

**Exam Seat No:**



This is to certify that Mr: **Vaibhav Sanjay Mane** of **T.Y.B.Sc. Information Technology (Semester-V)** Class has been successfully completed all the practical work in Subject **Advanced Web Development**, under the guidance of **Asst.Prof. Dnyaneshwar Deore** during Year 2024-25 in partial fulfillment of Information Technology Practical Examination conducted by University of Mumbai.

Subject in charge

Head Of Department

Date:

**Index**

Sr.no	List of Practicals	Date	Page No.	Sign.
1.	<p>a.Create an application to print on screen the output of adding, subtracting, multiplying and dividing two numbers entered by the user in C#.</p> <p>b.Create an application to print Floyd's triangle till n rows in C#.</p> <p>c.Create an application to demonstrate following operations  i. Generate Fibonacci series.    ii. Test for prime numbers.</p>			
2.	<p>a.Create a simple application to demonstrate the concepts boxing and unboxing.</p> <p>b.Create a simple application to perform addition and subtraction using delegate</p> <p>c.Create a simple application to demonstrate use of the concepts of interfaces.</p>			
3.	<p>a.Create a simple web page with various server controls to demonstrate setting and use of their properties. (Example : AutoPostBack)</p> <p>b.Create a simple application to demonstrate your vacation using calendar control.</p> <p>c.Demonstrate the use of Treeview operations on the web form</p>			
4.	<p>a.Create a Registration form to demonstrate use of various Validation controls.</p> <p>b.Create Web Form to demonstrate use of Adrotator Control.</p> <p>c.Create Web Form to demonstrate use User Controls</p>			
5.	<p>a.Create Web Form to demonstrate use of Website Navigation controls.</p>			

## 1

	<p>b.Create a web application to demonstrate use of Master Page and content page</p> <p>c.Create a web application to demonstrate various states of ASP.NET Pages.</p>			
6.	<p>a.Create a web application for inserting and deleting records from a database.</p> <p>b.Create a web application to display Using Disconnected Data Access and Data binding using GridView</p>			
7.	<p>a.Create a web application to demonstrate the use of different types of Cookies.</p>			
8.	<p>a.Create a web application for inserting and deleting records from a database. (Using ExecuteNon Query).</p> <p>b.Create a web application for user defined exception handling.</p>			
9.	<p>a.Create a web application to demonstrate use of GridView button column and GridView events along with paging and sorting.</p> <p>b.Create a web application to demonstrate data binding using DetailsView and FormView Control</p>			
10.	<p>a.Create a web application to demonstrate JS Bootstrap Button.</p> <p>b.Create a web application to demonstrate use of various Ajax controls</p>			

## 2

## 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());

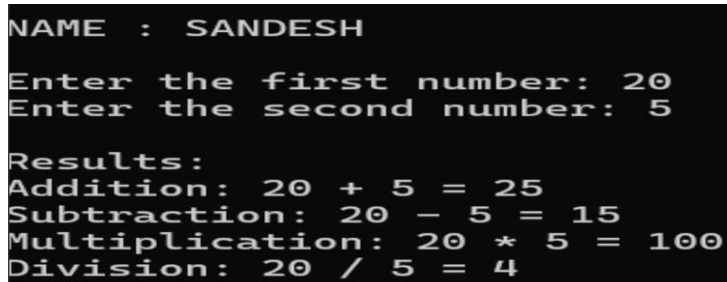
            // Prompt the user to enter the second number
            Console.WriteLine("Enter the second number: ");
            double num2 = Convert.ToDouble(Console.ReadLine());

            // 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
```

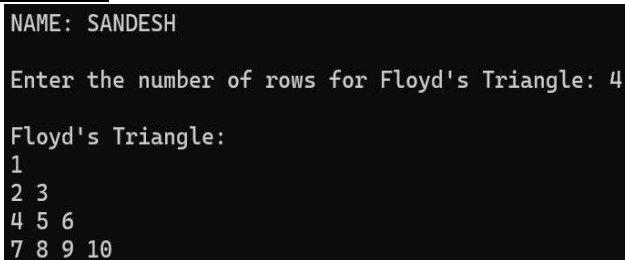
### Practical 1.b

**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:");
```

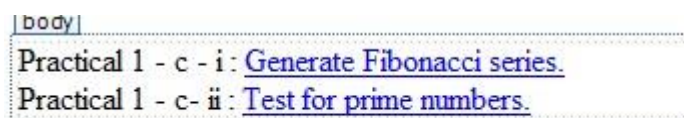
```
for (int i = 1; i <= n; i++)
{
    for (int j = 1; j <= i; j++)
    {
        Console.Write(number + " ");
        number++;
    }
    Console.WriteLine(); // Move to the next line after each row
}
Console.ReadKey();
}
```

**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.)

### 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>

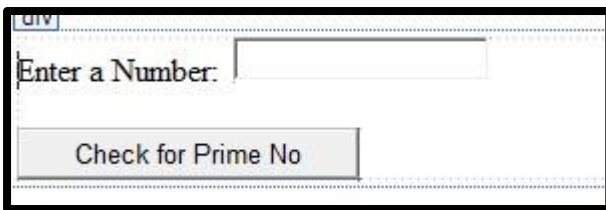
<asp:Label ID="Label1" runat="server" Text="Enter The Number of Elements in Fibonacci Series: "></asp:Label>

```

        <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 2 a.**

**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)
```

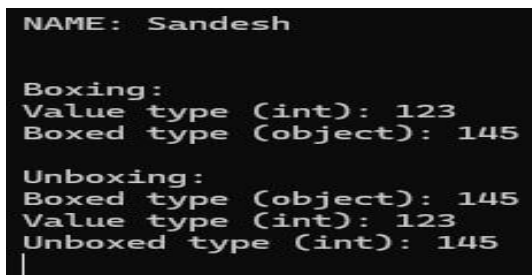
```
{
    Console.WriteLine("NAME: Sandesh \n\n");
// Boxing: Converting a value type (int) to an object
int num = 123; // Value type
    object obj = num; // Boxing - num is converted to an object
obj = 145;

    // 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);
```

NAME : Vaibhav Mane

```
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 {
height: 49px;
width: 289px;
}
body{
background-color:#e4cfcf
}
</style>
</head>
<body>
<form id="form1" runat="server">
<div>
<table class="auto-style1">
<tr>
<td class="auto-style13">
<asp:Label ID="Label1" runat="server" Text="RNo"></asp:Label>
</td>
<td class="auto-style14">
<asp:TextBox ID="TextBox1" runat="server" TabIndex="1"></asp:TextBox>
</td>
</tr>
<tr>
```



```

        <td class="auto-style15">
            <asp:Label ID="Label2" runat="server" Text="Name"></asp:Label>
        </td>
        <td class="auto-style16">
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
        </td>
    </tr>
    <tr>
        <td class="auto-style17">
            <asp:Label ID="Label3" runat="server" Text="Class"></asp:Label>
        </td>
        <td class="auto-style18">
            <asp:RadioButton ID="RadioButton1" runat="server" Text="FY" GroupName="Class" />
            &nbsp;<asp:RadioButton ID="RadioButton2" runat="server" Text="SY" GroupName="Class" />
            &nbsp;<asp:RadioButton ID="RadioButton3" runat="server" Text="TY" GroupName="Class" />
        </td>
    </tr>
    <tr>
        <td class="auto-style19">
            Course</td>
        <td class="auto-style20">
            <asp:DropDownList ID="DropDownList1" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="DropDownList1_SelectedIndexChanged" TabIndex="2">
                <asp:ListItem>B.Com</asp:ListItem>
                <asp:ListItem>BMS</asp:ListItem>
                <asp:ListItem>B.Sc.(I.T.)</asp:ListItem>
                <asp:ListItem>B.Sc.(CS)</asp:ListItem>
            </asp:DropDownList>
        </td>
    </tr>
    <tr>
        <td class="auto-style4" colspan="2">
            <asp:Button ID="Button1" runat="server" Text="Submit" OnClick="Button1_Click"
AccessKey="S" TabIndex="3" ToolTip="Please Submit Youe Data" />
        </td>
    </tr>
    <tr>
        <td class="auto-style12" colspan="2">
            <asp:Label ID="Label5" runat="server" Text=" "></asp:Label>
        </td>
    </tr>
</table>
</div>
</form>
</body>

```

</html>

**Code:**

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

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

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            string s = "You have been enrolled in ";
            if (RadioButton1.Checked == true)
            {
                s += RadioButton1.Text;
            }
            else if (RadioButton2.Checked == true)
            {
                s += RadioButton2.Text;
            }
            else if (RadioButton3.Checked == true)
            {
                s += RadioButton3.Text;
            }
            s += DropDownList1.SelectedItem;
            Label5.Text = s;
        }

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

**Output:**

RNo: 71

Name: Sandesh

Class: ☐ FY ☐ SY ☒ TY

Course: B.Sc.(I.T.)

Submit

You have been enrolled in TYB Sc (I.T.)

### Practical 3b

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

**Design:**

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

```
<!DOCTYPE html>
```

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

```
<head runat="server">
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
<form id="form1" runat="server">
```

```
<div>
```

```
<asp:Calendar ID="Calendar1" runat="server" NextMonthText="Next"
```

```
OnDayRender="Calendar1_DayRender" PrevMonthText="Pre" SelectionMode="DayWeekMonth"
```

```
BackColor="White" BorderColor="White" BorderWidth="1px" Font-Names="Verdana" Font-Size="9pt"
```

```
ForeColor="Black" Height="190px" NextPrevFormat="FullMonth"
```

```
OnSelectionChanged="Calendar1_SelectionChanged" Width="350px">
```

```
<DayHeaderStyle Font-Bold="True" Font-Size="8pt" />
```

```
<NextPrevStyle Font-Bold="True" Font-Size="8pt" ForeColor="#333333"
```

```
VerticalAlign="Bottom" />
```

```
<OtherMonthDayStyle ForeColor="#999999" />
```

```
<SelectedDayStyle BackColor="#333399" ForeColor="White" />
```

```
<TitleStyle BackColor="White" BorderColor="Black" BorderWidth="4px" Font-Bold="True"
```

```
Font-Size="12pt" ForeColor="#333399" />
```

```
<TodayDayStyle BackColor="#CCCCCC" />
```

```
</asp:Calendar>
```

```
<h4>NAME: SANDESH </h4>
```

```
</div>
```

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

**Code:**

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

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

        }

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

        protected void Calendar1_SelectionChanged(object sender, EventArgs e)
        {
            if (Calendar1.SelectedDate.Date >= new DateTime(2024, 09, 7) && Calendar1.SelectedDate.Date
            <= new DateTime(2024, 09, 12))
```

```

        Response.Write("</br><h1>Ganpati Vacation..... Go to your village and worship Lord
Ganesh</h1></br>");
    }
}

```

**Output:**

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 Ganpati Vacation Start	8
>	9	10	11	12/br Ganpati Vacation End	13		14
>	16	17	18		19	20	21
>	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"
FontSize="20pt"></asp:Label>

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

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

```

**Code:**

```

using System;
using System.Collections.Generic;
using System.Data; using

```

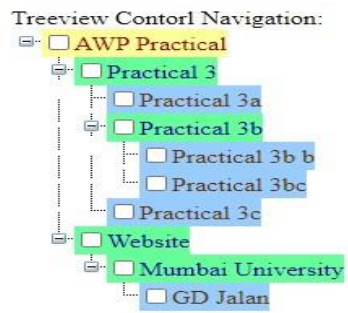
```
System.Linq; using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
```

```
namespace Practical_3
```

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

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

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

**Output:**

**The Value Collapsed was:AWP Practical**

**NAME: Sandesh**



**Practical 4a**

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

**Design:**

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

<!DOCTYPE html>

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

NAME : Vaibhav Mane

26

ROLL NO.: 49

```
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

**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;
}
```

NAME : Vaibhav Mane

31

ROLL NO.: 49

```

</style>
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    <h2 align="center"> Contact Us</h2>
    <h3 align="center"> Fill the datails</h3>
    <table class="auto-style1" align="center">
        <tr>
            <td class="auto-style1">
                <asp:Label ID="Label1" runat="server" Text="Name:"></asp:Label>
            </td>
            <td class="auto-style1">
                <asp:TextBox ID="TextBox1" runat="server" SkinID="Yellow"></asp:TextBox>
            </td>
        </tr>
        <tr>
            <td>
                <asp:Label ID="Label2" runat="server" Text="Email ID:"></asp:Label>
            </td>
            <td>
                <asp:TextBox ID="TextBox2" runat="server" SkinID="Yellow"></asp:TextBox>
            </td>
        </tr>
        <tr>
            <td class="auto-style1">
                <asp:Label ID="Label3" runat="server" Text="Mobile No."></asp:Label>
            </td>
            <td class="auto-style1">
                <asp:TextBox ID="TextBox3" runat="server" SkinID="Blue"></asp:TextBox>
            </td>
        </tr>
        <tr>
            <td>
                <asp:Label ID="Label4" runat="server" Text="Your Query"></asp:Label>
            </td>
            <td>
                <asp:TextBox ID="TextBox4" runat="server" SkinID="Blue"></asp:TextBox>
            </td>
        </tr>
        <tr>
            <td>
                <td>&nbsp;</td>
                <td>&nbsp;</td>
            </td>
        </tr>
        <tr>
            <td colspan="2">
                <asp:Button ID="Button1" runat="server" Text="Submit" SkinID="Green" />
            </td>
        </tr>
    </table>
</asp:Content>

```

```

        </td>
    </tr>
</table>
&nbsp;<br />
</asp:Content>

```

**MasterPage:**

```

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

```

```

<!DOCTYPE html>

```

```

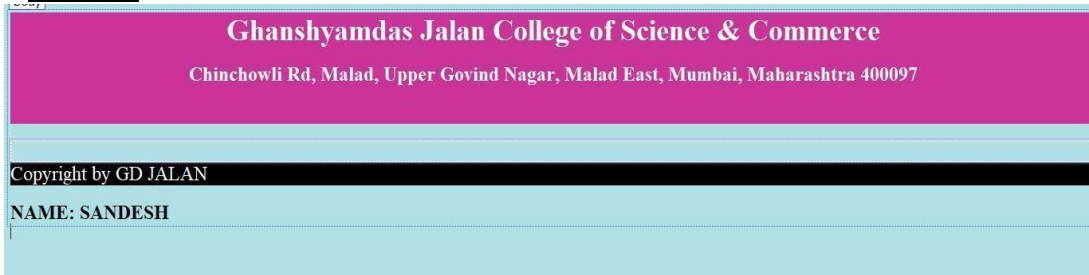
<html>
<head runat="server">
    <title></title>
    <style type="text/css">
        body{
background-color:powderblue;

        }
        .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>

```

```
</form>
<h4>NAME: SANDESH</h4>

</body>
</html>
```

**Output:****Practical 5c**

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

**1. ViewState:****Design:**

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

```
<!DOCTYPE html>
```

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

```
<head runat="server">
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
<form id="form1" runat="server">
```

```
<div>
```

View Variable:

```
<asp:Label ID="Label1" runat="server" Text="View Data is:"></asp:Label>
```

```
<br />
```

```
<br />
```

Session Variable:

```
<asp:Label ID="Label2" runat="server" Text="Session Variable"></asp:Label>
```

```
<br />
```

```
<br />
```

Application Variable:

```
<asp:Label ID="Label13" 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["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

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 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;
```

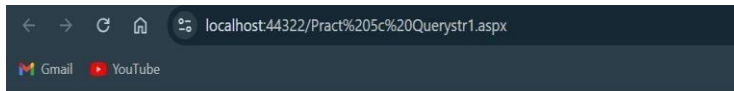
```
namespace Pract5
```

```
{
    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 );
        }
    }
}
```

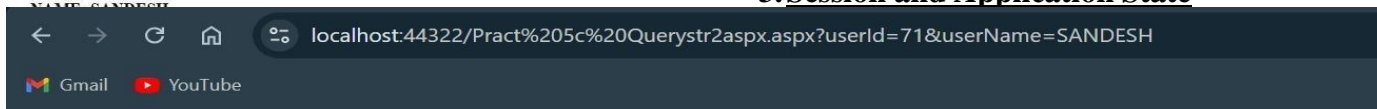
### Output:



### Query String Example

UserID	<input type="text" value="71"/>
UserName	<input type="text" value="SANDESH"/>
<input type="button" value="Send Data"/>	

### 3. Session and Application State



User ID: 71  
User Name: SANDESH

### 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" %>
```

&lt;!DOCTYPE html&gt;

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

```
<head runat="server">
```

&lt;title&gt;&lt;/title&gt;

&lt;/head&gt;

<body>

```
<form id="form1" runat="server">
```

<div>

```
<asp:Label ID="Label1" runat="server" Text="UserName:"></asp:Label>
```

```
<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
```

<br />

User Email:&nbsp;&nbsp; 

```
<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
```

<br />

```
<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
```

</div>

#### NAME: SANDESH

&lt;/body&gt;

&lt;/html&gt;

**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") %>" />

```

```

City:
    <br />
    <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;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
<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:   **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 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>
            </table>
        </div>
    </form>
</body>
</html>
```

```

        <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	<input type="text"/>
Employee Name	<input type="text"/>
Employee Salary	<input type="text"/>

Record deleted successfully

Select Employee Id:

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" />
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```

```

        <SortedDescendingHeaderStyle BackColor="#6F8DAE" />
    </asp:GridView>
    <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionString: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 />
                    <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="sha384cVKIPhGWiC2Al4u+LWgxfKTRIcfu0JTxR+EQDz/bgldoEyl4H0zUF0QKbrJ0EcQF"
crossorigin="anonymous"></script>
</head>
<body>
<form id="form1" runat="server">
<div>
<strong>Bootsrap Button Styles in web Page<br />
<br />
</strong> </div>
<asp:Button ID="Button1" runat="server" CssClass="btn-primary" Text=".btn-primary" />
<asp:Button ID="Button2" runat="server" CssClass="btn-warning" Text=".btn-warning" />
<br />
<br />
```

```

<asp:Button ID="Button4" runat="server" CssClass="btn-danger" Text=".btn-danger" Width="112px" />
<br />
<br />
<asp:Button ID="Button5" runat="server" CssClass="btn-primary disabled" Text=",btn-disabled" />
<asp:Button ID="Button6" runat="server" CssClass="btn-primary active" Text=".active" />
<br />
<br />
<asp:Button ID="Button7" runat="server" CssClass="btn-primary btn-lg" Text=".btn-lg" />
<asp:Button ID="Button8" runat="server" Text=".btn.xs" CssClass="btn-primary btn-xs" />
<br />
<br />
<asp:Button ID="Button9" runat="server" Text=".btn-block" CssClass="btn-primary btn-block" /> </form>
<h4>NAME: SAKET</h4>
</body>
</html>

```

**Output:****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>
      <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 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**

---