

AWD

PRACTICAL



VidyaVikas Education Society's

VIKAS COLLEGE OF ARTS, SCIENCE & COMMERCE

Affiliated to University of Mumbai
RE-ACCREDITED 'A' GRADE BY NAAC
ISO 9001 : 2008 CERTIFIED

Vikas High School Marg, Kannamwar Nagar No 2, Vikhroli (E), Mumbai – 400083

Dr. R. K. Patra
Principal

Hon' ble: **Shri P. M. Raut**
Chairman. V. V. Edu. Society

This is to certify that, _____
student of T.Y.B.Sc. (Information Technology) (Semester-V) with college enrolled Roll
no. _____ / University Seat _____ has satisfactorily
completed the Practical work for the Subject Advance Web Development in the program
of Information Technology from the UNIVERSITY OF MUMBAI for the academic year
2024-2025.

Guided By

College Seal

Head Of Department

External Examiner

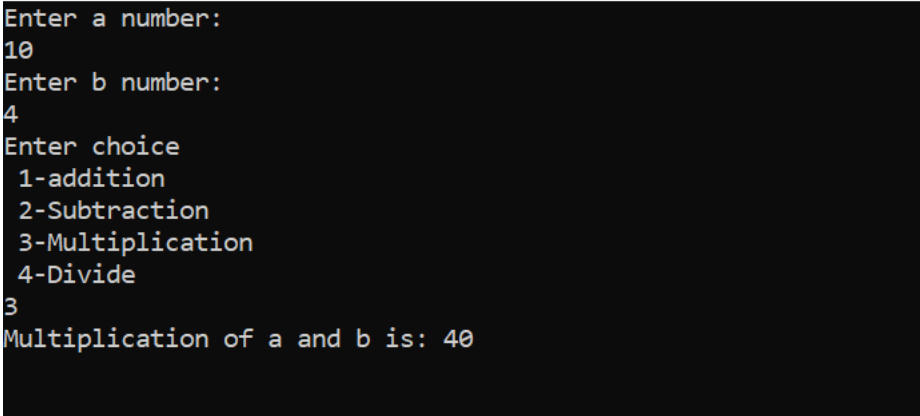
INDEX

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

| | | | |
|-----|---------------------------------------------------------------------------------------------------------|--|--|
| | | | |
| 5c | Create a web application to demonstrate various states of ASP.NET Pages. | | |
| 6a | Create a web application for inserting and deleting records from a database. | | |
| 6b | Create a web application to display Using Disconnected Data Access and Databinding using GridView. | | |
| 8a | Create a web application for inserting and deleting records from a database. (Using Execute-Non Query). | | |
| 8b | Create a web application for user defined exception handling. | | |
| 10a | Create a web application to demonstrate JS Bootstrap Button. | | |
| 10b | Create a web application to demonstrate use of various Ajax controls. | | |
| 10c | Create a web application to demonstrate Installation and use of NuGet package. | | |


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

OUTPUT:



```
C:\Users\Admin\source\repos\Practica1_a\Practica1_a\bin\Debug\Practica1_a.exe  
Enter a number:  
10  
Enter b number:  
4  
Enter choice  
1-addition  
2-Subtraction  
3-Multiplication  
4-Divide  
3  
Multiplication of a and b is: 40
```

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

```
using System;  
class Program  
{  
    static void Main(string[] args)  
    {  
        int i,j,k=1;  
        for(i=1;i<=15; i++)  
        {  
            for(j=1;j<=i;j++)  
            {  
                Console.Write(k + " ");  
                k=k+1;  
            }  
            Console.WriteLine("\n");  
        }  
        Console.ReadLine();  
    }  
}
```

Output:

```

1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31 32 33 34 35 36
37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54 55
56 57 58 59 60 61 62 63 64 65 66
67 68 69 70 71 72 73 74 75 76 77 78
79 80 81 82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 101 102 103 104 105
106 107 108 109 110 111 112 113 114 115 116 117 118 119 120
  
```

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

```

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

namespace Practical1_C
{
    public class Choice
    {
        public void Fiobonacci()
        {
            Console.WriteLine("Enter the number: ");
            int n=Convert.ToInt32(Console.ReadLine());
  
```

```
int n1=0, n2=1, n3;
for(int i=0; i<n; i++)
{
    n3 = n1 + n2;
    n1 = n2;
    n2 = n3;
    Console.Write(n3 + " ");
}
}
public void isPrime()
{
    Console.WriteLine("Enter the number for checking is prime or not");
    int num = Convert.ToInt32(Console.ReadLine());
    int flag = 0;
    for (int i = 2; i < num / 2; i++)
    {
        if (num % i == 0)
        {
            Console.WriteLine("Is not prime number");
            flag = 1;
            break;
        }
    }
    if (flag == 0)
    {
        Console.WriteLine("is prime number");
    }
}

}
internal class Program
{
    static void Main(string[] args)
    {
        Choice c1 = new Choice();
        bool iscontinue = true;
        while(iscontinue)
        {
            Console.WriteLine("Enter choice to 1:generate fibonacci and 2: check number prime");
            int choice = Convert.ToInt32(Console.ReadLine());
            if (choice == 1)
            {
                c1.Fibonacci();
            }
            else if (choice == 2)
            {
                c1.isPrime();
            }
        }
        else
        {
            {
```



```

        Console.WriteLine("please choice valide");
    }

    Console.WriteLine("\nDo you want to continue.....[Y/N]");
    String userResponse= Console.ReadLine();
    if(userResponse != "y" && userResponse != "Y")
    {
        iscontinue = false;
    }

    }
    Console.WriteLine("Program existed ....");
}

}
}

```

OUTPUT:

```

C:\Users\Admin\source\repos\Practical1_C\bin\Debug\Practical1_C.exe
Enter choice to 1:generate fibonaccie and 2: check number prime
1
Enter the number:
10
1 2 3 5 8 13 21 34 55 89
Do you want to continue.....[Y/N]
y
Enter choice to 1:generate fibonaccie and 2: check number prime
2
Enter the number for checing is prime or not
5
is prime number
Do you want to continue.....[Y/N]

```

2. Write the program for the following:

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

```

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

```

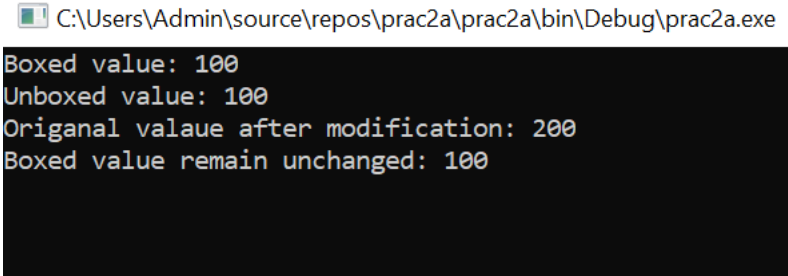
```
using System.Threading.Tasks;

namespace prac2a
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int num = 100;
            Object boxed = num;
            Console.WriteLine("Boxed value: " + boxed);
            int unboxed=(int)boxed;
            Console.WriteLine("Unboxed value: " + unboxed);

            num = 200;
            Console.WriteLine("Original valaue after modification: " + num);
            Console.WriteLine("Boxed value remain unchanged: " + boxed);

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

OUTPUT:



```
C:\Users\Admin\source\repos\prac2a\prac2a\bin\Debug\prac2a.exe
Boxed value: 100
Unboxed value: 100
Original valaue after modification: 200
Boxed value remain unchanged: 100
```

b. Create a simple application to perform addition and subtraction using delegate.

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

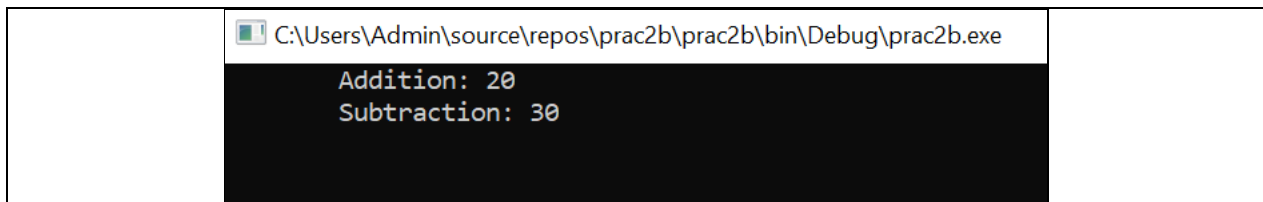
namespace prac2b
{
    public delegate int MathOperation(int x, int y);
    internal class Program
```

```
{
    public static int Add(int a , int b)
    {
        return a + b;
    }
    public static int Subtract(int a , int b) { return a - b; }
    static void Main(string[] args)
    {
        MathOperation operation = Add;
        Console.WriteLine("\tAddition: "+operation(10,10));

        operation=Subtract;
        Console.WriteLine("\tSubtraction: "+operation(50,20));

        Console.ReadKey();
    }
}
```

OUTPUT:



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

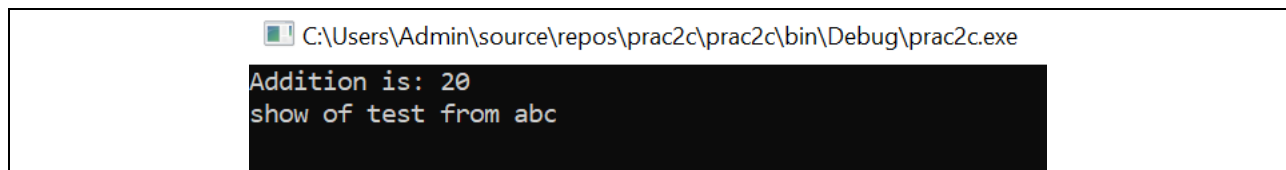
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace prac2c
{
    interface abc
    {
        void Adding(int x, int y);
    }
    interface bcd
    {
        void show();
    }
}
```

```
}

class Test:abc,bcd
{
    public void Adding(int a,int b)
    {
        Console.WriteLine("Addition is: "+(a + b));
    }
    public void show()
    {
        Console.WriteLine("show of test from abc");
    }
}
internal class Program
{
    static void Main(string[] args)
    {
        abc a1;
        a1=new Test();
        a1.Adding(10, 10);
        bcd b1=(bcd)a1;
        b1.show();
        Console.ReadKey();
    }
}
```

OUTPUT:



3 Write the program for the following:

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

Register.aspx file

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Register.aspx.cs" Inherits="prac3a.Register"%>
```



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

</p>
<p>

<asp:Label ID="Label3" runat="server"></asp:Label>

</p>
<p>

<asp:Label ID="Label4" runat="server"></asp:Label>

</p>
<p>

<asp:Label ID="Label5" runat="server"></asp:Label>

</p>
</div>
</form>
<p>
    &nbsp;</p>
</center>
</body>
</html>
```

Register.aspx.cs file:

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

namespace prac3a
{
    public partial class Register : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            String Name=TextBox1.Text;
            String Email=TextBox2.Text;
            String Course=TextBox3.Text;
            String gender = "";
        }
    }
}
```

```
        if (RadioButton1.Checked)
        {
            gender = RadioButton1.Text;
        }
        else
        {
            gender = RadioButton2.Text;
        }

        String Esports = "";
        if (CheckBox1.Checked)
        {
            Esports=CheckBox1.Text;
        }
        if(CheckBox2.Checked)
        {
            Esports=CheckBox2.Text;
        }
        if (CheckBox3.Checked)
        {
            Esports=CheckBox3.Text;
        }
        if(CheckBox4.Checked)
        {
            Esports=CheckBox4.Text;
        }

        Label1.Text = "Your name is: " + Name;
        Label2.Text="Email Id: "+Email;
        Label3.Text="Course: "+Course;
        Label4.Text = "Gender : " + gender;
        Label5.Text = "Esports: " + Esports;

    }
}
```

OUTPUT:

Registration Form

Name:

Email Id:

Course:

Gender: ☒ MALE ☐ FEMALE

Esports: ☐ CLASH OF CLANS ☒ PUBG ☐ VALORANT ☐ CALL OF DUTY

Your name is: Suraj

Email Id: surajkadam1706004@gmail.com

Course: BSC.IT

Gender : MALE

Esports: PUBG

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

Calenderform.aspx

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

```
<!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" BackColor="#FFFFCC" BorderColor="#FFCC66"
        BorderWidth="1px" DayNameFormat="Shortest" Font-Names="Verdana" Font-Size="8pt"
        ForeColor="#663399" Height="200px" ShowGridLines="True" Width="602px"
        OnDayRender="Calendar1_DayRender" OnSelectionChanged="Calendar1_SelectionChanged"
        SelectedDate="10/12/2024 12:34:57">
            <DayHeaderStyle BackColor="#FFCC66" Font-Bold="True" Height="1px" />
            <NextPrevStyle Font-Size="9pt" ForeColor="#FFFFCC" />
            <OtherMonthDayStyle ForeColor="#CC9966" />
            <SelectedDayStyle BackColor="#CCCCFF" Font-Bold="True" />
            <SelectorStyle BackColor="#FFCC66" />
            <TitleStyle BackColor="#990000" Font-Bold="True" Font-Size="9pt" ForeColor="#FFFFCC" />
            <TodayDayStyle BackColor="#FFCC66" ForeColor="White" />
        </asp:Calendar>

        <br />

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

        <br />
        <br />
        <asp:Label ID="Label1" runat="server"></asp:Label>

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

```

Calenderform.aspx.cs

```

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

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

        }

        protected void Calendar1_SelectionChanged(object sender, EventArgs e)

```

```

{
    Calendar1.SelectedDayStyle.BackColor = System.Drawing.Color.Yellow;
    Calendar1.SelectedDayStyle.ForeColor= System.Drawing.Color.Green;
}

protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
{
    if(e.Day.Date.Year==2024 && e.Day.Date.Month==8 && e.Day.Date.Day==15)
    {
        Label l1=new Label();
        l1.Text = "<br>INDEPENDENCE DAY";
        e.Cell.Controls.Add(l1);
    }
    if (e.Day.Date.Year == 2024 && e.Day.Date.Month == 10 && e.Day.Date.Day == 2)
    {
        Label l2 = new Label();
        l2.Text = "<br>MAHATNA GANDHI JAYANTI";
        e.Cell.Controls.Add(l2);
        e.Cell.BackColor= System.Drawing.Color.Red;
    }
}

protected void Button1_Click(object sender, EventArgs e)
{
    Label1.Text = Calendar1.SelectedDate.ToString();
}
}

```

OUTPUT:

| October 2024 | | | | | | |
|--------------|----|----|-----------------------------------|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| 29 | 30 | 1 | 2 MAHATNA GANDHI JAYANTI | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Button

10/13/2024 12:00:00 AM

c. Demonstrate the use of Treeview operations on the web form.

TreeViewForm.aspx

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="TreeviewForm.aspx.cs"
Inherits="prac3c.TreeviewForm" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>

            <asp:TreeView ID="TreeView1" runat="server" ImageSet="Arrows"
OnSelectedNodeChanged="TreeView1_SelectedNodeChanged">
                <HoverNodeStyle Font-Underline="True" ForeColor="#5555DD" />
                <Nodes>
                    <asp:TreeNode Text="Vikas College" Value="college">
                        <asp:TreeNode Text="BSC.CS" Value="BSC.CS">
                            <asp:TreeNode Text="TYCS" Value="TYCS"></asp:TreeNode>
                        </asp:TreeNode>
                        <asp:TreeNode Text="BSC.IT" Value="BSC.IT">
                            <asp:TreeNode Text="TYIT" Value="TYIT">
                                <asp:TreeNode Text="AWD" Value="AWD">
                                    <asp:TreeNode Text="Prac1" Value="Prac1"></asp:TreeNode>
                                    <asp:TreeNode Text="prac2" Value="prac2"></asp:TreeNode>
                                    <asp:TreeNode Text="prac4" Value="prac4"></asp:TreeNode>
                                </asp:TreeNode>
                            </asp:TreeNode>
                        </asp:TreeNode>
                    </asp:TreeNode>
                </Nodes>
                <NodeStyle Font-Names="Tahoma" Font-Size="10pt" ForeColor="Black" HorizontalPadding="5px"
NodeSpacing="0px" VerticalPadding="0px" />
                <ParentNodeStyle Font-Bold="False" />
                <SelectedNodeStyle Font-Underline="True" ForeColor="#5555DD" HorizontalPadding="0px"
VerticalPadding="0px" />
            </asp:TreeView>

            <br />
            &nbsp;<asp:TextBox ID="TextBox1" runat="server" style="margin-top: 0px" Width="466px"></asp:TextBox>

        </div>
    </form>

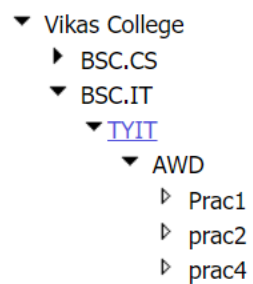
```

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

TreeViewForm.aspx.cs :

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Web;  
using System.Web.UI;  
using System.Web.UI.WebControls;  
  
namespace prac3c  
{  
    public partial class TreeviewForm : System.Web.UI.Page  
    {  
        protected void Page_Load(object sender, EventArgs e)  
        {  
  
        }  
  
        protected void TreeView1_SelectedNodeChanged(object sender, EventArgs e)  
        {  
            TextBox1.Text="Selected Node: "+TreeView1.SelectedNode.Text.ToString().ToUpper();  
        }  
    }  
}
```

OUTPUT:



```
▼ Vikas College  
  ▸ BSC.CS  
  ▼ BSC.IT  
    ▼ TYIT  
      ▼ AWD  
        ▸ Prac1  
        ▸ prac2  
        ▸ prac4
```

Selected Node: TYIT

4 Write the program for the following:

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

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>
  <appSettings>
    <add key="ValidationSettings:UnobtrusiveValidationMode" value="None"/>
  </appSettings>
  <system.codedom>
    <compilers>
      <compiler language="c#;cs;csharp" extension=".cs"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.CSharpCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" warningLevel="4" compilerOptions="/langversion:default
/nowarn:1659;1699;1701" />
      <compiler language="vb;vbs;visualbasic;vbscript" extension=".vb"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.VBCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" warningLevel="4" compilerOptions="/langversion:default /nowarn:41008
/define:_MYTYPE=\&quot;Web\&quot; /optionInfer+" />
    </compilers>
  </system.codedom>
</configuration>
```

ValidationForm.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ValidatorForm.aspx.cs"
Inherits="prac4a.ValidatorForm" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
```

```

        <div>
        <p>
Name: <asp:TextBox ID="TextBox1" runat="server"> </asp:TextBox> <asp:RequiredFieldValidator
ID="RequiredFieldValidator1" runat="server" ErrorMessage="Please provide name"
ControlToValidate="TextBox1" ValidationGroup="a"> </asp:RequiredFieldValidator>
        </p>
        <p>
Age:
        <asp:TextBox ID="TextBox2" runat="server"> </asp:TextBox>
        <asp:RangeValidator ID="RangeValidator1" runat="server" ControlToValidate="TextBox2"
ErrorMessage="Age between 17-25" MaximumValue="25" MinimumValue="17"
ValidationGroup="a"> </asp:RangeValidator>
        </p>
        <p>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Add" ValidationGroup="a"
        />
        </p>
        <p>
        <asp:Label ID="Label1" runat="server"> </asp:Label>
        </p>
        <p>
        <asp:Label ID="Label2" runat="server"> </asp:Label>
        </p>
        </div>
    </form>
</body>
</html>

```

ValidationForm.aspx.cs

```

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

namespace prac4a
{
    public partial class ValidatorForm : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Label1.Text="Welcome "+TextBox1.Text;
            Label2.Text="Your Age is: "+TextBox2.Text;
        }
    }
}

```

```

    }
  }
}

```

OUTPUT:

Name:

Age:

Welcome Suraj

Your Age is: 20

Name: Please provide name

Age: Age between 17-25

b. Create Web Form to demonstrate use of Adrotator Control.

XMLFile1.xml

```

<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
  <Ad>
    <ImageUrl>pizza.jpeg</ImageUrl>
    <NavigateUrl>https://www.zomato.com/</NavigateUrl>
    <AlternateText>
      Pizza
    </AlternateText>
    <Impressions>20</Impressions>
    <Keyword>pizza</Keyword>
  </Ad>
  <Ad>
    <ImageUrl>burger.jpeg</ImageUrl>
    <NavigateUrl>https://www.zomato.com/</NavigateUrl>
    <AlternateText>
      Burger
    </AlternateText>
    <Impressions>30</Impressions>
    <Keyword>Burger</Keyword>
  </Ad>
  <Ad>
    <ImageUrl>kfc.jpeg</ImageUrl>
    <NavigateUrl>https://www.zomato.com/</NavigateUrl>
    <AlternateText>
      KFC
    </AlternateText>
  </Ad>

```

```
        <Impressions>20</Impressions>
        <Keyword>KFC</Keyword>
    </Ad>
</Advertisements>
```

Ads.aspx file:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Ads.aspx.cs" Inherits="Prac4b.Ads" %>

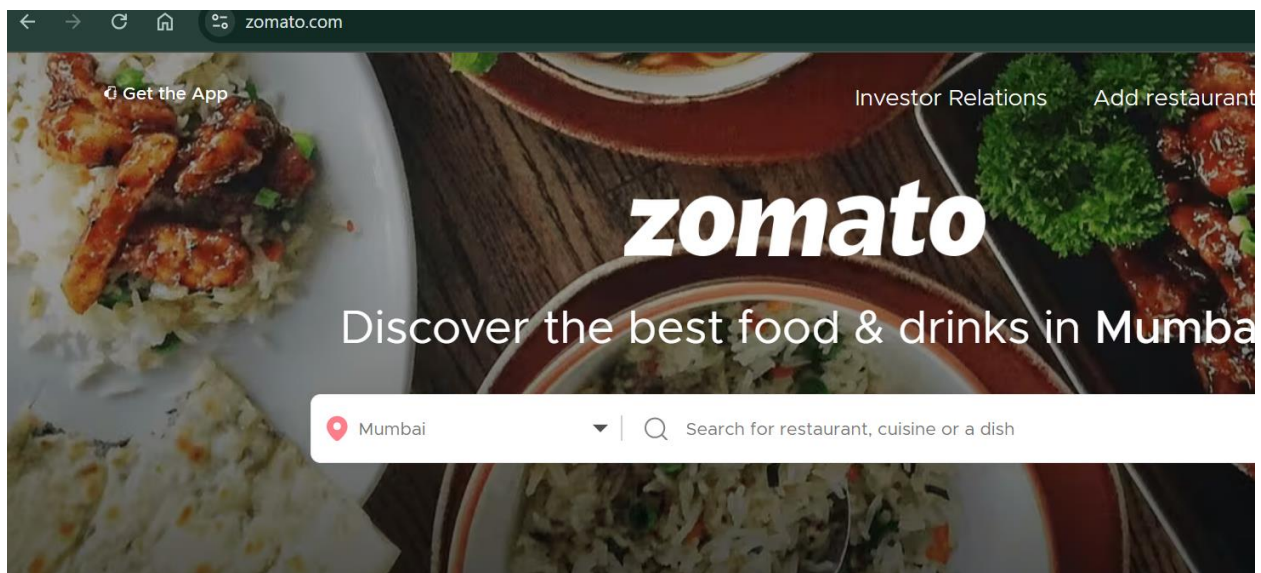
<!DOCTYPE html>

<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" DataSourceID="XmlDataSource1" Height="300px"
Width="300px"/>

            <%-- --%>
            <br />
            <asp:XmlDataSource ID="XmlDataSource1" runat="server"
DataFile="~/XMLFile1.xml"></asp:XmlDataSource>
        </div>
    </form>
</body>
</html>
```

OUTPUT:



c. Create Web Form to demonstrate use User Controls

WebUserControl1.ascx file:

```
<%@ Control Language="C#" AutoEventWireup="true" CodeBehind="WebUserControl1.ascx.cs"
Inherits="prac4c1.WebUserControl1" %>
<div>

    <asp:Label ID="Label1" runat="server" Text="Name: "></asp:Label>
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br />
```

```
<br />
<asp:Label ID="Label2" runat="server" Text="Password"></asp:Label>
<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
<br />
<br />
<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Register" />
<asp:Label ID="Label3" runat="server"></asp:Label>

</div>
```

WebForm1.aspx file:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="prac4c1.WebForm1" %>

<%@ Register src="WebUserControl1.ascx" tagName="WebUserControl1" tagprefix="uc1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <uc1:WebUserControl1 ID="WebUserControl1" runat="server" />
    <div>

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

OUTPUT:

| | |
|-----------------------------------------|------------------------------------------|
| Name: | <input type="text" value="abc"/> |
| Password | <input type="password" value="abc1234"/> |
| <input type="button" value="Register"/> | Valid login |

5 Write the program for the following:

- Create Web Form to demonstrate use of Website Navigation controls.

Web.sitemap:

```
<?xml version="1.0" encoding="utf-8" ?>
<siteMap xmlns="http://schemas.microsoft.com/AspNet/SiteMap-File-1.0" >
  <siteMapNode url="~/Home.aspx" title="Home page1" description="">
    <siteMapNode url="~/admin/admin.aspx" title="admin page" description="" />
    <siteMapNode url="~/staff/staffHome.aspx" title="staff home" description="" >
      <siteMapNode url="~/staff/addStudent.aspx" title="add student" description="" />
    </siteMapNode>
    <siteMapNode url="~/students/studentHome.aspx" title="student home" description="">
      <siteMapNode url="~/students/exam.aspx" title="exam page" description="">
        <siteMapNode url="~/students/result.aspx" title="result page" description="" />
      </siteMapNode>
    </siteMapNode>
  </siteMapNode>
</siteMap>
```

Site1.master:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="Practical5A.Site1" %>

<!DOCTYPE html>

<html>
<head runat="server">
  <title></title>
  <asp:ContentPlaceHolder ID="head" runat="server">
  </asp:ContentPlaceHolder>
</head>
<body>
  <form id="form1" runat="server">
    <div>
      <asp:SiteMapPath ID="SiteMapPath1" runat="server" Font-Names="Verdana" Font-Size="0.8em"
PathSeparator=" : ">
        <CurrentNodeStyle ForeColor="#333333" />
        <NodeStyle Font-Bold="True" ForeColor="#990000" />
        <PathSeparatorStyle Font-Bold="True" ForeColor="#990000" />
        <RootNodeStyle Font-Bold="True" ForeColor="#FF8000" />
      </asp:SiteMapPath>
      <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
      </asp:ContentPlaceHolder>
      <asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" />
    </div>
  </form>
</body>
</html>
```

Web.config


```
</p>
</asp:Content>
```

OUTPUT:

Home page1 : staff home : add student

This is add student page..

- b. Create a web application to demonstrate use of Master Page and content page.

Site1.master

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="practical5B.Site1" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

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

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

```
<link rel="stylesheet" type="text/css" href="~/css/StyleSheet1.css" />
```

```
<asp:ContentPlaceHolder ID="head" runat="server">
```

```
</asp:ContentPlaceHolder>
```

```
</head>
```

```
<body>
```

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

```
<div>
```

```
<header id="header">
```

```
<h1>Learning</h1>
```

```
</header>
```

```
<nav id="nav">
```

```
<span>Logo</span>
```

```
<ul>
```

```
<li><a href="#">Home</a></li>
```

```
<li><a href="#">About</a></li>
```

```
<li><a href="#">Artical</a></li>
```

```
<li><a href="#">Contact</a></li>
```

```
</ul>
```

```
</nav>
```

```
<div id="con">
```

```
<div id="content">
```

```
<asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
```

```
</asp:ContentPlaceHolder>
```

```

    </div>
    <aside>
    <p><a href="#">news</a></p>
    <p><a href="#">news</a></p>
    <p><a href="#">news</a></p>
    <p><a href="#">news</a></p>
    </aside>
  </div>
  <footer>
  <p>@CopyRight</p>
  </footer>
</div>
</form>
</body>
</html>

```

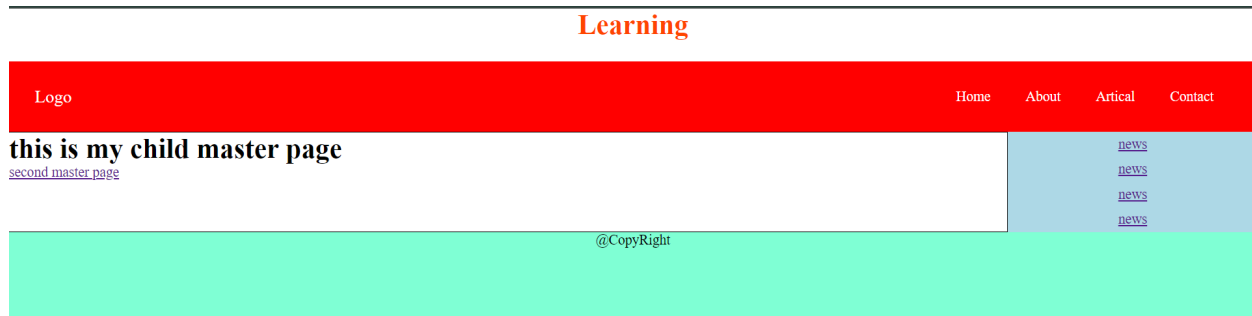
WebForm1.aspx

```

<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="practical5B.WebForm1" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
  <h1>this is my child master page</h1>
  <p>
    <asp:HyperLink ID="HyperLink1" runat="server" NavigateUrl="~/WebForm2.aspx">second master
page</asp:HyperLink>
  </p>
</asp:Content>

```

OUTPUT:



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

Webform2.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="Practical6.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Button ID="Button1" runat="server" Text="Button" OnClick="Button1_Click" />
        </div>
        <asp:Label ID="Label1" runat="server"></asp:Label>
    </form>
</body>
</html>
```

WebForm2.aspx.cs

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

namespace Practical6
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        int x = 0;
        protected void Page_Load(object sender, EventArgs e)
        {
            if(!IsPostBack)
            {
                ViewState.Add("myx",x);
            }
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            x = int.Parse(ViewState["myx"].ToString());
            x++;
            Label1.Text="You page refreshed " + x.ToString()+" Times";
            ViewState["myx"]= x;
        }
    }
}
```


[illegible]

```
        </asp:View>
    </asp:MultiView>

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

WebForm1.aspx.cs:

```
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;

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

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            MultiView1.SetActiveView(View1);
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            MultiView1.SetActiveView(View2);
            updateDropDownList();
            Label5.Text = "";
            Label6.Text = "";
        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            try
            {
                SqlConnection conn = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
                conn.Open();
```

```

        SqlCommand cmd = new SqlCommand("insert into Authors values(@id,@name,@phone)", conn);
        cmd.Parameters.AddWithValue("@id", TextBox1.Text);
        cmd.Parameters.AddWithValue("@name", TextBox2.Text);
        cmd.Parameters.AddWithValue("@phone", TextBox3.Text);
        cmd.ExecuteNonQuery();
        Label4.Text = "Record is added successfully";
        TextBox1.Text = "";
        TextBox2.Text = "";
        TextBox3.Text = "";
        conn.Close();
        updateDropDownList();

    }
    catch (Exception ex)
    {
        Label4.Text = ex.Message;
    }
}

protected void Button4_Click(object sender, EventArgs e)
{
    try {
        SqlConnection con = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
        con.Open();
        SqlCommand cmd = new SqlCommand("delete from Authors where Auid=@id", con);
        cmd.Parameters.AddWithValue("@id", DropDown1.SelectedItem.Text);
        cmd.ExecuteNonQuery ();
        con.Close();
        Label6.Text = "record deleted successfully";
        updateDropDownList ();
        Label5.Text = "";
    }
    catch(Exception ex) { Label6.Text = ex.Message; }
}

public void updateDropDownList()
{
    try
    {
        SqlConnection con = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
        con.Open();
        SqlCommand cmd = new SqlCommand("select * from Authors", con);
        SqlDataReader dr= cmd.ExecuteReader();
        DropDown1.DataSource = dr;
        DropDown1.DataTextField = "Auid";
        DropDown1.DataValueField = "Auname";
        DropDown1.DataBind();
        con.Close();
    }
    catch (SqlException ex)

```

```

        {
            throw ex;
        }
    }

    protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
    {
        Label5.Text = "Selected Author is " + DropDownList1.SelectedValue;
    }
}

```

OUTPUT:

The screenshot displays two web forms. The top form contains two buttons: 'new Author' and 'remove Author'. Below these are three input fields labeled 'ID', 'Author Name', and 'Phone Number'. At the bottom of this form is an 'Insert' button and a message 'Record is added successfully'. The bottom form also has 'new Author' and 'remove Author' buttons. Below them is a dropdown menu currently showing '1'. At the bottom of this form is a 'Delete' button and a message 'record deleted successfully'.

b. Create a web application to display Using Disconnected Data Access and Databinding using GridView.

WebForm1.aspx

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="prac6b.WebForm1" %>

```

```

<!DOCTYPE html>

```

```

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

```

```

<head runat="server">

```

[illegible]

WebForm1.aspx.cs

```
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;  
  
namespace prac6b  
{
```

```

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

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        try {
            SqlConnection con = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
            con.Open();
            String sql = "select * from Employee where Esalary>" + TextBox1.Text;
            SqlDataAdapter da = new SqlDataAdapter(sql, con);
            DataSet ds = new DataSet();
            da.Fill(ds);

            GridView1.DataSource = ds.Tables[0];
            GridView1.DataBind();
            con.Close();
        }
        catch (Exception ex)
        {
            Label2.Text= ex.Message;
        }
    }
}

```

OUTPUT:

Employee Salary >

Show Data

| Eid | Ename | Esalary |
|-----|-------------|---------|
| 1 | Suraj Kadam | 40000 |
| 2 | ABC | 10000 |
| 3 | Rupesh | 12500 |
| 4 | Sairaj | 20000 |

Employee Salary >

Show Data

| Eid | Ename | Esalary |
|-----|-------------|---------|
| 1 | Suraj Kadam | 40000 |
| 3 | Rupesh | 12500 |
| 4 | Sairaj | 20000 |

8. Write the program for the following:

[illegible]

WebForm1.aspx.cs:

```
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;

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

```



```

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        MultiView1.SetActiveView(View1);
    }

    protected void Button2_Click(object sender, EventArgs e)
    {
        MultiView1.SetActiveView(View2);
        updateDropDownList();
        Label5.Text = "";
        Label6.Text = "";
    }

    protected void Button3_Click(object sender, EventArgs e)
    {
        try
        {
            SqlConnection conn = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
            conn.Open();
            SqlCommand cmd = new SqlCommand("insert into Authors values(@id,@name,@phone)", conn);
            cmd.Parameters.AddWithValue("@id", TextBox1.Text);
            cmd.Parameters.AddWithValue("@name", TextBox2.Text);
            cmd.Parameters.AddWithValue("@phone", TextBox3.Text);
            cmd.ExecuteNonQuery();
            Label4.Text = "Record is added successfully";
            TextBox1.Text = "";
            TextBox2.Text = "";
            TextBox3.Text = "";
            conn.Close();
            updateDropDownList();

        }
        catch (Exception ex)
        {
            Label4.Text = ex.Message;
        }
    }

    protected void Button4_Click(object sender, EventArgs e)
    {
        try {
            SqlConnection con = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
            con.Open();
            SqlCommand cmd = new SqlCommand("delete from Authors where Auid=@id", con);
            cmd.Parameters.AddWithValue("@id", DropDownList1.SelectedItem.Text);
            cmd.ExecuteNonQuery ();

```

```

        con.Close();
        Label6.Text = "record deleted successfully";
        updateDropDownList ();
        Label5.Text = "";
    }
    catch(Exception ex) { Label6.Text = ex.Message; }
}
public void updateDropDownList()
{
    try
    {
        SqlConnection con = new
SqlConnection(WebConfigurationManager.ConnectionStrings["c1"].ConnectionString);
        con.Open();
        SqlCommand cmd = new SqlCommand("select * from Authors", con);
        SqlDataReader dr= cmd.ExecuteReader();
        DropDownList1.DataSource = dr;
        DropDownList1.DataTextField = "Auid";
        DropDownList1.DataValueField = "Auname";
        DropDownList1.DataBind();
        con.Close();
    }
    catch (SqlException ex)
    {
        throw ex;
    }
}

protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
{
    Label5.Text = "Selected Author is " + DropDownList1.SelectedValue;
}
}
}

```

b. Create a web application for user defined exception handling.

NumberTooLargeException.cs :

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace prac8b
{
    public class NumberTooLargeException : Exception
    {
        public NumberTooLargeException():base() { }
    }
}

```

```

    public NumberTooLargeException(string message) : base(message) {}
    public NumberTooLargeException(String message, Exception innerException) : base(message,
innerException) {}
    }
}

```

WebForm1.aspx.cs:

```

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

namespace prac8b
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            try {
                int number=int.Parse(TextBox1.Text);
                if(number>100)
                {
                    throw new NumberTooLargeException("The number entered too large please enter valide
number");
                }
                Label2.Text = "Number is valide";
            }
            catch (NumberTooLargeException ex)
            {
                Label2.Text = "Custome Error: "+ex.Message;
            }
            catch(FormatException ex)
            {
                Label2.Text= "Format Exception "+ex.Message;
            }
            catch (Exception ex) {}
        }
    }
}

```


WebForm1.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="prac10a.WebForm1" %>

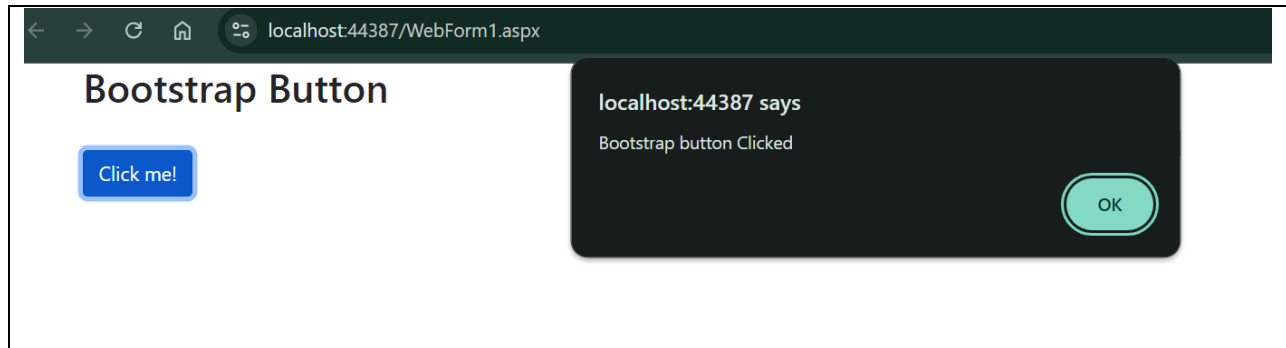
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWfSpd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous"/>

<title></title>
<script type="text/javascript">
    function showAlert() {
        alert("Bootstrap button Clicked");
    }
</script>
</head>
<body>
<form id="form1" runat="server">
    <div class="container">
        <h2>Bootstrap Button</h2>
        <br />
        <button type="button" class="btn btn-primary" onclick="showAlert()">Click me!</button>
    </div>
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-MrcW6ZMFYIzcLA8NI+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
    <script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.2/dist/umd/popper.min.js"
integrity="sha384-IQsoLXl5PILFhosVNubq5LC7Qb9DXgDA9i+tQ8Zj3iwWAwPtgFTxbJ8NT4GN1R8p"
crossorigin="anonymous"></script>
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.min.js" integrity="sha384-
cVKIPhGWic2Al4u+LWgxfKTRicfu0JTzR+EQDz/bgldoEyl4H0zUF0QKbrJ0EcQF"
crossorigin="anonymous"></script>

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

OUTPUT:



b. Create a web application to demonstrate use of various Ajax controls.

WebForm1.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"  
Inherits="prac10b.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:ScriptManager ID="ScriptManager1" runat="server"></asp:ScriptManager>  
            <asp:UpdatePanel ID="UpdatePanel1" runat="server">  
                <ContentTemplate>  
                    &nbsp; <br />  
                    <asp:Label ID="Label3" runat="server" Text="Name"></asp:Label>  
                    &nbsp; <br />  
                    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>  
                    <br />  
                    Password<br />  
                    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>  
                    <br />  
                    <br />  
                    <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Login" Width="308px">  
                        <br />  
                        <br />  
                    <asp:Label ID="Label1" runat="server"></asp:Label>  
                </ContentTemplate>  
            </asp:UpdatePanel>  
        </div>
```

```
<br />
<asp:UpdateProgress ID="UpdateProgress1" runat="server" AssociatedUpdatePanelID="UpdatePanel1"
DisplayAfter="1500">
    <ProgressTemplate>
        plz wait...<br />
        <asp:Image ID="Image1" runat="server" ImageUrl="~/loading.gif" Width="182px" />
        <br />
    </ProgressTemplate>
</asp:UpdateProgress>
<br />
</form>
</body>
</html>
```

WebForm1.aspx.cs:

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

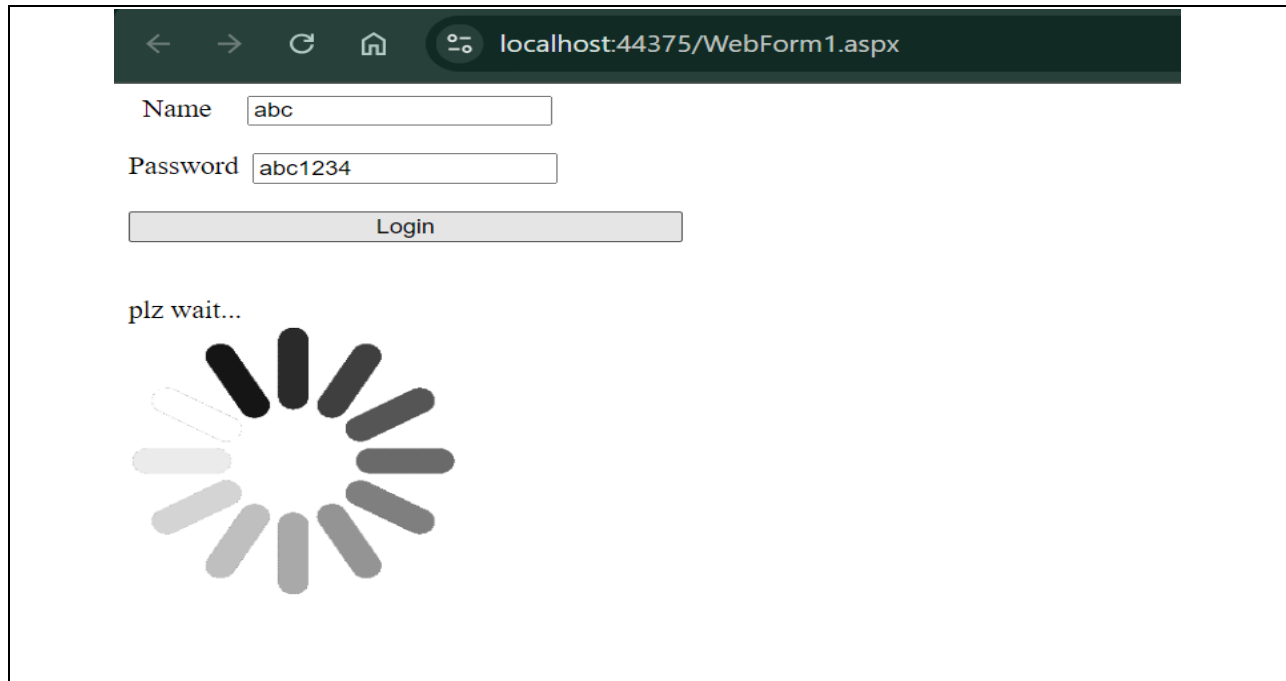
namespace prac10b
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            System.Threading.Thread.Sleep(5000);
            Label1.Text = "Login Successfully...";
        }

    }
}
```

OUTPUT:

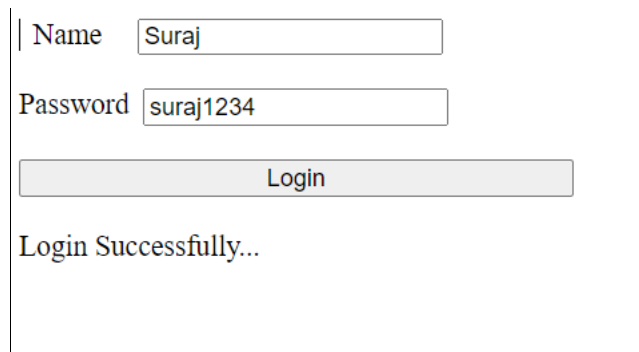



← → ↻ 🏠 🌐 localhost:44375/WebForm1.aspx

Name

Password

plz wait...



Name

Password

Login Successfully...

- c. Create a web application to demonstrate Installation and use of NuGet package.

Install the NuGet Package:

1. Right-click on project in Solution Explore
2. Select Manage NuGet Packages.
3. In the Browse tab, search for Newtonsoft.json
4. Select the Newtonsoft.json package and install
5. After installation , the package will be added to your project's References

WebForm1.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="prac10c.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>NuGet Application</title>
</head>
<body>
  <form id="form1" runat="server">
    <div>
      <h2>Simple NuGet Application</h2>

      <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Serialize Object to Json" />
      <br />
      <br />
      <asp:Label ID="Label1" runat="server"> </asp:Label>

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

WebFrom1.aspx.cs:

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

namespace prac10c
{
  public partial class WebForm1 : System.Web.UI.Page
  {

    public class SimplePerson
    {
      public String Name { get; set; }
      public int Age { get; set; }
    }

    protected void Page_Load(object sender, EventArgs e)
    {
```

```
    }  
  
    protected void Button1_Click(object sender, EventArgs e)  
    {  
        SimplePerson person = new SimplePerson  
        {  
            Name = "Suraj",  
            Age = 20  
        };  
        String json=JsonConvert.SerializeObject(person);  
  
        Label1.Text = "Serialized JSON: " + json;  
    }  
}
```

OUTPUT:

