Practical 1.a

Aim: Create an application to print on screen the output of adding, subtracting, multiplying and dividing two numbers entered by the user in C#.

Code:

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

namespace NewPract1a
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.Write("NAME : SANDESH \n\n");
         // Prompt the user to enter the first number
         Console.Write("Enter the first number: ");
         double num1 = Convert.ToDouble(Console.ReadLine());

         // Prompt the user to enter the second number
         Console.Write("Enter the second number: ");
         double num2 = Convert.ToDouble(Console.ReadLine());

         // Perform the operations
         double addition = num1 + num2;
         double subtraction = num1 - num2;
         double multiplication = num1 * num2;
         double division = num2 != 0 ? num1 / num2 : double.NaN;

         // Display the results
         Console.WriteLine($"\nResults:");
         Console.WriteLine($"Addition: {num1} + {num2} = {addition}");
         Console.WriteLine($"Subtraction: {num1} - {num2} = {subtraction}");
         Console.WriteLine($"Multiplication: {num1} * {num2} = {multiplication}");
         if (num2 != 0)
         {
            Console.WriteLine($"Division: {num1} / {num2} = {division}");
         }
         else
         {
            Console.WriteLine("Division: Cannot divide by zero.");
         }
         Console.ReadKey();
      }

   }
}
```

Output:

```
NAME : SANDESH

Enter the first number: 20
Enter the second number: 5

Results:
Addition: 20 + 5 = 25
Subtraction: 20 - 5 = 15
Multiplication: 20 * 5 = 100
Division: 20 / 5 = 4
```

Practical 1.b

Aim: Create an application to print Floyd's triangle till n rows in C#.

Code:

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

namespace newPract1b
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.Write("NAME :Sandesh \n\n");
         // Prompt the user to enter the number of rows for Floyd's triangle
         Console.Write("Enter the number of rows for Floyd's Triangle: ");
         int n = Convert.ToInt32(Console.ReadLine());

         // Initialize the starting number
         int number = 1;

         // Generate Floyd's Triangle
         Console.WriteLine("\nFloyd's Triangle:");
         for (int i = 1; i <= n; i++)
         {
            for (int j = 1; j <= i; j++)
            {
               Console.Write(number + " ");
               number++;
            }
            Console.WriteLine(); // Move to the next line after each row
         }
         Console.ReadKey();
      }
   }
}
```

Output:

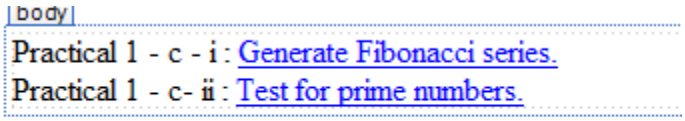
```
NAME: SANDESH

Enter the number of rows for Floyd's Triangle: 4

Floyd's Triangle:
1
2 3
4 5 6
7 8 9 10
```

Practical 1.c

Aim: Create an application to demonstrate following operations
i. Generate Fibonacci series. ii. Test for prime numbers.

Design:

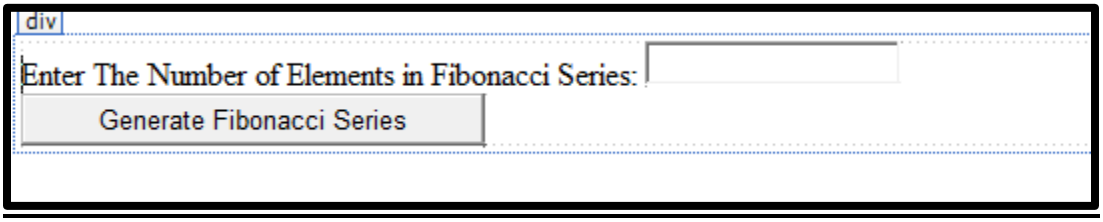
Home Page.aspx



Source Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Home Page.aspx.cs"
Inherits="Pract1_d_.Home_Page" %>

<!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="Practical 1 - c - i :"></asp:Label>
 <asp:HyperLink ID="HyperLink1" runat="server" NavigateUrl="~/WebForm1.aspx">Generate
Fibonacci series.</asp:HyperLink>
            <br />
            <asp:Label ID="Label2" runat="server" Text="Practical 1 - c- ii :"></asp:Label>
 <asp:HyperLink ID="HyperLink2" runat="server" NavigateUrl="~/WebForm2.aspx">Test for prime
numbers.</asp:HyperLink>
            <br />
        </div>
    </form>
</body>
</html>
```

WebForm1.aspx (Generate Fibonacci series.)

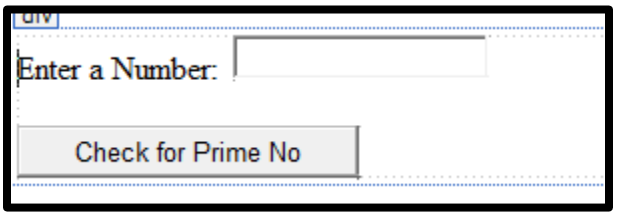


Source Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract1_d_.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:Label ID="Label1" runat="server" Text="Enter The Number of Elements in Fibonacci
Series: "></asp:Label>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Generate Fibonacci
Series" />
        </div>
    </form>
</body>
</html>
```

WebForm2.aspx (Test for prime numbers.)



Source Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="Pract1_d_.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form2" runat="server">
        <div>
            <asp:Label ID="Label1" runat="server" Text="Enter a Number:"></asp:Label> 
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Check for Prime
No" />
        </div>
    </form>
</body>
</html>
```

Code:

WebForm1.aspx (Generate Fibonacci series.)

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

namespace Pract1_d_
{
```

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

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int f1 = 0, f2 = 1, f3, n, co;
            n = int.Parse(TextBox1.Text);
            co = 3;
            Response.Write("Fibonacci Series:");
            Response.Write(f1+"\t"+f2);
            while(co<=n)
            {
                f3 = f1 + f2;
                Response.Write("\t" + f3);
                f1 = f2;
                f2 = f3;
                co++;
            }
        }
    }
}
```

WebForm2.aspx (Test for prime numbers.)

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

namespace Pract1_d_
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int n, i, c;
            n = int.Parse(TextBox1.Text);
            for (c = 2;c<=n-1;c++)
            {
                if (n % c == 0)
                    break;
            }
            if (n == 1)
                Response.Write(n + " is neither prime nor composite");
            else if (c<n-1)
                Response.Write(n + " is not Prime Number");
            else
                Response.Write(n + " is Prime Number");
        }
    }
}
```

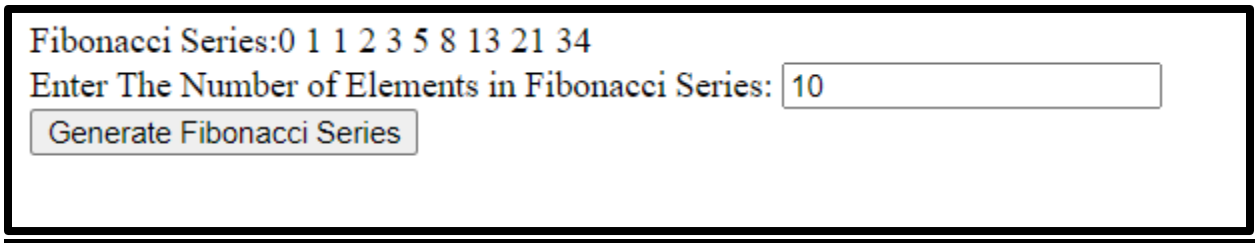
Output

Home Page

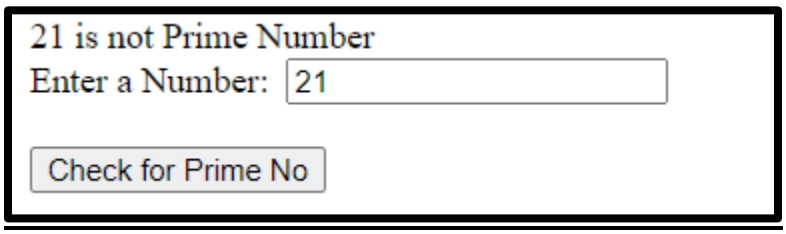
body

Practical 1 - c - i : Generate Fibonacci series.
Practical 1 - c- ii : Test for prime numbers.

WebForm1.aspx (Generate Fibonacci series.)



WebForm2.aspx (Test for prime numbers.)



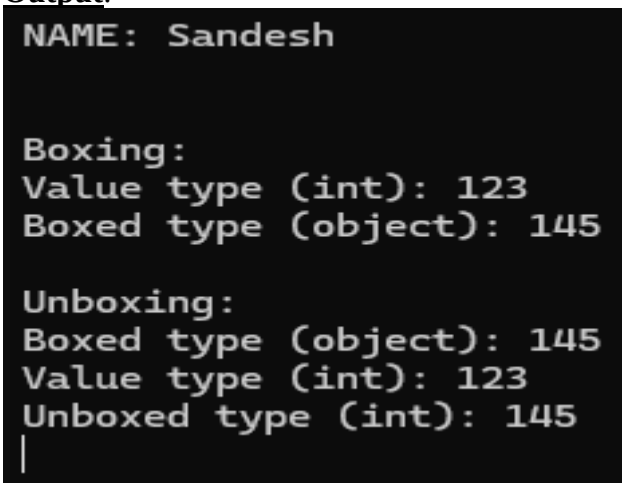
Practical 2a

Aim: Create a simple application to demonstrate the concepts boxing and unboxing.

Code:

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

namespace NewPract2_a_
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine("NAME: Sandesh \n\n");
         // Boxing: Converting a value type (int) to an object
         int num = 123; // Value type
         object obj = num; // Boxing - num is converted to an object
         obj = 145;

         // Display the boxed value
         Console.WriteLine("Boxing:");
         Console.WriteLine($"Value type (int): {num}");
         Console.WriteLine($"Boxed type (object): {obj}");

         // Unboxing: Converting an object back to a value type
         int unboxedNum = (int)obj; // Unboxing - obj is converted back to an int

         // Display the unboxed value
         Console.WriteLine("\nUnboxing:");
         Console.WriteLine($"Boxed type (object): {obj}");
         Console.WriteLine($"Value type (int): {num}");
         Console.WriteLine($"Unboxed type (int): {unboxedNum}");
         Console.ReadKey();
   }
   }
}
```

Output:



Practical 2b

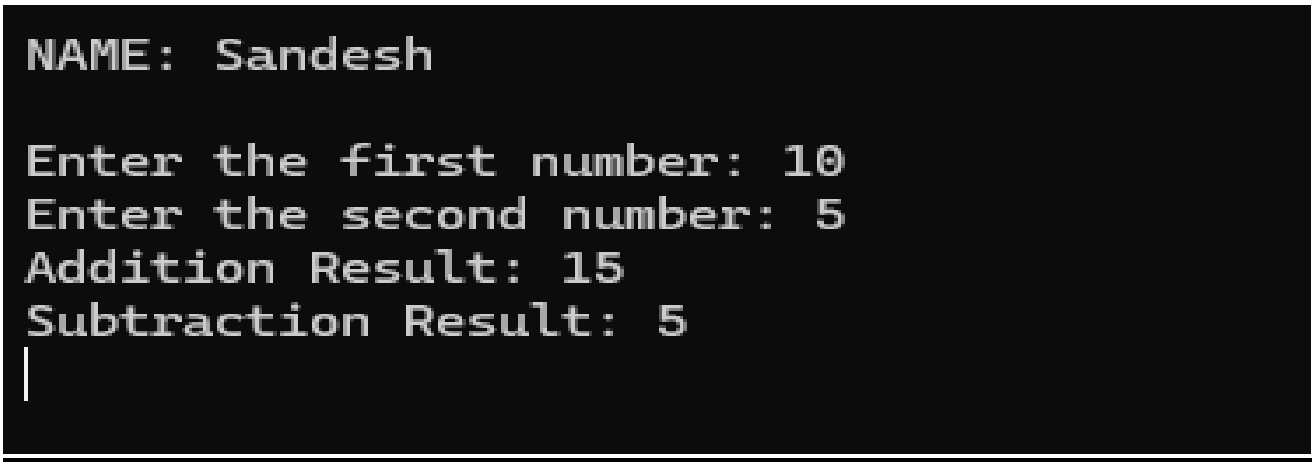
Aim: Create a simple application to perform addition and subtraction using delegate

Code:

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

namespace NewPract2b
{
    // Define a delegate that takes two integers and returns an integer
    public delegate int Operation(int x, int y);

    class Program
    {
        // Method to perform addition
        public static int Add(int x, int y)
        {
            return x + y;
        }

        // Method to perform subtraction
        public static int Subtract(int x, int y)
        {
            return x - y;
        }

        static void Main(string[] args)
        {
            Console.Write("NAME: Sandesh \n\n");
            // Create delegate instances
            Operation addOperation = new Operation(Add);
            Operation subtractOperation = new Operation(Subtract);

            // Input numbers
            Console.Write("Enter the first number: ");
            int num1 = int.Parse(Console.ReadLine());

            Console.Write("Enter the second number: ");
            int num2 = int.Parse(Console.ReadLine());

            // Perform addition
            int additionResult = addOperation(num1, num2);
            Console.WriteLine($"Addition Result: {additionResult}");

            // Perform subtraction
            int subtractionResult = subtractOperation(num1, num2);
            Console.WriteLine($"Subtraction Result: {subtractionResult}");

            // Wait for user input before closing
            Console.ReadKey();
        }
    }
```

}

Output:


NAME: Sandesh
Enter the first number: 10
Enter the second number: 5
Addition Result: 15
Subtraction Result: 5

Practical 2c

Aim: Create a simple application to demonstrate use of the concepts of interfaces.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Interface.aspx.cs"
Inherits="NewPract2c.Interface" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2> simple application to demonstrate use of the concepts of interfaces. </h2>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Button" />
            <h4>NAME: Sandesh </h4>
        </div>
    </form>
</body>
</html>
```

Code:

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

namespace NewPract2c
{
    public interface Itransactions
    {
        //interface member
        string retcode();
        double amtfunc();
    }

    public class Transaction : Itransactions
    {
        private string tCode;
        private double amount;
        public Transaction()
        {
            tCode = "";
            amount = 0.0;
        }
        public Transaction(string c, double a)
        {
            tCode = c;
            amount = a;
        }
```

```
        public double amtfunc()
        {
            return amount;
        }
        public string retcode()
        {
            return tCode;
        }

    }

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

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Transaction t1 = new Transaction("Cr", 780.00);
            Transaction t2 = new Transaction("Db", 400.00);
            Response.Write("<br> Code " + t1.retcode());
            Response.Write("<br> Amount " + t1.amtfunc());
            Response.Write("<br> Code " + t2.retcode());
            Response.Write("<br> Amount " + t2.amtfunc());
        }
    }
}
```

Output:

simple application to demonstrate use of the concepts of interfaces.

Button

NAME: Sandesh

Code Cr
Amount 780
Code Db
Amount 400

simple application to demonstrate use of the concepts of interfaces.

Button

NAME: Sandesh

Practical 3a

Aim: Create a simple web page with various server controls to demonstrate setting and use of their properties. (Example : AutoPostBack)

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 3 a.aspx.cs"
Inherits="Practical_3.Pract_3_a" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .auto-style1 {
            width: 50%;
            border:3px solid navy;
            background-color:#a7a122
        }
        .auto-style4 {
            text-align: center;
            height: 46px;
        }
        .auto-style12 {
            height: 47px;
        }
        .auto-style13 {
            width: 215px;
            height: 56px;
        }
        .auto-style14 {
            height: 56px;
            width: 289px;
        }
        .auto-style15 {
            width: 215px;
            height: 54px;
        }
        .auto-style16 {
            height: 54px;
            width: 289px;
        }
        .auto-style17 {
            width: 215px;
            height: 52px;
        }
        .auto-style18 {
            height: 52px;
            width: 289px;
        }
        .auto-style19 {
            width: 215px;
            height: 49px;
        }
        .auto-style20 {
```

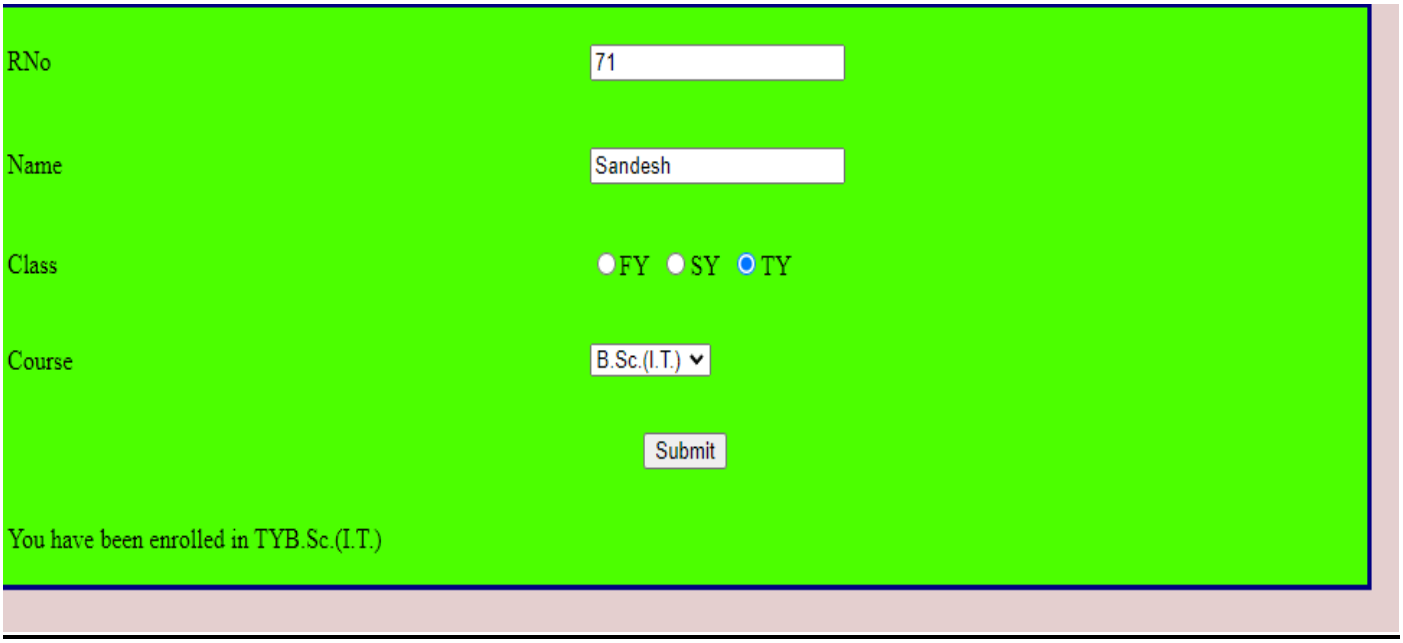
```
        height: 49px;
        width: 289px;
      }
      body{
        background-color:#e4cfcf
      }
    </style>
</head>
<body>
    <form id="form1" runat="server">
      <div>
        <table class="auto-style1">
          <tr>
            <td class="auto-style13">
              <asp:Label ID="Label1" runat="server" Text="RNo"></asp:Label>
            </td>
            <td class="auto-style14">
              <asp:TextBox ID="TextBox1" runat="server" TabIndex="1"></asp:TextBox>
            </td>
          </tr>
          <tr>
            <td class="auto-style15">
              <asp:Label ID="Label2" runat="server" Text="Name"></asp:Label>
            </td>
            <td class="auto-style16">
              <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            </td>
          </tr>
          <tr>
            <td class="auto-style17">
              <asp:Label ID="Label3" runat="server" Text="Class"></asp:Label>
            </td>
            <td class="auto-style18">
              <asp:RadioButton ID="RadioButton1" runat="server" Text="FY" GroupName="Class" />
 <asp:RadioButton ID="RadioButton2" runat="server" Text="SY" GroupName="Class" />
 <asp:RadioButton ID="RadioButton3" runat="server" Text="TY" GroupName="Class" />
            </td>
          </tr>
          <tr>
            <td class="auto-style19">
              Course</td>
            <td class="auto-style20">
              <asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="DropDownList1_SelectedIndexChanged" TabIndex="2">
                <asp:ListItem>B.Com</asp:ListItem>
                <asp:ListItem>BMS</asp:ListItem>
                <asp:ListItem>B.Sc.(I.T.)</asp:ListItem>
                <asp:ListItem>B.Sc.(CS)</asp:ListItem>
              </asp:DropDownList>
            </td>
          </tr>
          <tr>
            <td class="auto-style4" colspan="2">
              <asp:Button ID="Button1" runat="server" Text="Submit" OnClick="Button1_Click"
AccessKey="S" TabIndex="3" ToolTip="Please Submit Youe Data" />
            </td>
```

```
            </tr>
            <tr>
                <td class="auto-style12" colspan="2">
                    <asp:Label ID="Label5" runat="server" Text=" "></asp:Label>
                </td>
            </tr>
        </table>
    </div>
  </form>
</body>
</html>
```

Code:

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

namespace Practical_3
{
  public partial class Pract_3_a : System.Web.UI.Page
  {
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {

        string s = "You have been enrolled in ";
        if (RadioButton1.Checked == true)
        {
            s += RadioButton1.Text;
        }
        else if (RadioButton2.Checked == true)
        {
            s += RadioButton2.Text;
        }
        else if (RadioButton3.Checked == true)
        {
            s += RadioButton3.Text;
        }
        s += DropDownList1.SelectedItem;
        Label5.Text = s;
      }

    protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
    {
      Response.Write("You have selected " + DropDownList1.SelectedItem + " Course");
    }
  }
}
```

Output:


RNo
71
Name
Sandesh
Class
FY SY TY
Course
B.Sc.(I.T.)
Submit
You have been enrolled in TYB.Sc.(I.T.)

Practical 3b

Aim: Create a simple application to demonstrate your vacation using calendar control.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 3bb.aspx.cs"
Inherits="Practical_3.Pract_3bb" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <asp:Calendar ID="Calendar1" runat="server" NextMonthText="Next"
OnDayRender="Calendar1_DayRender" PrevMonthText="Pre" SelectionMode="DayWeekMonth"
BackColor="White" BorderColor="White" BorderWidth="1px" Font-Names="Verdana" Font-Size="9pt"
ForeColor="Black" Height="190px" NextPrevFormat="FullMonth"
OnSelectionChanged="Calendar1_SelectionChanged" Width="350px">
            <DayHeaderStyle Font-Bold="True" Font-Size="8pt" />
            <NextPrevStyle Font-Bold="True" Font-Size="8pt" ForeColor="#333333"
VerticalAlign="Bottom" />
            <OtherMonthDayStyle ForeColor="#999999" />
            <SelectedDayStyle BackColor="#333399" ForeColor="White" />
            <TitleStyle BackColor="White" BorderColor="Black" BorderWidth="4px" Font-Bold="True"
Font-Size="12pt" ForeColor="#333399" />
            <TodayDayStyle BackColor="#CCCCCC" />
         </asp:Calendar>

         <h4>NAME: SANDESH </h4>
      </div>
   </form>
</body>
</html>
```

Code:

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

namespace Practical_3
{
   public partial class Pract_3bb : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }
```

```
    protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
    {
        if ((e.Day.Date >= new DateTime(2024, 09, 7)) && (e.Day.Date <= new DateTime(2024, 09, 12)))
        {
            e.Cell.BackColor = System.Drawing.Color.Navy;
            e.Cell.BorderColor = System.Drawing.Color.Black;
            e.Cell.ForeColor= System.Drawing.Color.White;
            e.Cell.BorderWidth = new Unit(3);
            if (e.Day.Date == new DateTime(2024, 09, 7))
            {
                e.Cell.Controls.Add(new LiteralControl("/br Ganpati Vacation Start"));
            }
            if (e.Day.Date == new DateTime(2024, 09, 12))
            {
                e.Cell.Controls.Add(new LiteralControl("/br Ganpati Vacation End"));
            }
        }
    }

    protected void Calendar1_SelectionChanged(object sender, EventArgs e)
    {
        if (Calendar1.SelectedDate.Date >= new DateTime(2024, 09, 7) && Calendar1.SelectedDate.Date
<= new DateTime(2024, 09, 12))
            Response.Write("</br><h1>Ganpati Vacation..... Go to your village and worship Lord
Ganesh</h1></br>");
    }
  }
}
```

Output:

NAME: SANDESH

Practical 3c

Aim: Demonstrate the use of Treeview operations on the web form

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract3c.aspx.cs"
Inherits="Practical_3.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         Treeview Contorl Navigation:
         <asp:TreeView ID="TreeView1" runat="server"
OnSelectedNodeChanged="TreeView1_SelectedNodeChanged" ShowCheckBoxes="All"
OnTreeNodeCollapsed="TreeView1_TreeNodeCollapsed" ShowLines="True">
            <HoverNodeStyle BackColor="#FF99FF" ForeColor="#003300" />
            <LeafNodeStyle BackColor="#99CCFF" ForeColor="#663300" />
            <Nodes>
               <asp:TreeNode Text="AWP Practical" Value="AWP Practical">
                  <asp:TreeNode Text="Practical 3" Value="Practical 3">
                     <asp:TreeNode Text="Practical 3a" Value="Practical 3a" NavigateUrl="~/Pract 3 a.aspx"
Target="new"/>
                     <asp:TreeNode Text="Practical 3b" Value="Practical 3b" NavigateUrl="~/Pract 3
b.aspx">
                        <asp:TreeNode Text="Practical 3b b" Value="Practical 3b b" NavigateUrl="~/Pract
3bb.aspx"></asp:TreeNode>
                        <asp:TreeNode Text="Practical 3bc" Value="Practical 3bc"
NavigateUrl="~/Pract3bd.aspx"></asp:TreeNode>
                     </asp:TreeNode>
                     <asp:TreeNode Text="Practical 3c" Value="Practical 3c"></asp:TreeNode>
                  </asp:TreeNode>
                  <asp:TreeNode Text="Website" Value="Website">
                     <asp:TreeNode Text="Mumbai University" Value="Mumbai University"
NavigateUrl="https://mu.ac.in/">
                        <asp:TreeNode Text="GD Jalan" Value="GD Jalan"
NavigateUrl="https://gdjalan.edu.in/"></asp:TreeNode>
                     </asp:TreeNode>
                  </asp:TreeNode>
               </asp:TreeNode>
            </Nodes>
            <ParentNodeStyle BackColor="#66FF99" ForeColor="#000099" />
            <RootNodeStyle BackColor="#FFFF99" ForeColor="#990000" />
            <SelectedNodeStyle BackColor="Black" ForeColor="White" />
         </asp:TreeView>

         <br />
         <br />
         <asp:Label ID="Label1" runat="server" BackColor="#FFFF99" Font-Bold="True" Font-
Size="20pt"></asp:Label>
```

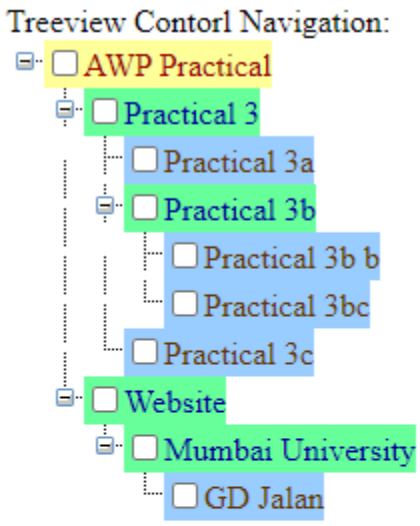
```
        <br />
        <br />
        <br />
        <h4>NAME: Sandesh </h4>

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

Code:

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

namespace Practical_3
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
         /*if (!IsPostBack)
            {
                BindData();
            }
        }
        protected void BindData()
        {
            DataSet ds = new DataSet();
            ds.ReadXml(Server.MapPath("XMLFile1.xml"));
            if (ds!= null && ds.HasChanges())
            {
                DataList1.DataSource = ds;
                DataList1.DataBind();
            }
            else
            {
                DataList1.DataBind();
            }*/
        }


        protected void TreeView1_SelectedNodeChanged(object sender, EventArgs e)
        {
            Label1.Text = "You have selected the option:" + TreeView1.SelectedValue;
        }

        protected void TreeView1_TreeNodeCollapsed(object sender, TreeNodeEventArgs e)
        {
            Label1.Text = "The Value Collapsed was:" + e.Node.Value;
        }
```

```
    }
}
```

Output:



The Value Collapsed was:AWP Practical

NAME: Sandesh

Practical 4a

Aim: Create a Registration form to demonstrate use of various Validation controls.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="4aValidate Contorl Form.aspx.cs"
Inherits="Pract_4_a.Validate_Contorl_Form" %>

<!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="Enter Password"></asp:Label>
 <asp:TextBox ID="TextBox1" runat="server" TextMode="Password"></asp:TextBox>
 <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ControlToValidate="TextBox1" ErrorMessage="Password Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
 <br />
         <br />
         <asp:Label ID="Label2" runat="server" Text="Confirmed Password"></asp:Label>
         <asp:TextBox ID="TextBox2" runat="server" TextMode="Password"></asp:TextBox>
         <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server"
ControlToValidate="TextBox2" ErrorMessage="Confirm Password Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
         <asp:CompareValidator ID="CompareValidator1" runat="server" ControlToCompare="TextBox1"
ControlToValidate="TextBox2" ErrorMessage="Confirm Password Should Match with password">Confirm
Password Should Match with password</asp:CompareValidator>
         <br />
         <br />
         <asp:Label ID="Label3" runat="server" Text="Enter Your Age "></asp:Label>
 <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
 <asp:RequiredFieldValidator ID="RequiredFieldValidator3" runat="server"
ControlToValidate="TextBox3" ErrorMessage="Age Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
         <asp:RangeValidator ID="RangeValidator1" runat="server" ControlToValidate="TextBox3"
ErrorMessage="Age Should be between 21 to 30" MaximumValue="30" MinimumValue="21">Age Should
be between 21 to 30</asp:RangeValidator>
         <br />
         <br />
         <asp:Label ID="Label4" runat="server" Text="Enter Your Emai ID"></asp:Label>
 <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
 <asp:RequiredFieldValidator ID="RequiredFieldValidator4" runat="server"
ControlToValidate="TextBox4" ErrorMessage="Email Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
         <asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ControlToValidate="TextBox4" ErrorMessage="Please Enter Valid Email" ValidationExpression="\w+([-
+.']\w+)*@\w+([-.]\w+)*\.\w+([-.]\w+)*">Please Enter Valid Email</asp:RegularExpressionValidator>
         <br />
         <br />
         <asp:Label ID="Label5" runat="server" Text="user id"></asp:Label>
 <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
```

```
        <asp:RequiredFieldValidator ID="RequiredFieldValidator5" runat="server"
ControlToValidate="TextBox5" ErrorMessage="User Id Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
        <asp:CustomValidator ID="CustomValidator1" runat="server" ControlToValidate="TextBox5"
ErrorMessage="User Id Length Should be between 7 and 20 characters"
OnServerValidate="CustomValidator1_ServerValidate">User Id Length Should be between 7 and 20
characters</asp:CustomValidator>
        <br />
        <asp:ValidationSummary ID="ValidationSummary1" runat="server" />
        <br />
        <br />
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Button" />
        <br />
        <br />

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

Code:

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

namespace Pract_4_a
{
   public partial class Validate_Contorl_Form : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }
      protected void Button1_Click(object sender, EventArgs e)
      {
         Response.Write("Submitted");
      }
          protected void CustomValidator1_ServerValidate(object source, ServerValidateEventArgs args)
      {
         string str = args.Value;
         args.IsValid=false;
         if (str.Length < 7 || str.Length > 20)
            args.IsValid = false;
         else
            args.IsValid = true;
      }
   }
}
```

Output:

Enter Password *

Confirmed Password *Confirm Password Should Match with password

Enter Your Age *Age Should be between 21 to 30

Enter Your Emai ID *Please Enter Valid Email

user id *User Id Length Should be between 7 and 20 characters

- Error message 1.
- Error message 2.

Button

Enter Password •••••

Confirmed Password •••••• Confirm Password Should Match with password

Enter Your Age 55 Age Should be between 21 to 30

Enter Your Emai ID example@gmail.com

user id pnr

- Confirm Password Should Match with password
- Age Should be between 21 to 30

Button

Practical 4b

Aim: Create Web Form to demonstrate use of Adrotator Control.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Adrotator 4 b.aspx.cs"
Inherits="Pract_4_a.Adrotator_4_b" %>

<!DOCTYPE html>

<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="~/XMLFile1.xml"
Target="_blank" />
            <br />
            <h4>NAME: Sandesh </h4>
        </div>
    </form>
</body>
</html>
```

Code:

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

namespace Pract_4_a
{
    public partial class Adrotator_4_b : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
    }
}
```

XML file:

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
        <Ad>
                <ImageUrl>~/Images/Coke.jpg</ImageUrl>
                <Impressions>1</Impressions>
                <NavigateUrl>https://www.coca-colacompany.com/</NavigateUrl>
                <AlternateText>Coke image is missing</AlternateText>
```

```
        <Keyword>Coke</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>~/Images/Frooti.jpg</ImageUrl>
        <Impressions>5</Impressions>
        <NavigateUrl>https://gdjalan.edu.in/commerce-faculty-degree-college/ </NavigateUrl>
        <Keyword>Frooti</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>~/Images/Pepsi.jpg</ImageUrl>
        <Impressions>1</Impressions>
        <NavigateUrl>https://www.pepsi.com/</NavigateUrl>
        <Keyword>Pepsi</Keyword>
    </Ad>
</Advertisements>
```

Output:

NAME: Sandesh

Practical 4c

Aim: Create Web Form to demonstrate use User Controls

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="4C.aspx.cs"
Inherits="Pract_4_a._4C" %>

<%@ Register src="WebUserControl1.ascx" tagname="MyControl" tagprefix="user" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <user:MyControl ID="WebUserControl11" runat="server" />
        <div>
            <br />
            <br />
            <asp:Image ID="Image1" runat="server" ImageUrl="~/Images/nature.jpeg" />
            <br />
            <h4>NAME: SANDESH </h4>
        </div>
    </form>
</body>
</html>
```

Code:

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

namespace Pract_4_a
{
    public partial class _4C : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
    }
}
```

Output:

This is User Contro1

Name SANDESH

City TROONBAY

Save

Your Name is SANDESH and you are from TROONBAY

NAME: SANDESH

This is User Contro1

Name

City

Save

NAME: SANDESH

Practical 5a

Aim: Create Web Form to demonstrate use of Website Navigation controls.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="prac_5(A).aspx.cs"
Inherits="Pract_4_a.prac_5_A_" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .menu {
            width: 50%;
            height:100px;
            border:3px solid navy;
            background-color:black;
        }
        </style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="menu">

            <asp:Menu ID="Menu1" runat="server" DataSourceID="SiteMapDataSource1"
DisappearAfter="1000" Font-Bold="True" Font-Size="X-Large" ForeColor="White">
                <DynamicHoverStyle BackColor="Black" ForeColor="White" />
            </asp:Menu>
            </div>
            <div><h1>Welcome to our website</h1>
            <h3>This is the Home Page</h3> <br/></div>



            <asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
            <br />
            <asp:SiteMapPath ID="SiteMapPath1" runat="server">
                <CurrentNodeStyle BackColor="#CCFFCC" />
            </asp:SiteMapPath>
            <br />

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

Page 1:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Page1.aspx.cs"
Inherits="Pract_4_a.Page1" %>

<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <h1>Welcome to Page 1 of our website</h1>
      </div>
      <asp:SiteMapPath ID="SiteMapPath1" runat="server">
      </asp:SiteMapPath>
   </form>
</body>
</html>
```

