

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.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:

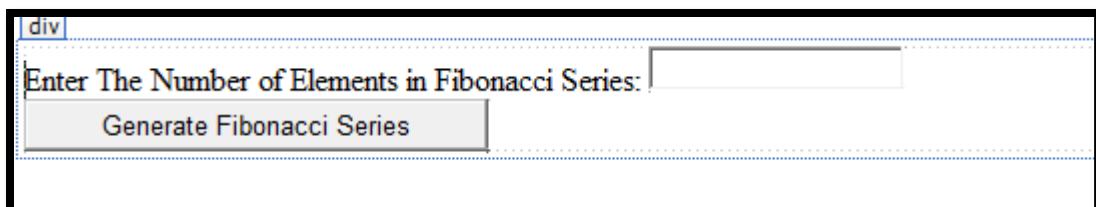
Home Page.aspx

```
|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.)



Source Code:

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

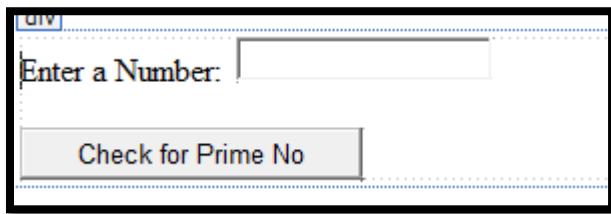
```

<!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.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.

NAME: Sandesh

Code Cr
Amount 780
Code Db
Amount 400

simple application to demonstrate use of the concepts of interfaces.

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:#e4cfef
}

```

</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	<input checked="" type="radio"/> FY <input type="radio"/> SY <input checked="" type="radio"/> TY
Course	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		
>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>1</u>		
>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u> / <u>Ganpati</u> <u>Vacation</u> <u>Start</u>		<u>8</u>	
>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u> / <u>Ganpati</u> <u>Vacation</u> <u>End</u>		<u>13</u>	<u>14</u>	<u>15</u>	
>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>		
>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>		
>	<u>30</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>		

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>
                                            <asp:TreeNode Text="GD Jalan" Value="GD Jalan"
                                                NavigateUrl="https://gdjalan.edu.in/"></asp:TreeNode>
                                            <asp:TreeNode>
                                                <asp:TreeNode>
                                                    <asp:TreeNode Text="GD Jalan" Value="GD Jalan"
                                                        NavigateUrl="https://gdjalan.edu.in/"></asp:TreeNode>
                                                    <asp:TreeNode>
                                                        <asp:TreeNode>
                                                            <asp:TreeNode Text="GD Jalan" Value="GD Jalan"
                                                                NavigateUrl="https://gdjalan.edu.in/"></asp:TreeNode>
                                                        </asp:TreeNode>
                                                    </asp:TreeNode>
                                                </asp:TreeNode>
                                            </asp:TreeNode>
                                        </asp:TreeNode>
                                    </asp:TreeNode>
                                </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;
        }

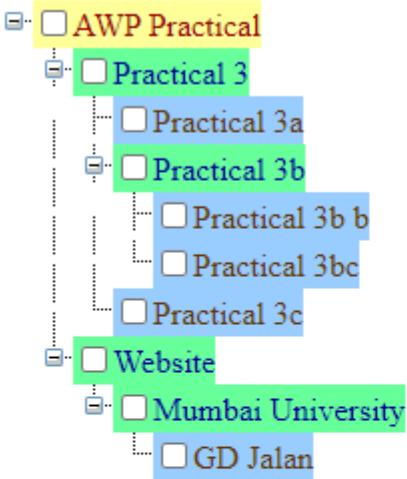
        protected void TreeView1_TreeNodeCollapsed(object sender, TreeNodeEventArgs e)
        {
            Label1.Text = "The Value Collapsed was:" + e.Node.Value;
        }
    }
}

```

```
    }  
}
```

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 Email 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.

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

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 Control1

Name

City

Your Name is SANDESH and you are from TROONBAY



NAME: SANDESH

This is User Control1

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>
        <br />
        <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 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>&nbsp;</td>
            <td>&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>

```

Ghanshyamdas Jalan College of Science & Commerce

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

Copyright by GD JALAN

NAME: SANDESH

Output:

Ghanshyamdas Jalan College of Science & Commerce

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

Contact Us

Fill the details

Name:

Email ID:

Mobile No.

Your Query

Copyright by GD JALAN

NAME: SANDESH

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:

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:

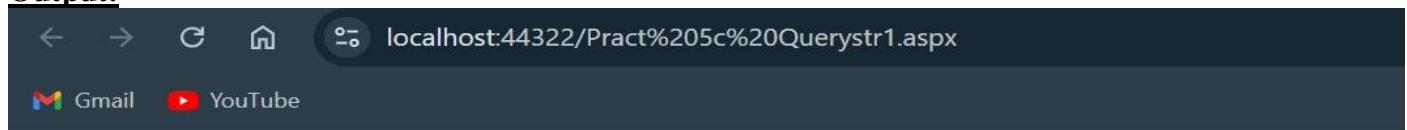
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

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 );
        }
    }
}
```

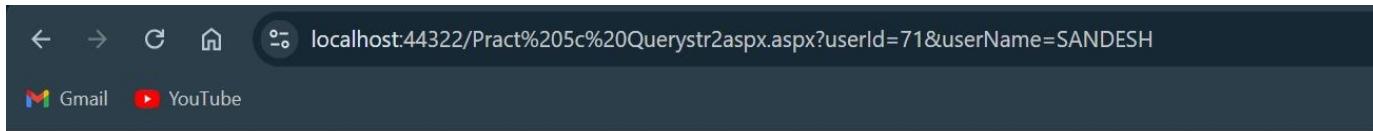
Output:



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 = "Aplication 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" %>

<!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>
            &nbsp;&nbsp;&nbsp;
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            User Email:&nbsp;&nbsp;
            <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:

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" />
  <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="StatusLabel" 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="Web" /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
<u>Delete</u> <u>New</u>	
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
<u>Edit</u> <u>Delete</u> <u>New</u>	
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
<u>Delete</u> <u>New</u>	
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
<u>Edit</u> <u>Delete</u> <u>New</u>	
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();
                            }
                        }
                    }
                }
            }
        }
    }
}

```

```

        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:

Retrieve Cookie

Delete Cookie

NAME: SANDESH

Persistent Cookie creation:

Cookie Demonstration

Persistent Cookie created successfully.

Create Cookies

Enter Cookie Value:

Retrieve Cookie

Delete Cookie

Secure Cookie creation:

Cookie Demonstration

Secure Cookie created successfully.

Create Cookies

Enter Cookie Value:

Retrieve Cookie

Delete Cookie

Retrieving Cookie:

Cookie Demonstration

Session Cookie: 1

Persistent Cookie: 1

Secure Cookie: 1

Create Cookies

Enter Cookie Value:

Retrieve Cookie

Delete Cookie

Deleting Cookie:

Cookie Demonstration

All cookies have been deleted.

Create Cookies

Enter Cookie Value:

Retrieve 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>
                <tr>
```

```

<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: **1 ▾**

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>
        <br />
    </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-MrcW6ZMFYlzcLA8NI+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-IQsoLXI5PILFhosVNubq5LC7Qb9DXgDA9i+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>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 :

From Inside of Update Pannel:

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

Enter The Surname:

Time :

NAME: SAKET

From Outside of Update Panel:

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

Enter The Name :

You have Entered Saket

From Inside of Update Panel:

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: