

## 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.WriteLine("NAME : SANDESH \n\n");
            // Prompt the user to enter the first number
            Console.WriteLine("Enter the first number: ");
            double num1 = Convert.ToDouble(Console.ReadLine());

            // Prompt the user to enter the second number
            Console.WriteLine("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($"Results:");
            Console.WriteLine($"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.WriteLine("NAME :Sandesh \n\n");
            // Prompt the user to enter the number of rows for Floyd's triangle
            Console.WriteLine("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

body  
Practical 1 - c - i : [Generate Fibonacci series.](#)  
Practical 1 - c - ii : [Test for prime numbers.](#)

---

#### 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>
            &nbsp;<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>
            &nbsp;<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.)

div

Enter The Number of Elements in Fibonacci Series:

---

#### Source Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract1_d_.WebForm1" %>
```

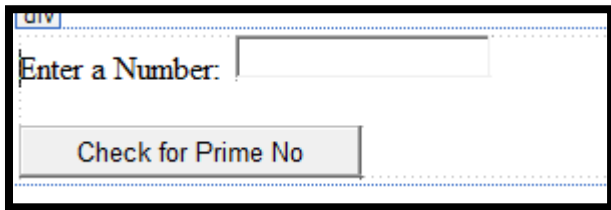
```

<!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>&nbsp;
            <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.)

Fibonacci Series:0 1 1 2 3 5 8 13 21 34

Enter The Number of Elements in Fibonacci Series:

---

**WebForm2.aspx** (Test for prime numbers.)

21 is not Prime Number

Enter a Number:

---



## 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:**

```
NAME: Sandesh

Boxing:
Value type (int): 123
Boxed type (object): 145

Unboxing:
Boxed type (object): 145
Value type (int): 123
Unboxed type (int): 145
|
```

## 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.WriteLine("NAME: Sandesh \n\n");
            // Create delegate instances
            Operation addOperation = new Operation(Add);
            Operation subtractOperation = new Operation(Subtract);

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

            Console.WriteLine("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 {
```



```

        </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                                     | <input type="text" value="71"/>   |
| Name                                    | <input type="text" value="Sandesh"/>  |
| Class                                   | <input type="radio"/> FY <input type="radio"/> SY <input checked="" type="radio"/> TY |
| Course                                  | <input type="text" value="B.Sc.(I.T.)"/> ▼  |
| <input type="button" value="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:

| August |     | September 2024 |     |                                     |     |                                      | October |
|--------|-----|----------------|-----|-------------------------------------|-----|--------------------------------------|---------|
| >>     | Mon | Tue            | Wed | Thu                                 | Fri | Sat                                  | Sun     |
| >      | 26  | 27             | 28  | 29                                  | 30  | 31                                   | 1       |
| >      | 2   | 3              | 4   | 5                                   | 6   | 7/br<br>Ganpati<br>Vacation<br>Start |         |
| >      | 9   | 10             | 11  | 12/br<br>Ganpati<br>Vacation<br>End |     | 13                                   | 14      |
| >      | 16  | 17             | 18  | 19                                  | 20  | 21                                   | 22      |
| >      | 23  | 24             | 25  | 26                                  | 27  | 28                                   | 29      |
| >      | 30  | 1              | 2   | 3                                   | 4   | 5                                    | 6       |

**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;
        }

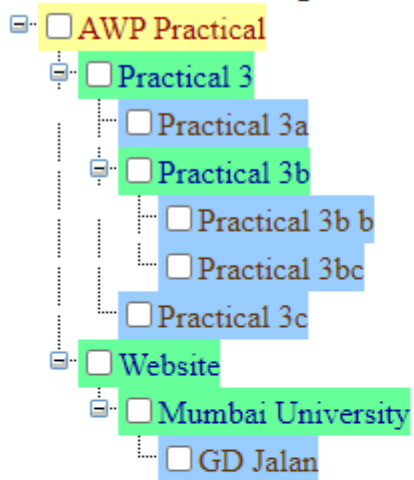
        protected void TreeView1_TreeNodeCollapsed(object sender, TreeNodeEventArgs e)
        {
            Label1.Text = "The Value Collapsed was:" + e.Node.Value;
        }
    }
}

```

```
}  
}
```

### **Output:**

Treeview Control Navigation:



**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>
            &nbsp;<asp:TextBox ID="TextBox1" runat="server" TextMode="Password"></asp:TextBox>
            &nbsp;<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ControlToValidate="TextBox1" ErrorMessage="Password Required"
ForeColor="Red">*</asp:RequiredFieldValidator>
            &nbsp;<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>
            &nbsp;<asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            &nbsp;<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 Emal ID"></asp:Label>
            &nbsp;<asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
            &nbsp;<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>
            &nbsp;<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_Control_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 Email 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 Email 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.aspx" 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="WebUserControl1" 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 Control**

Name

City

**Your Name is SANDESH and you are from TROONBAY**



**NAME: SANDESH**

---

**This is User Control**

Name

City



**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>
```

# Welcome to Page 1 of our website

[Home Page](#) > Page1

---

## 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>
```

# Welcome to Page 2 of our website

[Home Page](#) > [Page1](#) > Page2

---

## 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>
```

# Welcome to Page 3 of our website

[Home Page](#) > [Page1](#) > Page3

## 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>
```

# Welcome to Page 4 of our website

[Home Page](#) > [Page1](#) > Page4

## 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 details</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>&nbsp;&nbsp;&nbsp;</td>
            <td>&nbsp;&nbsp;&nbsp;</td>
        </tr>
        <tr>
            <td colspan="2">
```

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

```
</td>
```

```
</tr>
```

```
</table>
```

```
&nbsp;<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"> &nbsp;</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>
```

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

### Fill the details

Submit

## 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["scent"] == null)
    {
        //Session["scent"] = count;
        Session.Add("scent", 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["scent"] = (int)Session["scent"] + 1;
    Label2.Text = Session["scent"].ToString();
    Application["acnt"] = (int)Application["acnt"] + 1;
    Label3.Text = Application["acnt"].ToString();
    /*count++;
    Label1.Text = count.ToString();*/
}
}
}

```

### **Output:**

View Variable: 1

Session Variable: 1

Application Variable: 1

Get Data

**NAME: SANDESH**

---

## 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> &nbsp;</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 );
        }
    }
}
```

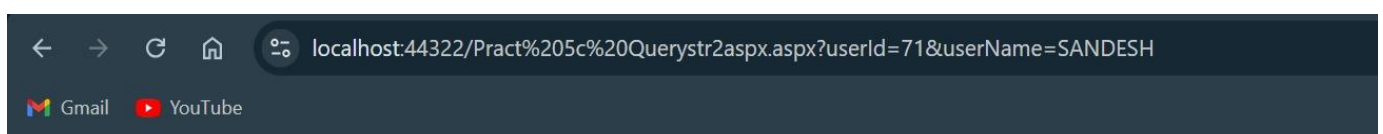
### **Output:**



## Query String Example

|          |  |
|----------|--|
| UserID   | <input type="text" value="71"/>          |
| UserName | <input type="text" value="SANDESH"/>     |
|          | <input type="button" value="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 = "Application Count " + Application["OnlineApplicationUsers"];  
  
    Session["OnlineSessionUsers"] = (int)Session["OnlineSessionUsers"] + 1;  
    Label1.Text = Label1.Text + "<br> Session Count " + Session["OnlineSessionUsers"];  
}  
}
```

$$\}$$

**Output:**

Application Count 1  
Session Count 1

## Get Data

**NAME: SANDESH**

## 4. Cookies

**Design:**

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

&lt;!DOCTYPE html&gt;

[illegible]

**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:**

UserName:

User Email:

**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" />
    &nbsp;<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" />
    &nbsp;<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" />
    &nbsp;<asp:LinkButton ID="DeleteButton" runat="server" CausesValidation="False"
CommandName="Delete" Text="Delete" />
    &nbsp;<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;sharp" 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      |
| <a href="#">Delete</a> <a href="#">New</a> |             |
| 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      |
| <a href="#">Edit</a> <a href="#">Delete</a> <a href="#">New</a> |             |
| 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      |
| <a href="#">Delete</a> <a href="#">New</a> |             |
| 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      |
| <a href="#">Edit</a> <a href="#">Delete</a> <a href="#">New</a> |             |
| 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>
&nbsp;<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
&nbsp;<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:

Employee Salary >

| 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:

## Cookie Demonstration

Session Cookie created successfully.

### Create Cookies

Enter Cookie Value:

Create Session Cookie

Create Persistent Cookie

Create Secure Cookie

### Retrieve Cookie

Retrieve Cookie

### Delete Cookie

Delete Cookie

NAME: SANDESH

---

### Persistent Cookie creation:

## Cookie Demonstration

Persistent Cookie created successfully.

### Create Cookies

Enter Cookie Value:

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:

Create Session Cookie

Create Persistent Cookie

Create Secure Cookie

### Retrieve Cookie

Retrieve Cookie

### Delete Cookie

Delete Cookie

---



### Retrieving Cookie:

## Cookie Demonstration

Session Cookie: 1  
Persistent Cookie: 1  
Secure Cookie: 1

### Create Cookies

Enter Cookie Value:

Create Session Cookie

Create Persistent Cookie

Create Secure Cookie

### Retrieve Cookie

Retrieve Cookie

### Delete Cookie

Delete Cookie

---

### Deleting Cookie:

## Cookie Demonstration

All cookies have been deleted.

### Create Cookies

Enter Cookie Value:

Create Session Cookie

Create Persistent Cookie

Create Secure Cookie

### Retrieve Cookie

Retrieve Cookie

### Delete Cookie

Delete 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 ExecuteNonQuery).

### 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>&nbsp;</td>
                    <td>&nbsp;</td>
                </tr>
            </table>
        </div>
    </form>
</body>
</html>
```

```

        <td>
            <asp:Button ID="Button1" runat="server" Text="Insert" OnClick="Button1_Click" />
        </td>
        <td>&nbsp;</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>
&nbsp;<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:**

Employee ID

Employee Name

Employee Salary

Insert

Record deleted successfully

Select Employee Id:

Delete

**NAME: SANDESH**

---

## 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:**

**Exception caught here: New User Defined Exception**

**Final Statement that is executed**

---



## 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" />
                    &nbsp;<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 />
                </InsertItemTemplate>
            </asp:FormView>
        </div>
    </form>
</body>
</html>
```

```

        <asp:LinkButton ID="InsertButton" runat="server" CausesValidation="True"
CommandName="Insert" Text="Insert" />
        &nbsp;<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-
IQsoLX15PILFhosVNubq5LC7Qb9DXgDA9i+tQ8Zj3iwWAwPtgFTxbJ8NT4GN1R8p"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.min.js" integrity="sha384-
cVKIPhGWic2A14u+LWgxfKTRIfu0JTtR+EQDz/bglDoEyl4H0zUF0QKbrJ0EcQF"
crossorigin="anonymous"></script>
</head>
<body>
<form id="form1" runat="server">
<div>
<strong>Bootstrap 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:**

## **Bootstrap Button Styles in web Page**

**.btn-primary** **.btn-warning**

**.btn-danger**

**.btn-disabled** **.active**

**.btn-lg** **.btn-xs**

**.btn-block**

**NAME: SAKET**

---

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



```

</asp:UpdatePanel>
<asp:UpdatePanel ID="UpdatePanel2" runat="server">
  <ContentTemplate>
    Time :
    <asp:Label ID="Label3" runat="server"></asp:Label>
    &nbsp;<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 :

You have Entered Saket

## From Inside of Update Pannel:

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

Enter The Surname:

You have Entered Gupta

Time : 23:30:44

**NAME: SAKET**

---

---

## **Practical 10c**

**Aim:**

**Design:**

**Code:**

**Output:**