">
   <div>
   <p align="center">
      <asp:Label ID="Label1" runat="server" Text="State Management Using Cookies"
         Font-Bold="True" Font-Italic="True" Font-Names="Century Schoolbook"
         Font-Size="20pt" Font-Underline="True" ForeColor="#009900"></asp:Label>
      <br />       <br />
      <asp:Label ID="Label2" runat="server" Text="Username: " Font-Bold="True"
         Font-Italic="True" Font-Names="Century Schoolbook" Font-Size="18pt"></asp:Label>
             
      <asp:TextBox ID="TextBox1" runat="server" Font-Names="Century Schoolbook"
         Font-Size="16pt"></asp:TextBox>
      <br />       <br />
      <asp:Label ID="Label3" runat="server" Text="Password: " Font-Bold="True"
         Font-Italic="True" Font-Names="Century Schoolbook" Font-Size="18pt"></asp:Label>
              
      <asp:TextBox ID="TextBox2" runat="server" Font-Names="Century Schoolbook"
         Font-Size="16pt"></asp:TextBox>
      <br />       <br />
      <asp:Button ID="Button1" runat="server" Text="Create Cookie" Font-Bold="True"
         Font-Names="Century Schoolbook" Font-Size="16pt" Width="200px"
         BorderColor="Black" BorderStyle="Solid" onclick="Button1_Click" />
             
      <asp:Button ID="Button2" runat="server" Text="Retrieve Cookie" Font-Bold="True"
         Font-Names="Century Schoolbook" Font-Size="16pt" Width="200px"
         BorderColor="Black" BorderStyle="Solid" onclick="Button2_Click" />
      <br />       <br />
      <asp:Label ID="Label4" runat="server" Text="Status: " Font-Bold="True"
         Font-Italic="True" Font-Names="Times New Roman" Font-Size="15pt"
         ForeColor="Red"></asp:Label>
   </p>
   </div>
   </form>
</body>
</html>
```

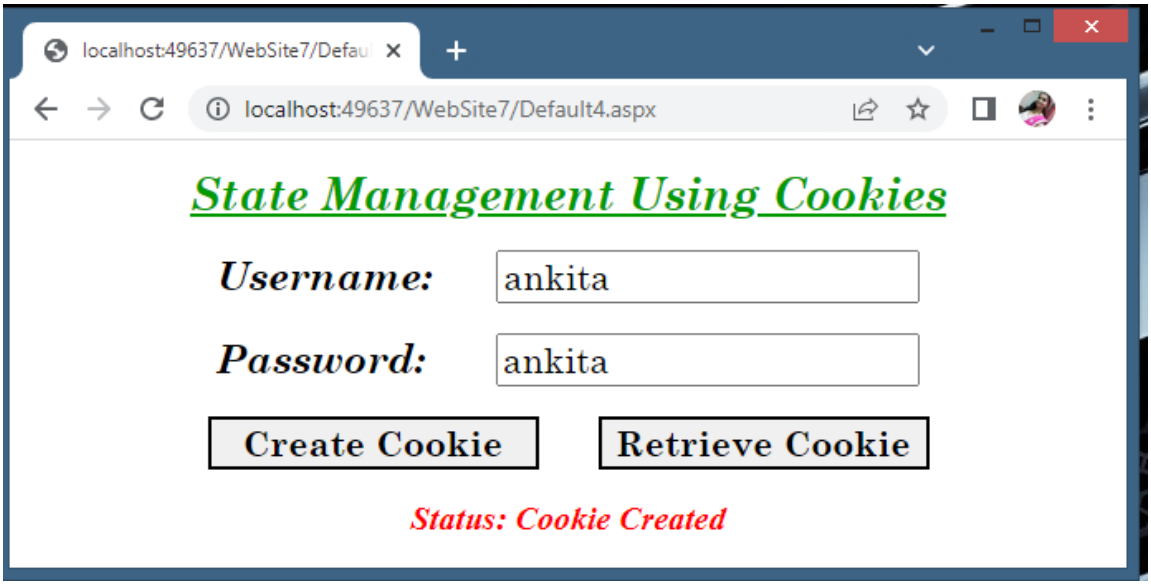
Default.aspx.cs Page:

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

public partial class Default4 : System.Web.UI.Page
{
   protected void Page_Load(object sender, EventArgs e)
   {          }

   protected void Button1_Click(object sender, EventArgs e)
   {
      Response.Cookies["name"].Value = TextBox1.Text;
      Response.Cookies["password"].Value = TextBox2.Text;

      Response.Cookies["name"].Expires = DateTime.Now.AddMinutes(1);
      Response.Cookies["password"].Expires = DateTime.Now.AddMinutes(1);

      Label4.Text = Label4.Text + "Cookie Created";

      TextBox1.Text = "";
      TextBox2.Text = "";
   }

   protected void Button2_Click(object sender, EventArgs e)
   {
      if (Request.Cookies["name"] == null || Request.Cookies["password"] == null)
      {
         Label4.Text = "No cookie found";
      }
      else
      {
         TextBox1.Text = Request.Cookies["name"].Value;
         TextBox2.Text = Request.Cookies["password"].Value;
      }
   }
}
```

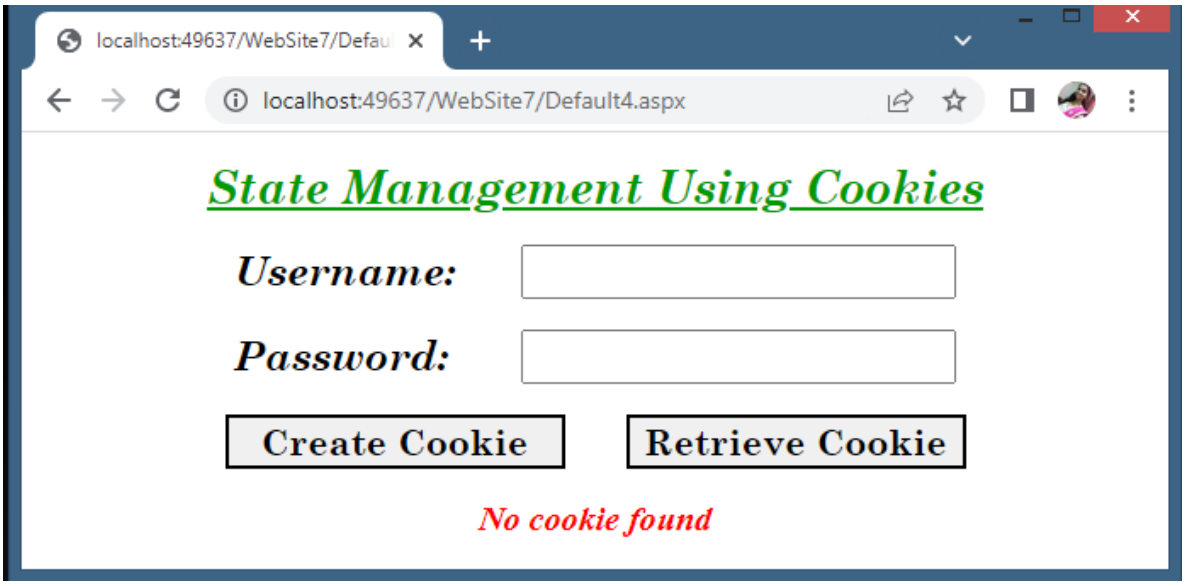
Output:







After 1 Minute….


localhost:49637/WebSite7/Defau
localhost:49637/WebSite7/Default4.aspx
State Management Using Cookies
Username:
Password:
Create Cookie
Retrieve Cookie
No cookie found

Practical No. 8

Aim: Design ASP.NET page and perform validation using various Validation Controls

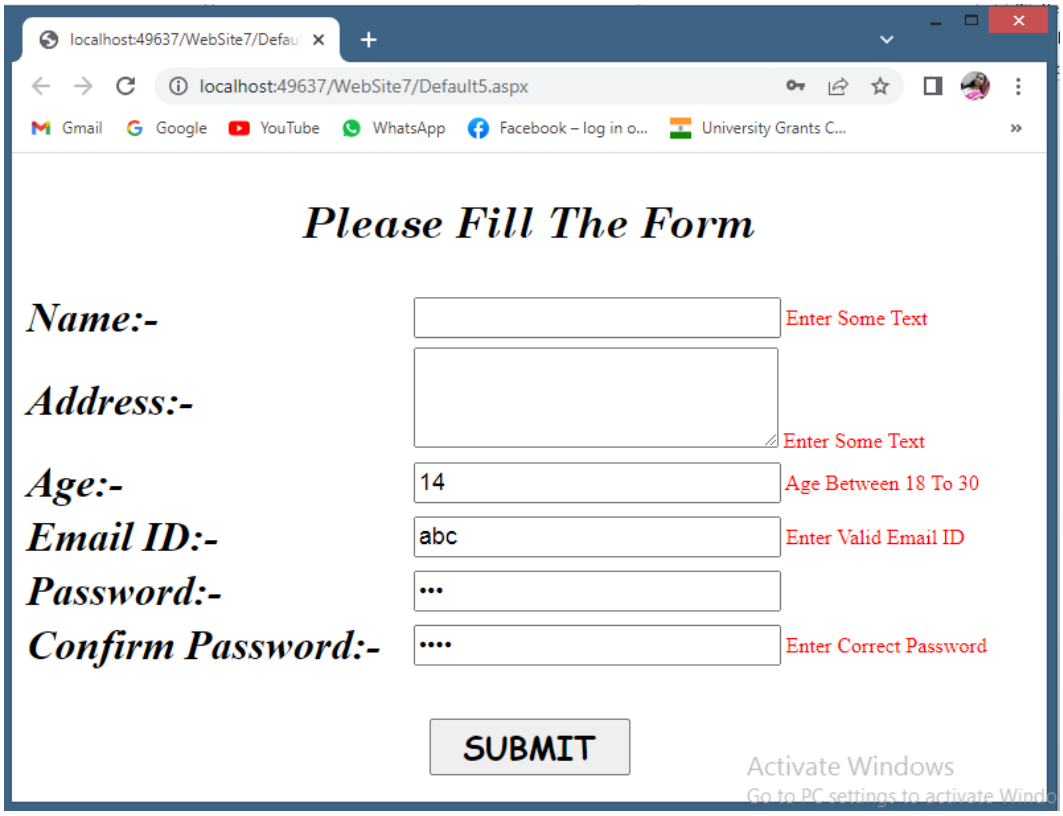
Default.aspx Page:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default5.aspx.cs" Inherits="Default5" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">      <title></title>                  </head>
<body>
   <form id="form1" runat="server">
      <div>
         <p align="center" style="font-family: 'Century Schoolbook'; font-size: xx-large; font-weight: bold; font-
style: italic;">Please Fill The Form</p>
         <table style="width:100%;">
            <tr>
               <td>
                  <asp:Label ID="Label1" runat="server" Text="Name:-" Font-Bold="True" Font-Italic="True"
Font-Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
               </td>
               <td>
                  <asp:TextBox ID="TextBox1" runat="server" Height="25px" Width="270px" Font-
Size="Large"></asp:TextBox>
                  <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server" ErrorMessage="Enter
Some Text" ControlToValidate="TextBox1" ForeColor="Red"></asp:RequiredFieldValidator>
               </td>
            </tr>
            <tr>
               <td>
                  <asp:Label ID="Label2" runat="server" Text="Address:- " Font-Bold="True" Font-Italic="True"
Font-Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
               </td>
               <td>
                  <asp:TextBox ID="TextBox2" runat="server" Height="70px" TextMode="MultiLine"
Width="270px" Font-Size="Large"></asp:TextBox>
                  <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server" ErrorMessage="Enter
Some Text" ControlToValidate="TextBox2" ForeColor="Red"></asp:RequiredFieldValidator>
               </td>
            </tr>
            <tr>
               <td>
                  <asp:Label ID="Label3" runat="server" Text="Age:- " Font-Bold="True" Font-Italic="True" Font-
Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
               </td>
               <td>
                  <asp:TextBox ID="TextBox3" runat="server" Height="25px" Width="270px" Font-
Size="Large"></asp:TextBox>
```

```
                <asp:RangeValidator ID="RangeValidator1" runat="server" ErrorMessage="Age Between 18 To
30" ControlToValidate="TextBox3" MaximumValue="30" MinimumValue="18"
ForeColor="Red"></asp:RangeValidator>
                </td>
            </tr>
            <tr>
                <td>
                <asp:Label ID="Label4" runat="server" Text="Email ID:- " Font-Bold="True" Font-Italic="True"
Font-Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
                </td>
                <td>
                <asp:TextBox ID="TextBox4" runat="server" Height="25px" Width="270px" Font-
Size="Large"></asp:TextBox>
                <asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ErrorMessage="Enter Valid Email ID" ControlToValidate="TextBox4" ValidationExpression="\w+([-
+.']\w+)*@\w+([-.]\w+)*\.\w+([-.]\w+)*" ForeColor="Red"></asp:RegularExpressionValidator>
                </td>
            </tr>
            <tr>
                <td>
                <asp:Label ID="Label5" runat="server" Text="Password:- " Font-Bold="True" Font-Italic="True"
Font-Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
                </td>
                <td>
                <asp:TextBox ID="TextBox5" runat="server" Height="25px" Width="270px"
TextMode="Password" Font-Size="Large"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>
                <asp:Label ID="Label6" runat="server" Text="Confirm Password:- " Font-Bold="True" Font-
Italic="True" Font-Names="Times New Roman" Font-Size="XX-Large"></asp:Label>
                </td>
                <td>
                <asp:TextBox ID="TextBox6" runat="server" Height="25px" Width="270px"
TextMode="Password" Font-Size="Large"></asp:TextBox>
                <asp:CompareValidator ID="CompareValidator1" runat="server" ErrorMessage="Enter Correct
Password" ControlToCompare="TextBox5" ControlToValidate="TextBox6"
ForeColor="Red"></asp:CompareValidator>
                </td>
            </tr>
        </table>
        <br />
        <p align="center">
            <asp:Button ID="Button1" runat="server" Text="SUBMIT" Height="43px" Width="152px" Font-
Bold="True" Font-Names="Comic Sans MS" Font-Size="X-Large"></asp:Button>
```

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

Output:



Practical No. 9

Aim: Design an APS.NET master web page and use it other (at least 2-3) content pages.

MasterPage.master:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeFile="MasterPage.master.cs" Inherits="MasterPage"
%>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">                <title></title>
   <asp:ContentPlaceHolder id="head" runat="server">     </asp:ContentPlaceHolder>
</head>
<body>
   <form id="form1" runat="server">
   <div>
      <table style="width: 100%; vertical-align: middle;" align="center">
         <tr valign="middle" align="center" style="background-image: url('/WebSite7/4kTn7x.png');">
            <td colspan=4 height="130px">
               <br />
               <asp:Label ID="Label1" runat="server" Text="Computer Science Blog" Font-Bold="True" Font-
Names="Lucida Calligraphy" Font-Size="40pt" ForeColor="#CC0066"></asp:Label>
            </td>
         </tr>
         <tr align="center" bgcolor="Black" valign="middle">
            <td width="150px" align="center" height="40px" valign="middle">
                
               <asp:LinkButton ID="LinkButton1" runat="server" Font-Italic="True"
                  Font-Names="Comic Sans MS" Font-Size="20pt" Font-Strikeout="False"
                  ForeColor="White" PostBackUrl="~/Default.aspx">Home</asp:LinkButton>
            </td>
            <td width="150px" height="40px">
                
               <asp:LinkButton ID="LinkButton2" runat="server" Font-Bold="False"
                  Font-Italic="True" Font-Names="Comic Sans MS" Font-Size="20pt"
                  Font-Underline="False" ForeColor="White"
PostBackUrl="~/Default1.aspx">Syllabus</asp:LinkButton>
            </td>
            <td width="150px" height="40px">
                
               <asp:LinkButton ID="LinkButton3" runat="server" Font-Italic="True"
                  Font-Names="Comic Sans MS" Font-Size="20pt" Font-Underline="False"
                  ForeColor="White" PostBackUrl="~/Default2.aspx">Theory</asp:LinkButton>
            </td>
            <td width="150px" height="40px">
                
               <asp:LinkButton ID="LinkButton4" runat="server" Font-Italic="True"
```

```
                Font-Names="Comic Sans MS" Font-Size="20pt" Font-Underline="False"
                ForeColor="White" PostBackUrl="~/Default3.aspx">Practical</asp:LinkButton>
            </td>
          </tr>
      </table>
      <asp:ContentPlaceHolder id="ContentPlaceHolder1" runat="server">

      </asp:ContentPlaceHolder>
   </div>
   </form>
</body>
</html>
```

Default.aspx Page:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master" AutoEventWireup="true"
CodeFile="Default7.aspx.cs" Inherits="Default7" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
   <div align="center" style="background-color: #FFCC99">
      <asp:Label ID="Label1" runat="server" Text="This is Home Page." Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="30pt" ForeColor="Red"></asp:Label>
      <br />       <br />
      <asp:Image ID="Image1" runat="server" ImageUrl="~/image (2).png" Height="300px" Width="500px" />
      <br />       <br />       <br />       <br />
   </div>
</asp:Content>
```

Default1.aspx Page:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master" AutoEventWireup="true"
CodeFile="Default8.aspx.cs" Inherits="Default8" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
<div align="center" style="background-color: #FFCC99">
      <asp:Label ID="Label1" runat="server" Text="This is Syllabus Page." Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="30pt" ForeColor="Red"></asp:Label>
      <br />       <br />
      <asp:Image ID="Image1" runat="server" ImageUrl="~/computer-science-education.jpg" Height="300px"
Width="500px" />
      <br />       <br />       <br />       <br />
   </div>
</asp:Content>
```

Default2.aspx Page:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master" AutoEventWireup="true"
CodeFile="Default9.aspx.cs" Inherits="Default9" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
<div align="center" style="background-color: #FFCC99">
      <asp:Label ID="Label1" runat="server" Text="This is Theory Page." Font-Bold="True" Font-Italic="True"
Font-Names="Century Schoolbook" Font-Size="30pt" ForeColor="Red"></asp:Label>
      <br />       <br />
      <asp:Image ID="Image1" runat="server"
         ImageUrl="~/fposter,small,wall_texture,product,750x1000.u2.jpg" Height="300px"
         Width="500px" />
      <br />       <br />       <br />       <br />
   </div>
</asp:Content>
```

Default3.aspx Page:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/MasterPage.master" AutoEventWireup="true"
CodeFile="Default10.aspx.cs" Inherits="Default10" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">
<div align="center" style="background-color: #FFCC99">
      <asp:Label ID="Label1" runat="server" Text="This is Practical Page."
         Font-Bold="True" Font-Italic="True" Font-Names="Century Schoolbook"
         Font-Size="30pt" ForeColor="Red"></asp:Label>
      <br />       <br />
      <asp:Image ID="Image1" runat="server" ImageUrl="~/images.jpg" Height="300px" Width="500px" />
      <br />       <br />       <br />       <br />
   </div>
</asp:Content>
```

Output:


Computer Science Blog
Home
Syllabus
Theory
Practical
This is Home Page.
COMPUTER SCIENCE
CS


Computer Science Blog
Home
Syllabus
Theory
Practical
This is Syllabus Page.


Computer Science Blog
Home
Syllabus
Theory
Practical
This is Theory Page.
COMPUTER
SCIENCE


Computer Science Blog
Home
Syllabus
Theory
Practical
This is Practical Page.
COMPUTER
WHISPERER