Page 2:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Page2.aspx.cs"
Inherits="Pract_4_a.Page2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <h1>Welcome to Page 2 of our website</h1>
      </div>
      <asp:SiteMapPath ID="SiteMapPath1" runat="server">
      </asp:SiteMapPath>
   </form>
</body>
</html>
```

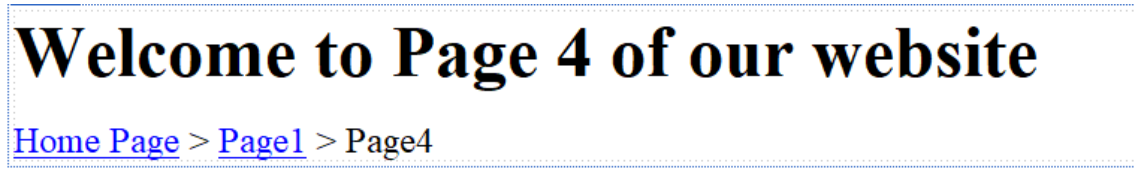
Page 3:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Page3.aspx.cs"
Inherits="Pract_4_a.Page3" %>

<!DOCTYPE html>

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

```
    <form id="form1" runat="server">
        <div>
            <h1>Welcome to Page 3 of our website</h1>
        </div>
        <asp:SiteMapPath ID="SiteMapPath1" runat="server">
        </asp:SiteMapPath>
    </form>
</body>
</html>
```

Page 4:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Page4.aspx.cs"
Inherits="Pract_4_a.Page4" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h1>Welcome to Page 4 of our website</h1>
        </div>
        <asp:SiteMapPath ID="SiteMapPath1" runat="server">
        </asp:SiteMapPath>
    </form>
</body>
</html>
```



Output:

Home Page

Welcome to our website

This is the Home Page

Home Page

NAME: SANDESH

Home Page Page1 Page2
Page3
Page4

Welcome to our website

This is the Home Page

Home Page

NAME: SANDESH

Practical 5b

Aim: Create a web application to demonstrate use of Master Page and content page

Design:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="Pract5b.aspx.cs" Inherits="Pract5.Pract5b" Theme ="Theme1"%>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
   <style type="text/css">
      .auto-style1 {
         height: 29px;
      }
   </style>
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
   <h2 align="center"> Contact Us</h2>
<h3 align="center"> Fill the datails</h3>
   <table class="auto-style1" align="center">
      <tr>
         <td class="auto-style1">
            <asp:Label ID="Label1" runat="server" Text="Name:"></asp:Label>
         </td>
         <td class="auto-style1">
            <asp:TextBox ID="TextBox1" runat="server" SkinID="Yellow"></asp:TextBox>
         </td>
      </tr>
      <tr>
         <td>
            <asp:Label ID="Label2" runat="server" Text="Email ID:"></asp:Label>
         </td>
         <td>
            <asp:TextBox ID="TextBox2" runat="server" SkinID="Yellow"></asp:TextBox>
         </td>
      </tr>
      <tr>
         <td class="auto-style1">
            <asp:Label ID="Label3" runat="server" Text="Mobile No."></asp:Label>
         </td>
         <td class="auto-style1">
            <asp:TextBox ID="TextBox3" runat="server" SkinID="Blue"></asp:TextBox>
         </td>
      </tr>
      <tr>
         <td>
            <asp:Label ID="Label4" runat="server" Text="Your Query"></asp:Label>
         </td>
         <td>
            <asp:TextBox ID="TextBox4" runat="server" SkinID="Blue"></asp:TextBox>
         </td>
      </tr>
      <tr>
         <td> </td>
         <td> </td>
      </tr>
      <tr>
         <td colspan="2">
```

```
            <asp:Button ID="Button1" runat="server" Text="Submit" SkinID="Green" />


        </td>
      </tr>
   </table>
 <br />
</asp:Content>
```

MasterPage:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="Pract5.Site1" %>

<!DOCTYPE html>

<html>
<head runat="server">
   <title></title>
   <style type="text/css">
      body{
background-color:powderblue;

      }
      .head {
         background-color:#cc3399;
         color:white;
      }
      footer{
background-color:black;
         color:white;
      }
</style>
   <asp:ContentPlaceHolder ID="head" runat="server">
   </asp:ContentPlaceHolder>
</head>
<body>
   <form id="form1" runat="server">
      <div class ="head">
         <h2 align="center">Ghanshyamdas Jalan College of Science & Commerce</h2>
         <h4 align="center"> Chinchowli Rd, Malad, Upper Govind Nagar, Malad East, Mumbai,
Maharashtra 400097</h4>
         <p align="center">  </p>
         </div>
      <div>
         <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
         </asp:ContentPlaceHolder>
      </div>
      <footer align="center">Copyright by GD JALAN</footer>
   </form>
    <h4>NAME: SANDESH</h4>

</body>
</html>
```

Ghanshyamdas Jalan College of Science & Commerce

Chinchowli Rd, Malad, Upper Govind Nagar, Malad East, Mumbai, Maharashtra 400097

Copyright by GD JALAN

NAME: SANDESH

Output:

Practical 5c

Aim: Create a web application to demonstrate various states of ASP.NET Pages.

1. ViewState:

Design:

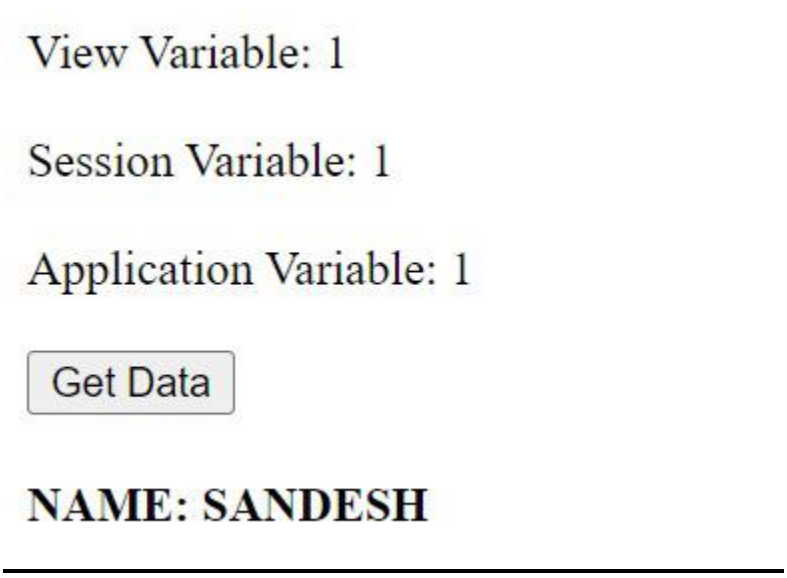
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 5 C ViewState.aspx.cs"
Inherits="Pract5.Pract_5_C_ViewState" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            View Variable:
            <asp:Label ID="Label1" runat="server" Text="View Data is:"></asp:Label>
            <br />
            <br />
            Session Variable:
            <asp:Label ID="Label2" runat="server" Text="Session Variable"></asp:Label>
            <br />
            <br />
            Application Variable:
            <asp:Label ID="Label3" runat="server" Text="Application Variable"></asp:Label>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Get Data" />
        </div>
    </form>
    <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

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

namespace Pract5
{
    public partial class Pract_5_C_ViewState : System.Web.UI.Page
    {
        int count = 0;
        protected void Page_Load(object sender, EventArgs e)
        {

          if (!IsPostBack)
```

```
        {
            if (ViewState["cnt"] == null)
            {
                //ViewState["cnt"] = count;
                ViewState.Add("cnt", count);
            }
            if (Session["scnt"] == null)
            {
                //Session["scnt"] = count;
                Session.Add("scnt", count);
            }
            if (Application["acnt"] == null)
            {
                //Application["acnt"] = count;
                Application.Add("acnt", count);
            }

        }
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        /* count = int.Parse(ViewState["cnt"].ToString());
         count++;
         ViewState["cnt"] = count;
         Label1.Text = ViewState["cnt"].ToString();*/
        ViewState["cnt"] = (int)ViewState["cnt"] + 1;
        Label1.Text = ViewState["cnt"].ToString();
        Session["scnt"] = (int)Session["scnt"] + 1;
        Label2.Text = Session["scnt"].ToString();
        Application["acnt"] = (int)Application["acnt"] + 1;
        Label3.Text = Application["acnt"].ToString();
        /*count++;
        Label1.Text = count.ToString();*/

    }
  }
}
```

Output:



2. QueryString

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 5c Querystr1.aspx.cs" Inherits="Pract5.Pract_5c_Querystr1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .auto-style1 {
            width: 68%;
            height: 158px;
        }
        .auto-style2 {
            text-align: center;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <table class="auto-style1">
                <tr>
                    <td colspan="2"> <h2 align ="center"> Query String Example </h2>  </td>
                </tr>
                <tr>
                    <td>
                        <asp:Label ID="Label1" runat="server" Text="UserID"></asp:Label>
                    </td>
                    <td>
                        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>
                        <asp:Label ID="Label2" runat="server" Text="UserName"></asp:Label>
                    </td>
                    <td>
                        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td class="auto-style2" colspan="2">
                        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Send Data" />
                    </td>
                </tr>
            </table>
        </div>
    </form>
    <h4>NAME: SANDESH</h4>
</body>
```

```
</html>
```

Code:

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

namespace Pract5
{
   public partial class Pract_5c_Querystr1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         /*Session["userId"] = TextBox1.Text;
         Session["userName"] = TextBox2.Text;*/
         /*Application["userId"] = TextBox1.Text;
         Application["userName"] = TextBox2.Text;*/
         //Response.Redirect("~/Pract 5c Querystr2aspx.aspx");
         Response.Redirect("~/Pract 5c Querystr2aspx.aspx?userId=" +TextBox1.Text + "&userName=" +
TextBox2.Text );
      }
   }
}
```

Output:

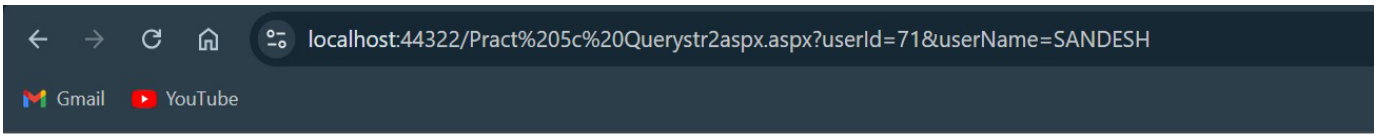
Query String Example

UserID 71

UserName SANDESH

Send Data

NAME: SANDESH



User ID: **71**
User Name: **SANDESH**

---

3. Session and Application State

Design:

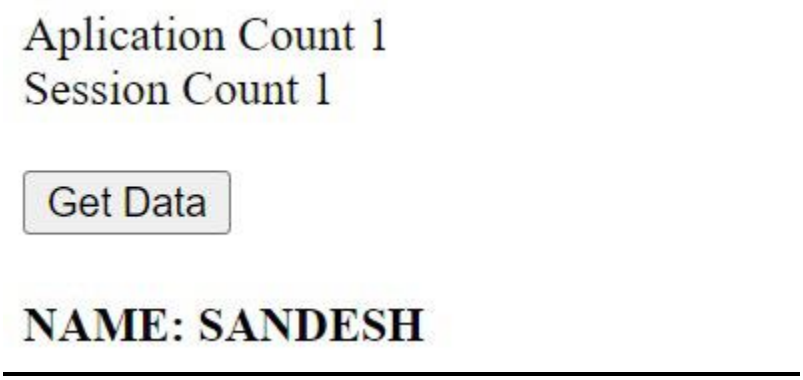
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 5c Session and Application State.aspx.cs" Inherits="Pract5.Pract_5c_Session_and_Application_State"%>

<!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"></asp:Label>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Get Data" />
        </div>
    </form>
    <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

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

namespace Pract5
{
    public partial class Pract_5c_Session_and_Application_State : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Label1.Text = "";
            Application["OnlineApplicationUsers"] = (int)Application["OnlineApplicationUsers"] + 1;
            Label1.Text = "Aplication Count " + Application["OnlineApplicationUsers"];

            Session["OnlineSessionUsers"] = (int)Session["OnlineSessionUsers"] + 1;
            Label1.Text = Label1.Text + "<br> Session Count " + Session["OnlineSessionUsers"];
        }
    }
```

}

Output:



4. **Cookies**

Design:

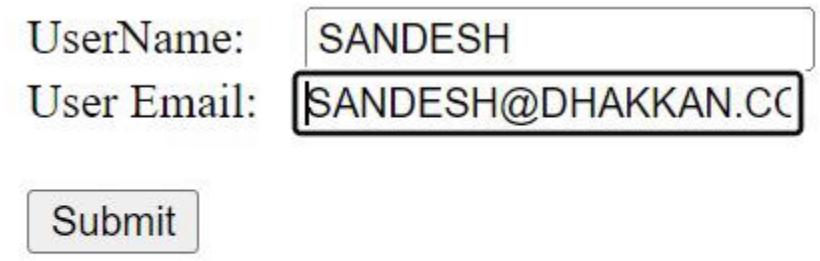
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practica5cCookies1.aspx.cs"
Inherits="Pract5.Practica5cCookies1" %>

<!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 />
         User Email:  
         <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
      </div>
   </form>
   <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

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

namespace Pract5
```

```
{
   public partial class Practica5cCookies1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         HttpCookie cookie = new HttpCookie("UserInfo");
         cookie["Name"] = TextBox1.Text;
         cookie["Email"] = TextBox2.Text;
         cookie.Expires = DateTime.Now.AddDays(3);
         //cookie.Expires = DateTime.Now.AddSeconds(100);
         Response.Cookies.Add(cookie);
         Response.Redirect("~/Practica5cCookies2.aspx");
      }
   }
}
```

Output:



NAME: SANDESH

User Name: SANDESH
User Email SANDESH@DHAKKAN.COM

Practical 6a

Aim: Create a web application for inserting and deleting records from a database.

Design & Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="New_Pract_6a.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <h2>Inserting and deleting records from a database</h2>
         <asp:DetailsView ID="DetailsView1" runat="server" Height="54px" Width="157px"
AllowPaging="True" AutoGenerateRows="False" BackColor="#DEBA84" BorderColor="#DEBA84"
BorderStyle="None" BorderWidth="1px" CellPadding="3" CellSpacing="2" DataKeyNames="Cust_Id"
DataSourceID="SqlDataSource1">
            <EditRowStyle BackColor="#738A9C" Font-Bold="True" ForeColor="White" />
            <Fields>
               <asp:BoundField DataField="Cust_Id" HeaderText="Cust_Id" ReadOnly="True"
SortExpression="Cust_Id" />
               <asp:BoundField DataField="Cust_Name" HeaderText="Cust_Name"
SortExpression="Cust_Name" />
               <asp:BoundField DataField="State" HeaderText="State" SortExpression="State" />
               <asp:BoundField DataField="City" HeaderText="City" SortExpression="City" />
               <asp:CommandField ShowDeleteButton="True" ShowInsertButton="True" />
            </Fields>
            <FooterStyle BackColor="#F7DFB5" ForeColor="#8C4510" />
            <FooterTemplate>
               Copyright by Ravi Sir
            </FooterTemplate>
            <HeaderStyle BackColor="#A55129" Font-Bold="True" ForeColor="White" />
            <HeaderTemplate>
               Customer Details:
            </HeaderTemplate>
            <PagerStyle ForeColor="#8C4510" HorizontalAlign="Center" />
            <RowStyle BackColor="#FFF7E7" ForeColor="#8C4510" />
         </asp:DetailsView>
         <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConflictDetection="CompareAllValues"
ConnectionString="<%$ ConnectionStrings:TYConnectionString %>" DeleteCommand="DELETE FROM
[Customer] WHERE [Cust_Id] = @original_Cust_Id AND (([Cust_Name] = @original_Cust_Name) OR
([Cust_Name] IS NULL AND @original_Cust_Name IS NULL)) AND (([State] = @original_State) OR
([State] IS NULL AND @original_State IS NULL)) AND (([City] = @original_City) OR ([City] IS NULL
AND @original_City IS NULL))" InsertCommand="INSERT INTO [Customer] ([Cust_Id], [Cust_Name],
[State], [City]) VALUES (@Cust_Id, @Cust_Name, @State, @City)"
OldValuesParameterFormatString="original_{0}" SelectCommand="SELECT * FROM [Customer]"
UpdateCommand="UPDATE [Customer] SET [Cust_Name] = @Cust_Name, [State] = @State, [City] =
@City WHERE [Cust_Id] = @original_Cust_Id AND (([Cust_Name] = @original_Cust_Name) OR
([Cust_Name] IS NULL AND @original_Cust_Name IS NULL)) AND (([State] = @original_State) OR
([State] IS NULL AND @original_State IS NULL)) AND (([City] = @original_City) OR ([City] IS NULL
AND @original_City IS NULL))">
            <DeleteParameters>
```

```
            <asp:Parameter Name="original_Cust_Id" Type="Int32" />
            <asp:Parameter Name="original_Cust_Name" Type="String" />
            <asp:Parameter Name="original_State" Type="String" />
            <asp:Parameter Name="original_City" Type="String" />
        </DeleteParameters>
        <InsertParameters>
            <asp:Parameter Name="Cust_Id" Type="Int32" />
            <asp:Parameter Name="Cust_Name" Type="String" />
            <asp:Parameter Name="State" Type="String" />
            <asp:Parameter Name="City" Type="String" />
        </InsertParameters>
        <UpdateParameters>
            <asp:Parameter Name="Cust_Name" Type="String" />
            <asp:Parameter Name="State" Type="String" />
            <asp:Parameter Name="City" Type="String" />
            <asp:Parameter Name="original_Cust_Id" Type="Int32" />
            <asp:Parameter Name="original_Cust_Name" Type="String" />
            <asp:Parameter Name="original_State" Type="String" />
            <asp:Parameter Name="original_City" Type="String" />
        </UpdateParameters>
    </asp:SqlDataSource>
    <br />
    <br />
    <asp:FormView ID="FormView1" runat="server" BackColor="#DEBA84"
BorderColor="#DEBA84" BorderStyle="None" BorderWidth="1px" CellPadding="3" CellSpacing="2"
DataKeyNames="Cust_Id" DataSourceID="SqlDataSource1" GridLines="Both">
        <EditItemTemplate>
            Cust_Id:
            <asp:Label ID="Cust_IdLabel1" runat="server" Text='<%# Bind("Cust_Id") %>' />
            <br />
            Cust_Name:
            <asp:TextBox ID="Cust_NameTextBox" runat="server" Text='<%# Bind("Cust_Name") %>'
/>
            <br />
            State:
            <asp:TextBox ID="StateTextBox" runat="server" Text='<%# Bind("State") %>' />
            <br />
            City:
            <asp:TextBox ID="CityTextBox" runat="server" Text='<%# Bind("City") %>' />
            <br />
            <asp:LinkButton ID="UpdateButton" runat="server" CausesValidation="True"
CommandName="Update" Text="Update" />
             <asp:LinkButton ID="UpdateCancelButton" runat="server" CausesValidation="False"
CommandName="Cancel" Text="Cancel" />
        </EditItemTemplate>
        <EditRowStyle BackColor="#738A9C" Font-Bold="True" ForeColor="White" />
        <FooterStyle BackColor="#F7DFB5" ForeColor="#8C4510" />
        <FooterTemplate>
            Copyright by Ravi Sir
        </FooterTemplate>
        <HeaderStyle BackColor="#A55129" Font-Bold="True" ForeColor="White" />
        <HeaderTemplate>
            Customer Details:
        </HeaderTemplate>
        <InsertItemTemplate>
            Cust_Id:
```

```
                <asp:TextBox ID="Cust_IdTextBox" runat="server" Text='<%# Bind("Cust_Id") %>' />
                <br />
                Cust_Name:
                <asp:TextBox ID="Cust_NameTextBox" runat="server" Text='<%# Bind("Cust_Name") %>'
/>
                <br />
                State:
                <asp:TextBox ID="StateTextBox" runat="server" Text='<%# Bind("State") %>' />
                <br />
                City:
                <asp:TextBox ID="CityTextBox" runat="server" Text='<%# Bind("City") %>' />
                <br />
                <asp:LinkButton ID="InsertButton" runat="server" CausesValidation="True"
CommandName="Insert" Text="Insert" />
                 <asp:LinkButton ID="InsertCancelButton" runat="server" CausesValidation="False"
CommandName="Cancel" Text="Cancel" />
            </InsertItemTemplate>
            <ItemTemplate>
                Cust_Id:
                <asp:Label ID="Cust_IdLabel" runat="server" Text='<%# Bind("Cust_Id") %>' />
                <br />
                Cust_Name:
                <asp:Label ID="Cust_NameLabel" runat="server" Text='<%# Bind("Cust_Name") %>' />
                <br />
                State:
                <asp:Label ID="StateLabel" runat="server" Text='<%# Bind("State") %>' />
                <br />
                City:
                <asp:Label ID="CityLabel" runat="server" Text='<%# Bind("City") %>' />
                <br />
                <asp:LinkButton ID="EditButton" runat="server" CausesValidation="False"
CommandName="Edit" Text="Edit" />
                 <asp:LinkButton ID="DeleteButton" runat="server" CausesValidation="False"
CommandName="Delete" Text="Delete" />
                 <asp:LinkButton ID="NewButton" runat="server" CausesValidation="False"
CommandName="New" Text="New" />
            </ItemTemplate>
            <PagerStyle ForeColor="#8C4510" HorizontalAlign="Center" />
            <RowStyle BackColor="#FFF7E7" ForeColor="#8C4510" />
        </asp:FormView>
        <br />
        <h4>NAME: SANDESH</h4>
    </div>
  </form>
</body>
</html>
```

Web.config:

```
<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  https://go.microsoft.com/fwlink/?LinkId=169433
  -->
<configuration>
  <connectionStrings>
```

```
    <add name="TYConnectionString" connectionString="Server=SAKET;Database=TYDatabase;Integrated
Security=True;" providerName="System.Data.SqlClient" />
  </connectionStrings>
  <system.web>
    <compilation debug="true" targetFramework="4.7.2" />
    <httpRuntime targetFramework="4.7.2" />
  </system.web>
  <system.codedom>
    <compilers>
      <compiler language="c#;cs;csharp" extension=".cs" warningLevel="4"
compilerOptions="/langversion:default /nowarn:1659;1699;1701;612;618"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.CSharpCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=4.1.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" />
      <compiler language="vb;vbs;visualbasic;vbscript" extension=".vb" warningLevel="4"
compilerOptions="/langversion:default /nowarn:41008,40000,40008
/define:_MYTYPE=\&quot;Web\&quot; /optionInfer+"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.VBCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=4.1.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" />
    </compilers>
  </system.codedom>
</configuration>
```

Output:

Inserting and deleting records from a database

Customer Details:	
Cust_Id	2
Cust_Name	Sandesh
State	Maharashtra
City	Mumbai
Delete New	
Copyright by Ravi Sir	
1 2 3 4 5 6 7 8 9	

Customer Details:
Cust_Id: 2 Cust_Name: Sandesh State: Maharashtra City: Mumbai Edit Delete New
Copyright by Ravi Sir

NAME: SANDESH

Inserting and deleting records from a database

Customer Details:	
Cust_Id	2
Cust_Name	Sandesh
State	Maharashtra
City	Mumbai
Delete New	
Copyright by Ravi Sir	
1 2 3 4 5 6 7 8 9	

Customer Details:
Cust_Id: 2 Cust_Name: Sandesh State: Maharashtra City: Mumbai Edit Delete New
Copyright by Ravi Sir

NAME: SANDESH

Practical 6b

Aim: Create a web application to display Using Disconnected Data Access and Databinding using GridView

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 6b.aspx.cs"
Inherits="Practical_8.Pract_8c" %>

<!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="Employee Salary &gt;"></asp:Label>
 <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
          
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Button" />
         <br />
         <br />
         <asp:Label ID="Label2" runat="server"></asp:Label>
         <br />
         <br />
         <asp:GridView ID="GridView1" runat="server" BorderStyle="Ridge" CellPadding="4"
ForeColor="#333333" GridLines="None">
            <AlternatingRowStyle BackColor="White" ForeColor="#284775" />
            <EditRowStyle BackColor="#999999" />
            <FooterStyle BackColor="#5D7B9D" Font-Bold="True" ForeColor="White" />
            <HeaderStyle BackColor="#5D7B9D" Font-Bold="True" ForeColor="White" />
            <PagerStyle BackColor="#284775" ForeColor="White" HorizontalAlign="Center" />
            <RowStyle BackColor="#F7F6F3" ForeColor="#333333" />
            <SelectedRowStyle BackColor="#E2DED6" Font-Bold="True" ForeColor="#333333" />
            <SortedAscendingCellStyle BackColor="#E9E7E2" />
            <SortedAscendingHeaderStyle BackColor="#506C8C" />
            <SortedDescendingCellStyle BackColor="#FFFDF8" />
            <SortedDescendingHeaderStyle BackColor="#6F8DAE" />
         </asp:GridView>
      </div>
   </form>
   <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

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

```
using System.Web.Configuration;
using System.Configuration;

namespace Practical_8
{
   public partial class Pract_8c : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         try
         {
            // Debugging - Check if TextBox1 is null
            if (TextBox1 == null)
            {
               throw new Exception("TextBox1 is null.");
            }

            string connStr = WebConfigurationManager.ConnectionStrings["connStr"].ConnectionString;
            if (string.IsNullOrEmpty(connStr))
            {
               Label2.Text = "Connection string not found!";
               return;
            }
            using (SqlConnection con = new SqlConnection(connStr))
            {
               con.Open();
               string sql = "SELECT * FROM Employee WHERE Esalary > @Salary";
               using (SqlCommand cmd = new SqlCommand(sql, con))
               {
                  decimal salary;
                  if (decimal.TryParse(TextBox1.Text, out salary))
                  {
                     cmd.Parameters.AddWithValue("@Salary", salary);

                     SqlDataAdapter da = new SqlDataAdapter(cmd);
                     DataSet ds = new DataSet();
                     da.Fill(ds);

                     // Debugging - Check if dataset is empty
                     if (ds.Tables.Count == 0 || ds.Tables[0].Rows.Count == 0)
                     {
                        Label2.Text = "No records found.";
                     }
                     else
                     {
                        GridView1.DataSource = ds.Tables[0];
                        GridView1.DataBind();
                     }
                  }
                  else
                  {
```

```
                    Label2.Text = "Please enter a valid salary.";
                }
            }
        }
    }
    catch (Exception ex)
    {
        Label2.Text = "";
        Label2.Text = "Invalid Query ..." + ex.Message;
    }
  }

}
 }
```

Web.config:

```
<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  https://go.microsoft.com/fwlink/?LinkId=169433
  -->
<configuration>
  <system.web>
    <compilation debug="true" targetFramework="4.7.2" />
    <httpRuntime targetFramework="4.7.2" />
  </system.web>

        <connectionStrings>
                <add name="connStr" connectionString="Data Source=SAKET;Initial
Catalog=EmployeeDB;Integrated Security=True" providerName="System.Data.SqlClient" />
        </connectionStrings>

    </configuration>
```

Output:

EmployeeId	Name	Esalary
1	Saket	100000.00
2	Sandesh	120000.00
3	Sahil	2000000.00
4	Suraj	10000000.00
5	Deepak	5000000.00
6	Karan	3000000.00

NAME: SANDESH

Practical 7a

Aim: Create a web application to demonstrate the use of different types of Cookies.

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="CookiesDemo.aspx.cs"
Inherits="New_Pract_7a.CookiesDemo" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <meta charset="utf-8" />
   <title>Cookie Demo</title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <h2>Cookie Demonstration</h2>
         <asp:Label ID="lblMessage" runat="server" Text="Cookie Info will appear here." />

         <h3>Create Cookies</h3>
         <label for="cookieValue">Enter Cookie Value:</label>
         <asp:TextBox ID="txtCookieValue" runat="server"></asp:TextBox>
         <br /><br />
         <asp:Button ID="btnCreateSessionCookie" runat="server" Text="Create Session Cookie"
OnClick="btnCreateSessionCookie_Click" />
         <asp:Button ID="btnCreatePersistentCookie" runat="server" Text="Create Persistent Cookie"
OnClick="btnCreatePersistentCookie_Click" />
         <asp:Button ID="btnCreateSecureCookie" runat="server" Text="Create Secure Cookie"
OnClick="btnCreateSecureCookie_Click" />
         <br /><br />

         <h3>Retrieve Cookie</h3>
         <asp:Button ID="btnRetrieveCookie" runat="server" Text="Retrieve Cookie"
OnClick="btnRetrieveCookie_Click" />
         <br /><br />

         <h3>Delete Cookie</h3>
         <asp:Button ID="btnDeleteCookie" runat="server" Text="Delete Cookie"
OnClick="btnDeleteCookie_Click" />
      </div>
   </form>
   <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

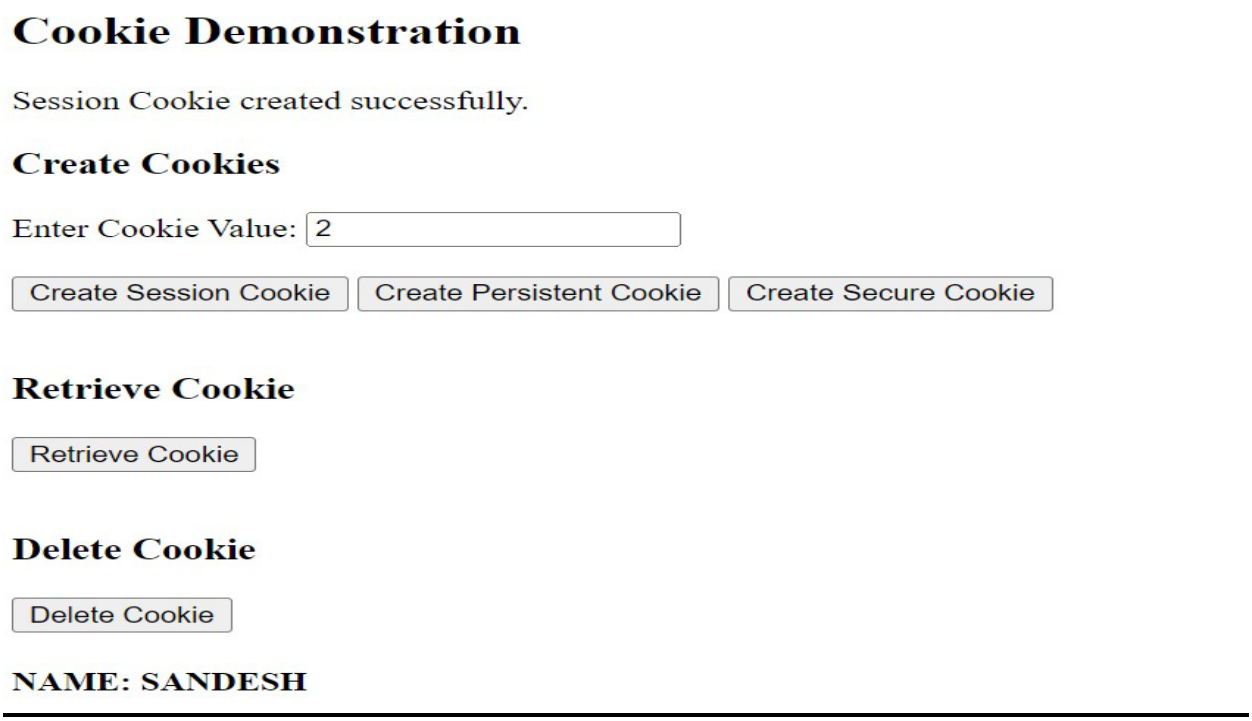
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace New_Pract_7a
```

```
{
    public partial class CookiesDemo : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            lblMessage.Text = "";
        }

        // Create a session cookie (expires when browser is closed)
        protected void btnCreateSessionCookie_Click(object sender, EventArgs e)
        {
            string cookieValue = txtCookieValue.Text;
            HttpCookie sessionCookie = new HttpCookie("SessionCookie", cookieValue);
            Response.Cookies.Add(sessionCookie);
            lblMessage.Text = "Session Cookie created successfully.";
        }

        // Create a persistent cookie (expires in 30 days)
        protected void btnCreatePersistentCookie_Click(object sender, EventArgs e)
        {
            string cookieValue = txtCookieValue.Text;
            HttpCookie persistentCookie = new HttpCookie("PersistentCookie", cookieValue);
            persistentCookie.Expires = DateTime.Now.AddDays(30); // Set expiration to 30 days
            Response.Cookies.Add(persistentCookie);
            lblMessage.Text = "Persistent Cookie created successfully.";
        }

        // Create a secure cookie (only sent over HTTPS)
        protected void btnCreateSecureCookie_Click(object sender, EventArgs e)
        {
            string cookieValue = txtCookieValue.Text;
            HttpCookie secureCookie = new HttpCookie("SecureCookie", cookieValue);
            secureCookie.Secure = true; // Ensure it's sent only over HTTPS
            Response.Cookies.Add(secureCookie);
            lblMessage.Text = "Secure Cookie created successfully.";
        }

        // Retrieve cookie value
        protected void btnRetrieveCookie_Click(object sender, EventArgs e)
        {
            if (Request.Cookies["SessionCookie"] != null)
            {
                lblMessage.Text = "Session Cookie: " + Request.Cookies["SessionCookie"].Value + "<br/>";
            }

            if (Request.Cookies["PersistentCookie"] != null)
            {
                lblMessage.Text += "Persistent Cookie: " + Request.Cookies["PersistentCookie"].Value +
"<br/>";
            }

            if (Request.Cookies["SecureCookie"] != null)
            {
                lblMessage.Text += "Secure Cookie: " + Request.Cookies["SecureCookie"].Value + "<br/>";
            }
```

```
        if (lblMessage.Text == "")
        {
            lblMessage.Text = "No cookies found.";
        }
    }

    // Delete cookie
    protected void btnDeleteCookie_Click(object sender, EventArgs e)
    {
        if (Request.Cookies["SessionCookie"] != null)
        {
            HttpCookie sessionCookie = new HttpCookie("SessionCookie");
            sessionCookie.Expires = DateTime.Now.AddDays(-1); // Expire the cookie
            Response.Cookies.Add(sessionCookie);
        }

        if (Request.Cookies["PersistentCookie"] != null)
        {
            HttpCookie persistentCookie = new HttpCookie("PersistentCookie");
            persistentCookie.Expires = DateTime.Now.AddDays(-1); // Expire the cookie
            Response.Cookies.Add(persistentCookie);
        }

        if (Request.Cookies["SecureCookie"] != null)
        {
            HttpCookie secureCookie = new HttpCookie("SecureCookie");
            secureCookie.Expires = DateTime.Now.AddDays(-1); // Expire the cookie
            Response.Cookies.Add(secureCookie);
        }

        lblMessage.Text = "All cookies have been deleted.";
    }
}
  }
```

Output:

Session Cookie creation:



Persistent Cookie creation:

Cookie Demonstration

Persistent Cookie created successfully.

Create Cookies

Enter Cookie Value: 1

Create Session Cookie | Create Persistent Cookie | Create Secure Cookie

Retrieve Cookie

Retrieve Cookie

Delete Cookie

Delete Cookie

Secure Cookie creation:

Cookie Demonstration

Secure Cookie created successfully.

Create Cookies

Enter Cookie Value: 1

Create Session Cookie | Create Persistent Cookie | Create Secure Cookie

Retrieve Cookie

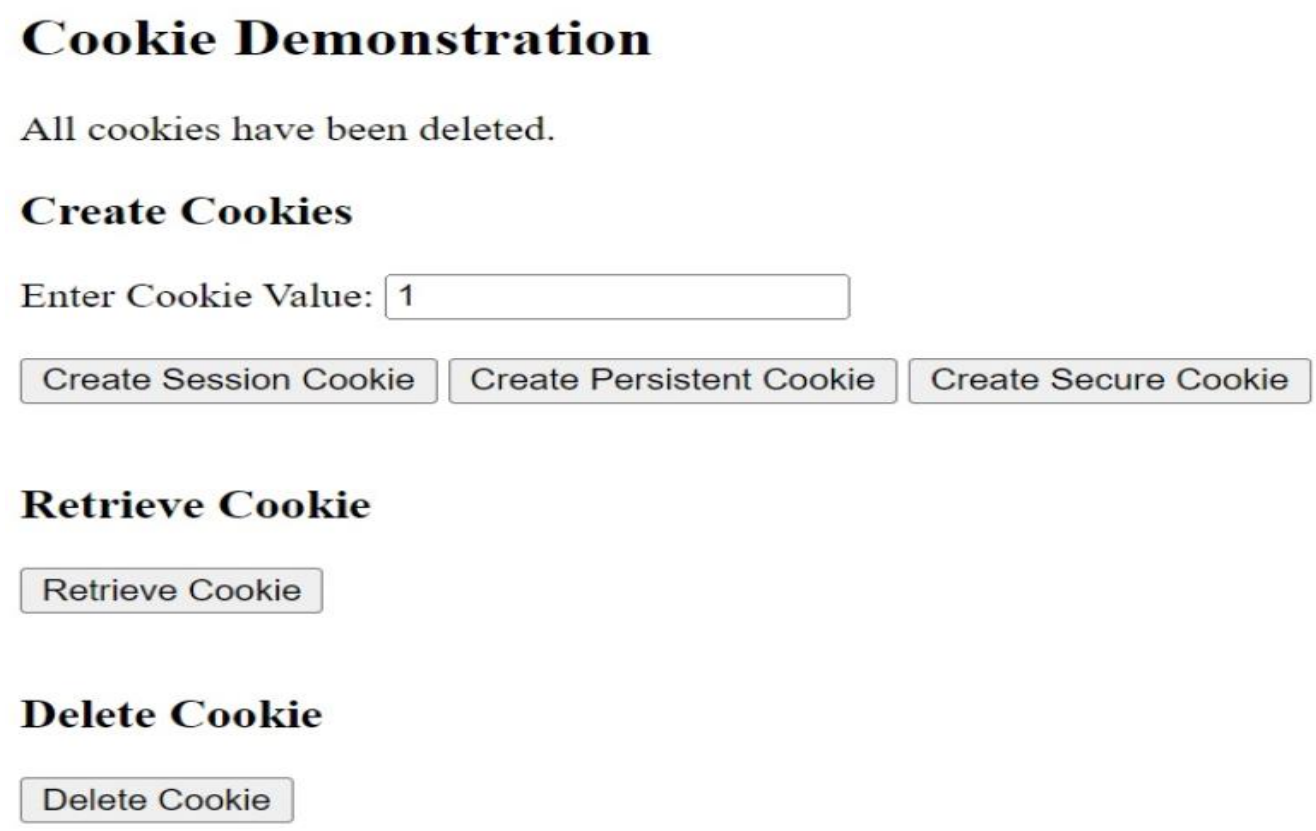
Retrieve Cookie

Delete Cookie

Delete Cookie

Retrieving Cookie:

Deleting Cookie:



Practical 7b

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

Design:

Code:

Output:

Practical 8a

Aim: Create a web application for inserting and deleting records from a database. (Using ExecuteNon Query).

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 8a.aspx.cs"
Inherits="Practical_8.Pract_8a" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style type="text/css">
        .auto-style1 {
            width: 36%;
            height: 111px;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <table class="auto-style1">
                <tr>
                    <td>
                        <asp:Label ID="Label2" runat="server" Text="Employee ID"></asp:Label>
                    </td>
                    <td>
                        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>
                        <asp:Label ID="Label3" runat="server" Text="Employee Name"></asp:Label>
                    </td>
                    <td>
                        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>
                        <asp:Label ID="Label4" runat="server" Text="Employee Salary"></asp:Label>
                    </td>
                    <td>
                        <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td> </td>
                    <td> </td>
                </tr>
                <tr>
```

```
                <td>
                    <asp:Button ID="Button1" runat="server" Text="Insert" OnClick="Button1_Click" />
                </td>
                <td> </td>
            </tr>
            <tr>
                <td colspan="2">
                    <asp:Label ID="Label5" runat="server"></asp:Label>
                </td>
            </tr>
        </table>
        <asp:SqlDataSource ID="SqlDataSource1" runat="server"
            ConnectionString="<%$ ConnectionStrings:connStr2 %>"
            InsertCommand="INSERT INTO [Employee2] ([Eid], [Ename], [Esalary]) VALUES (@Eid,
@Ename, @Esalary)">
            <InsertParameters>
                <asp:Parameter Name="Eid" Type="Int32" />
                <asp:Parameter Name="Ename" Type="String" />
                <asp:Parameter Name="Esalary" Type="Decimal" />
            </InsertParameters>
        </asp:SqlDataSource>
        <br />
        <asp:Label ID="Label6" runat="server" Text="Select Employee Id:"></asp:Label>
         <asp:DropDownList ID="DropDownList1" runat="server" DataTextField="Eid"
DataValueField="Eid">
        </asp:DropDownList>
        <asp:SqlDataSource ID="SqlDataSource2" runat="server"
            ConnectionString="<%$ ConnectionStrings:connStr2 %>"
            SelectCommand="SELECT Eid FROM Employee2">
        </asp:SqlDataSource>
        <br />
        <br />
        <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Delete" />
        <br />
        <br />
    </div>
  </form>
  <h4>NAME: SANDESH</h4>
</body>
</html>
```

Code:

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

namespace Practical_8
{
  public partial class Pract_8a : System.Web.UI.Page
  {
    protected void Page_Load(object sender, EventArgs e)
    {
      // Optional: Bind the DropDownList on first load
      if (!IsPostBack)
      {
```

```
            DropDownList1.DataBind();
        }
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        // Validate TextBox inputs
        if (string.IsNullOrEmpty(TextBox1.Text) || string.IsNullOrEmpty(TextBox2.Text) ||
string.IsNullOrEmpty(TextBox3.Text))
        {
            Label5.Text = "Please fill all fields.";
            return;
        }

        // Set Insert Parameters
        SqlDataSource1.InsertParameters["Eid"].DefaultValue = TextBox1.Text;
        SqlDataSource1.InsertParameters["Ename"].DefaultValue = TextBox2.Text;
        SqlDataSource1.InsertParameters["Esalary"].DefaultValue = TextBox3.Text;

        // Execute Insert
        try
        {
            SqlDataSource1.Insert();
            Label5.Text = "Record added successfully";


            DropDownList1.DataBind(); // Refresh the DropDownList
        }
        catch (Exception ex)
        {
            Label5.Text = "Error: " + ex.Message;
        }
    }

    protected void Button2_Click(object sender, EventArgs e)
    {
        // Validate DropDownList selection
        if (DropDownList1.SelectedValue == "")
        {
            Label5.Text = "Please select an employee to delete.";
            return;
        }

        // Set Delete Command and execute
        try
        {
            SqlDataSource1.DeleteCommand = "DELETE FROM Employee2 WHERE Eid = @Eid";
            SqlDataSource1.DeleteParameters.Clear();
            SqlDataSource1.DeleteParameters.Add("Eid", DropDownList1.SelectedItem.Value);
            SqlDataSource1.Delete();

            Label5.Text = "Record deleted successfully";
            DropDownList1.DataBind(); // Refresh the DropDownList
        }
        catch (Exception ex)
        {
```

```
            Label5.Text = "Error: " + ex.Message;
        }
    }
}
}
```

Output:

Practical 8b

Aim: Create a web application for user defined exception handling.

Design:

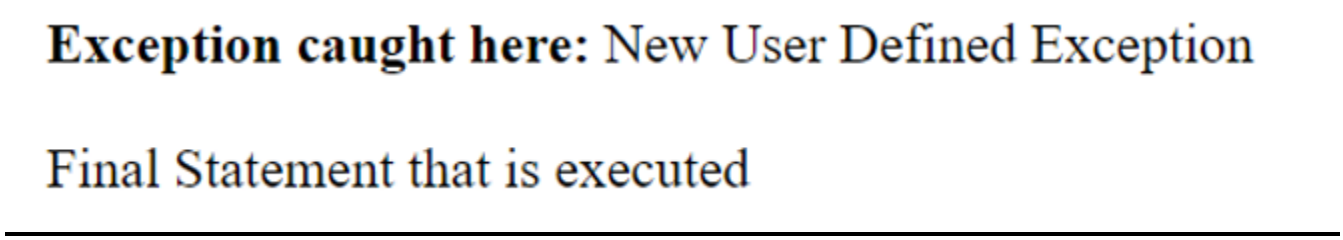
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="New_Pract_8_b.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
<asp:Label ID="Label1" runat="server" Text=""></asp:Label>
<br />
<br />
<asp:Label ID="Label2" runat="server" Text=""></asp:Label>
</div>
   </form>

</body>
</html>
```

Code:

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

namespace New_Pract_8_b
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         try
         {
            // Throwing the custom exception
            throw new UserDefinedException("New User Defined Exception");
         }
         catch (UserDefinedException ex) // Catching the custom exception
         {
            Label1.Text = "<b>Exception caught here: </b>" + ex.Message;
         }
         catch (Exception ex) // Catching any other exceptions
         {
            Label1.Text = "<b>Exception caught here: </b>" + ex.ToString();
         }
```

```
            // Final statement
            Label2.Text = "Final Statement that is executed";
        }

        // Custom exception class
        class UserDefinedException : Exception
        {
            public UserDefinedException(string message) : base(message)
            {
                // Optionally log the exception message or perform other actions
            }
        }
    }
}
```

Output:



Practical 9a

Aim: Create a web application to demonstrate use of GridView button column and GridView events along with paging and sorting.

Design & Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Pract 9 a.aspx.cs"
Inherits="Practical_8.Pract_9_a" %>

<!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" AllowPaging="True"
AutoGenerateColumns="False" CellPadding="4" DataKeyNames="EmployeeId"
DataSourceID="SqlDataSource1" ForeColor="#333333" GridLines="None" Height="283px"
Width="452px">
            <AlternatingRowStyle BackColor="White" ForeColor="#284775" />
            <Columns>
               <asp:BoundField DataField="EmployeeId" HeaderText="EmployeeId"
SortExpression="EmployeeId" InsertVisible="False" ReadOnly="True" />
               <asp:BoundField DataField="Name" HeaderText="Name" SortExpression="Name" />
               <asp:BoundField DataField="Esalary" HeaderText="Esalary" SortExpression="Esalary" />
            </Columns>
            <EditRowStyle BackColor="#999999" />
            <EmptyDataTemplate>
               No Record Found
            </EmptyDataTemplate>
            <FooterStyle BackColor="#5D7B9D" Font-Bold="True" ForeColor="White" />
            <HeaderStyle BackColor="#5D7B9D" Font-Bold="True" ForeColor="White" />
            <PagerStyle BackColor="#284775" ForeColor="White" HorizontalAlign="Center" />
            <PagerTemplate>
               Pager Template
            </PagerTemplate>
            <RowStyle BackColor="#F7F6F3" ForeColor="#333333" />
            <SelectedRowStyle BackColor="#E2DED6" Font-Bold="True" ForeColor="#333333" />
            <SortedAscendingCellStyle BackColor="#E9E7E2" />
            <SortedAscendingHeaderStyle BackColor="#506C8C" />
            <SortedDescendingCellStyle BackColor="#FFFDF8" />
            <SortedDescendingHeaderStyle BackColor="#6F8DAE" />
         </asp:GridView>
         <asp:SqlDataSource ID="SqlDataSource1" runat="server"
ConnectionString="<%$ ConnectionStrings:connStr %>" SelectCommand="SELECT * FROM
[Employee]"></asp:SqlDataSource>
      </div>
   </form>
</body>
</html>
```

Output:

EmployeeId	Name	Esalary
1	Saket	100000.00
2	Sandesh	120000.00
3	Sahil	2000000.00
4	Suraj	10000000.00
5	Deepak	5000000.00
6	Karan	3000000.00

Practical 9b

Aim: Create a web application to demonstrate data binding using DetailsView and FormView Control

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="PRACT 9 B.aspx.cs"
Inherits="Practical_8.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
  <form id="form1" runat="server">
      <div>
         <!-- DetailsView Control -->
         <asp:DetailsView ID="DetailsView1" runat="server" DataSourceID="SqlDataSource1"
AutoGenerateRows="False" DataKeyNames="EmployeeId">
            <Fields>
               <asp:BoundField DataField="EmployeeId" HeaderText="EmployeeId" InsertVisible="False"
ReadOnly="True" SortExpression="EmployeeId" />
               <asp:BoundField DataField="Name" HeaderText="Name" SortExpression="Name" />
               <asp:BoundField DataField="Esalary" HeaderText="Esalary" SortExpression="Esalary" />
            </Fields>
         </asp:DetailsView>
         <br />

         <!-- FormView Control -->
         <asp:FormView ID="FormView1" runat="server" DataSourceID="SqlDataSource1"
DataKeyNames="EmployeeId" OnItemCommand="FormView1_ItemCommand" >
            <EditItemTemplate>
               EmployeeId:
               <asp:Label ID="EmployeeIdLabel1" runat="server" Text='<%# Eval("EmployeeId") %>' />
               <br />
               Name:
               <asp:TextBox ID="NameTextBox" runat="server" Text='<%# Bind("Name") %>' />
               <br />
               Esalary:
               <asp:TextBox ID="EsalaryTextBox" runat="server" Text='<%# Bind("Esalary") %>' />
               <br />
               <asp:LinkButton ID="UpdateButton" runat="server" CausesValidation="True"
CommandName="Update" Text="Update" />
                <asp:LinkButton ID="UpdateCancelButton" runat="server" CausesValidation="False"
CommandName="Cancel" Text="Cancel" />
            </EditItemTemplate>
            <InsertItemTemplate>
               Name:
               <asp:TextBox ID="NameTextBox" runat="server" Text='<%# Bind("Name") %>' />
               <br />
               Esalary:
               <asp:TextBox ID="EsalaryTextBox" runat="server" Text='<%# Bind("Esalary") %>' />
               <br />
```

```
            <asp:LinkButton ID="InsertButton" runat="server" CausesValidation="True"
CommandName="Insert" Text="Insert" />
             <asp:LinkButton ID="InsertCancelButton" runat="server" CausesValidation="False"
CommandName="Cancel" Text="Cancel" />
        </InsertItemTemplate>
        <ItemTemplate>
            EmployeeId:
            <asp:Label ID="EmployeeIdLabel" runat="server" Text='<%# Eval("EmployeeId") %>' />
            <br />
            Name:
            <asp:Label ID="NameLabel" runat="server" Text='<%# Eval("Name") %>' />
            <br />
            Esalary:
            <asp:Label ID="EsalaryLabel" runat="server" Text='<%# Eval("Esalary") %>' />
            <br />
        </ItemTemplate>
    </asp:FormView>

    <!-- SQL Data Source -->
    <asp:SqlDataSource ID="SqlDataSource1" runat="server"
        ConnectionString="<%$ ConnectionStrings:connStr %>"
        SelectCommand="SELECT * FROM [Employee]">
    </asp:SqlDataSource>
  </div>
 </form>
</body>
</html>
```

Output:

EmployeeId	1
Name	Saket
Esalary	100000.00

EmployeeId: 1
Name: Saket
Esalary: 100000.00

EmployeeId	1
Name	Saket
Esalary	100000.00

EmployeeId: 1
Name: Saket
Esalary: 100000.00

NAME: SAKET

Practical 10a

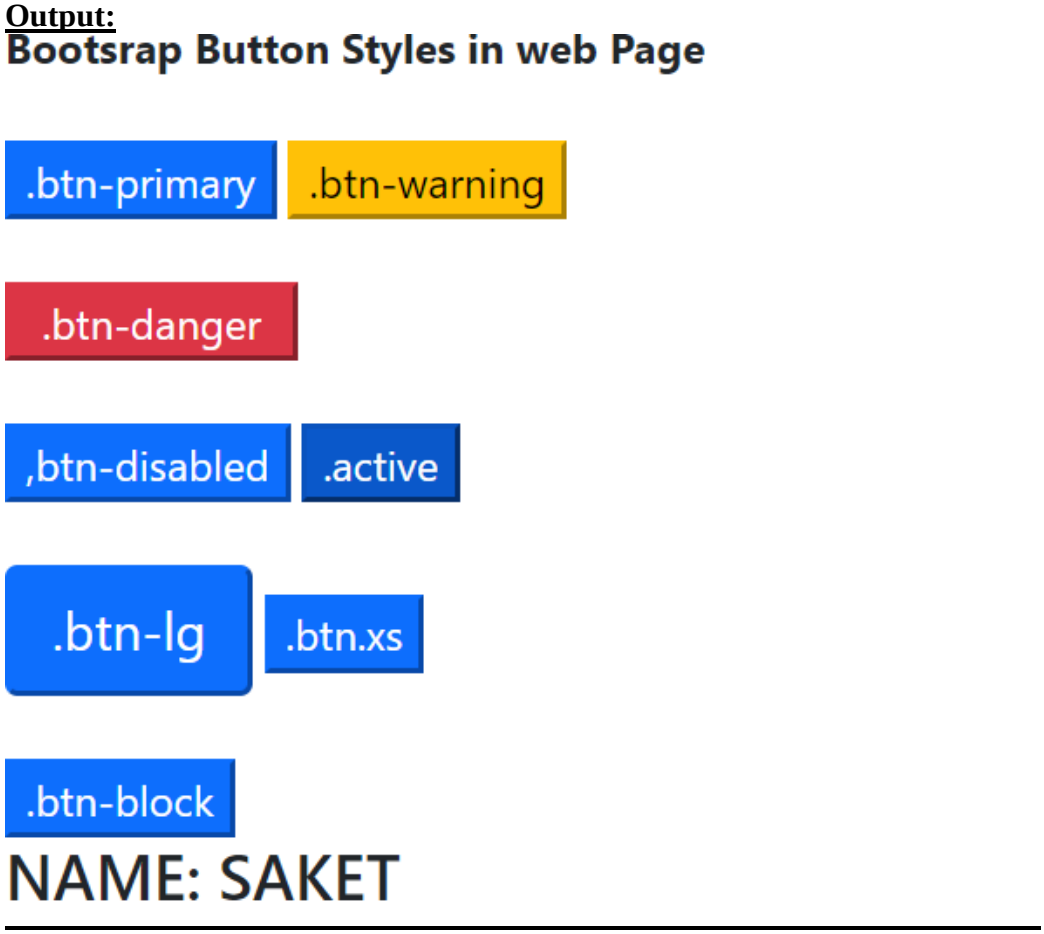
Aim: Create a web application to demonstrate JS Bootstrap Button.

Design & Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Bootstrap.aspx.cs"
Inherits="Pract10a.Bootstrap" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Bootstrap example</title>
<meta charset="utf-8"/>
<meta name="viewport" content="width=device-width, initial-scale=1"/>
<%--<link rel="stylesheet" href= "https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css"/>
<script
   src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js">
</script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js">
</script> --%>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous"/>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.2/dist/umd/popper.min.js" integrity="sha384-
IQsoLXl5PILFhosVNubq5LC7Qb9DXgDA9i+tQ8Zj3iwWAwPtgFTxbJ8NT4GN1R8p"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.min.js" integrity="sha384-
cVKIPhGWiC2Al4u+LWgxfKTRIcfu0JTxR+EQDz/bgldoEyl4H0zUF0QKbrJ0EcQF"
crossorigin="anonymous"></script>
</head>
<body>
<form id="form1" runat="server">
<div>
<strong>Bootsrap Button Styles in web Page<br />
<br />
</strong>
</div>
<asp:Button ID="Button1" runat="server" CssClass="btn-primary" Text=".btn-primary" />
<asp:Button ID="Button2" runat="server" CssClass="btn-warning" Text=".btn-warning" />
<br />
<br />
<asp:Button ID="Button4" runat="server" CssClass="btn-danger" Text=".btn-danger" Width="112px" />
<br />
<br />
<asp:Button ID="Button5" runat="server" CssClass="btn-primary disabled" Text=",btn-disabled" />
<asp:Button ID="Button6" runat="server" CssClass="btn-primary active" Text=".active" />
<br />
<br />
<asp:Button ID="Button7" runat="server" CssClass="btn-primary btn-lg" Text=".btn-lg" />
```

```
<asp:Button ID="Button8" runat="server" Text=".btn.xs" CssClass="btn-primary btn-xs" />
<br />
<br />
<asp:Button ID="Button9" runat="server" Text=".btn-block" CssClass="btn-primary btn-block" />
</form>
   <h4>NAME: SAKET</h4>
   </body>
    </html>
```

Output:



Practical 10b

Aim: Create a web application to demonstrate use of various Ajax controls

Design:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="pract 10 B.aspx.cs"
Inherits="Practical_10.pract_10_c" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
   </head>
<body>
   <form id="form1" runat="server">
      <div>
         <asp:ScriptManager ID="ScriptManager1" runat="server">
         </asp:ScriptManager>
         <br />
         <h1 style="color:blueviolet">From Outside of Update Pannel:</h1>
         <h3>It will refresh the whole page when the button gets pressed.</h3>
         Enter The Name :
         <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Label ID="Label1" runat="server" Text=""></asp:Label>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Get Name" />
         <br />
         <br />
         <br />
         <asp:UpdatePanel ID="UpdatePanel1" runat="server">
            <ContentTemplate>
               <h1 style="color:blueviolet">From Inside of Update Pannel:</h1> <br/>
               <h3>It will refresh the only sub part of page when the button gets pressed.</h3>
               Enter The Surname:
               <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
<br />
               <asp:Label ID="Label2" runat="server" Text=""></asp:Label>
               <br />
               <br />
               <asp:UpdateProgress ID="UpdateProgress1" runat="server" DisplayAfter="1000"
AssociatedUpdatePanelID="UpdatePanel1">
                  <ProgressTemplate>
                     Please Wait ...
                     <br />
                     <asp:Image ID="Image1" runat="server" ImageUrl="~image" />

                  </ProgressTemplate>
               </asp:UpdateProgress>
               <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Get Surname" />
               <br>
               </br>
               <br />
            </ContentTemplate>
```

```
        </asp:UpdatePanel>
        <asp:UpdatePanel ID="UpdatePanel2" runat="server">
          <ContentTemplate>
            Time :
            <asp:Label ID="Label3" runat="server"></asp:Label>
             <asp:Timer ID="Timer1" runat="server" Interval="10000" OnTick="Timer1_Tick1">
            </asp:Timer>
            <br />
          </ContentTemplate>
        </asp:UpdatePanel>
        <br />
      </div>
    </form>
    <h4>NAME: SAKET</h4>
</body>
</html>
```

Output:

From Outside of Update Pannel:

It will refresh the whole page when the button gets pressed.

Enter The Name :

Get Name

From Inside of Update Pannel:

It will refresh the only sub part of page when the button gets pressed.

Enter The Surname:

Get Surname

Time :

NAME: SAKET

From Outside of Update Pannel:

It will refresh the whole page when the button gets pressed.

Enter The Name : Saket

You have Entered Saket

Get Name

From Inside of Update Pannel:

It will refresh the only sub part of page when the button gets pressed.

Enter The Surname: Gupta
You have Entered Gupta

Get Surname

Time : 23:30:44

NAME: SAKET

Practical 10c

Aim:

Design:

Code:

Output: