

**MODULE 1: INTRODUCTION TO ASP.NET****EXPERIMENT NO 1:**

**Aim:** Create a simple web page to show the ASP.NET page Life cycle

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo1_1.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Life Cycle | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Button ID="Button1" runat="server" Text="Submit" OnClick="Button1_Click" /><br
/><br />
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </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;

namespace ExperimentNo1_1
{
    public partial class WebForm1 : System.Web.UI.Page
    {
```

```
protected void Page_PreInit(object sender, EventArgs e)
{
    Label1.Text += "<br/>PreInit";
}

protected void Page_Init(object sender, EventArgs e)
{
    Label1.Text += "<br/>Init";
}

protected void Page_InitComplete(object sender, EventArgs e)
{
    Label1.Text += "<br/>InitComplete";
}

protected void Page_PreLoad(object sender, EventArgs e)
{
    Label1.Text += "<br/>PreLoad";
}

protected void Page_Load(object sender, EventArgs e)
{
    Label1.Text += "<br/>LoadStarted";
}

protected void Button1_Click(object sender, EventArgs e)
{
    Label1.Text += "<br/>SubmitButtonClicked";
}

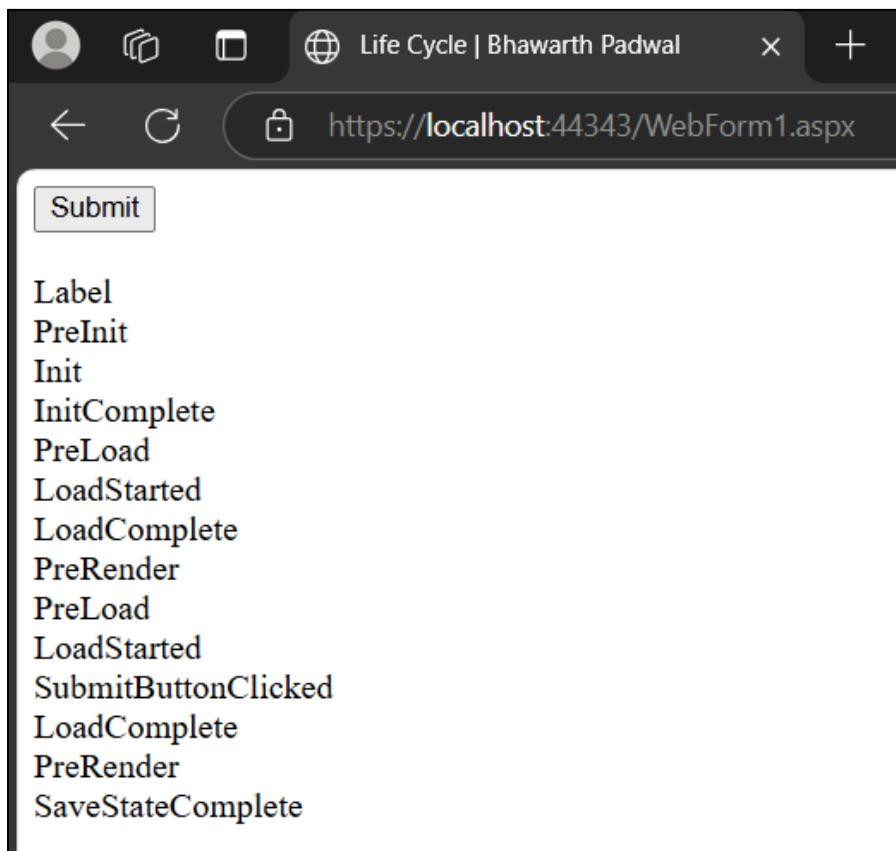
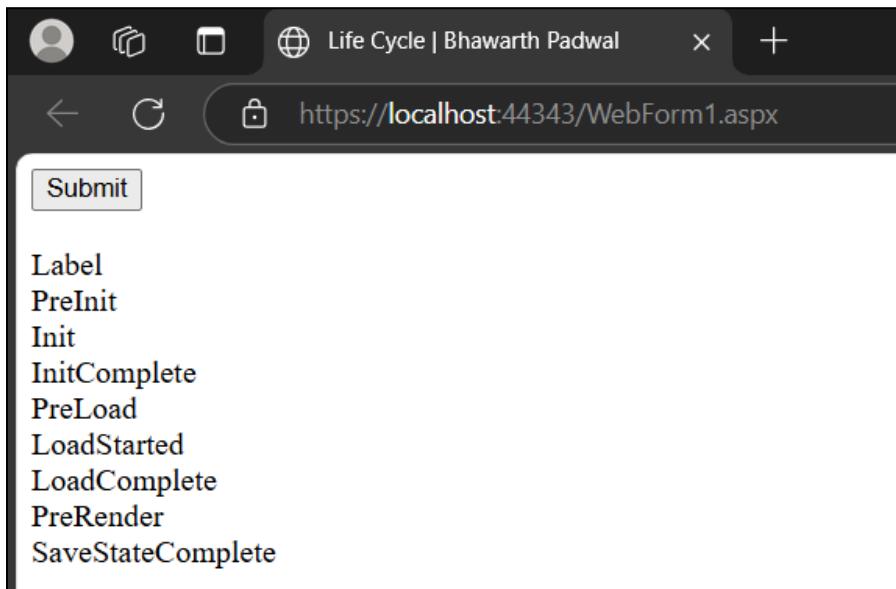
protected void Page_LoadComplete(object sender, EventArgs e)
{
    Label1.Text += "<br/>LoadComplete";
}

protected override void OnPreRender(EventArgs e)
{
    Label1.Text += "<br/>PreRender";
}

protected override void OnSaveStateComplete(EventArgs e)
{
    Label1.Text += "<br/>SaveStateComplete";
}

protected void Page_UnLoad(object sender, EventArgs e)
{
    Label1.Text += "<br/>UnLoad";
}
```

{}

**Output:**

**EXPERIMENT NO 2:**

**Aim:** Design a web form to accept user input (e.g., name, email, and feedback) and display it after submission.

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo1_2.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Registration Page</title>
    <style type="text/css">
        .auto-style1 {
            width: 409px;
        }
        .auto-style2 {
            width: 251px;
        }
    </style>
</head>
<body style="border-style: solid; border-width: 2px; padding: 1px 1px">
    <form id="form1" runat="server">
        <table style="width: 100%;">
            <tr>
                <td colspan="3" class="auto-style1">
                    <h2 style="width: 100%">&nbsp; PERSONAL INFORMATION</h2>
                </td>
            </tr>
            <tr>
                <td class="auto-style2"><strong>Name of the student</strong></td>
                <td><strong>:</strong></td>
                <td>
                    <asp:TextBox ID="name_txt" runat="server"
Width="250px"></asp:TextBox></td>
                </tr>
                <tr>
```

```
<td class="auto-style2"><strong>Class</strong></td>
<td><strong>:</strong></td>
<td>
    <asp:DropDownList ID="DropDownList1" runat="server" Width="250px">
        <asp:ListItem Selected="True" Value="None">Select Class</asp:ListItem>
        <asp:ListItem>FYMCA-A</asp:ListItem>
        <asp:ListItem>FYMCA-B</asp:ListItem>
    </asp:DropDownList>
</td>
</tr>
<tr>
    <td class="auto-style2"><strong>Email ID</strong></td>
    <td><strong>:</strong></td>
    <td>
        <asp:TextBox ID="email_txt" runat="server"
Width="250px"></asp:TextBox></td>
    </tr>
    <tr>
        <td class="auto-style2"><strong>Gender</strong></td>
        <td><strong>:</strong></td>
        <td>
            <asp:RadioButtonList ID="RadioButtonList1" runat="server">
                <asp:ListItem>Male</asp:ListItem>
                <asp:ListItem>Female</asp:ListItem>
            </asp:RadioButtonList></td>
        </tr>
        <tr>
            <td class="auto-style2"><strong>Address</strong></td>
            <td><strong>:</strong></td>
            <td>
                <asp:TextBox ID="address_txt" runat="server"
TextMode="MultiLine"></asp:TextBox></td>
            </tr>
            <tr>
                <td colspan="3"></td>
            </tr>
            <tr>
                <td colspan="3">
                    <asp:Button ID="submit_btn" runat="server" Text="Submit" Width="250px"
OnClick="submit_btn_Click" /></td>
                </tr>
            </table>
        </div>
    </body>
</html>
```

```
</tr>
<tr>
    <td class="auto-style3">&nbsp;</td>
    <td class="auto-style4">&nbsp;</td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td colspan="3">
        <asp:Label ID="DisplayInfo" runat="server"></asp:Label>
    </td>
</tr>

</table>
</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 ExperimentNo1_2
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {}
        protected void submit_btn_Click(object sender, EventArgs e)
        {
            if (RadioButtonList1.SelectedItem != null)
            {
                if (name_txt.Text != null && email_txt.Text != null && address_txt.Text != null &&
DropDownList1.SelectedItem != null)
                {
                    DisplayInfo.Text = "<h3>Selection Completed</h3>";
                }
            }
        }
    }
}
```

```
DisplayInfo.Text += "Name: " + name_txt.Text.ToString();
DisplayInfo.Text += "<br>Class: " + DropDownList1.SelectedValue.ToString();
DisplayInfo.Text += "<br>Email ID: " + email_txt.Text.ToString();
DisplayInfo.Text += "<br>Gender: " + RadioButtonList1.SelectedValue.ToString();
DisplayInfo.Text += "<br>Address: " + address_txt.Text.ToString();

}

else

{

    DisplayInfo.Text = "<br>Please fill above information.";

}

}

else {

    DisplayInfo.Text = "<br>Please select your gender.";

}

}

}

}
```

## Output:

Registration Page | Bhawarth Pad  
https://localhost:44318/WebForm1.aspx

### PERSONAL INFORMATION

Name of the student :

Class :

Email ID :

Gender :  Male  
 Female

Address :

Registration Page | Bhawarth Padwal

https://localhost:44318/WebForm1.aspx

## PERSONAL INFORMATION

Name of the student :

Class :

Email ID :

Gender :  Male  
 Female

Address :

**Selection Completed**

Name: Bhawarth Padwal  
Class: FYMCA-B  
Email ID: bhawarthpadwal7@gmail.com  
Gender: Male  
Address: Khar West, Mumbai-52

**EXPERIMENT NO 3:**

**Aim:** Implement a Cross Page Postback feature to pass data between two web pages.

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo1_3.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Home Page</title>
    <style type="text/css">
        .auto-style1 {
            width: 300px;
        }
        .auto-style2 {
            width: 433px;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <h2>Hello there!</h2>
        <table style="width: 100%;">
            <tr>
                <td class="auto-style1">Enter your name to proceed: </td>
                <td class="auto-style2">
                    <asp:TextBox ID="name_txt" runat="server"
Width="350px"></asp:TextBox></td>
                    <td>
                        <asp:Button ID="proceed_btn" runat="server" Text="Proceed"
OnClick="proceed_btn_Click" style="margin-left: 0px" Width="250px" /></td>
                    </tr>
                </table>
            </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 ExperimentNo1_3
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void proceed_btn_Click(object sender, EventArgs e)
        {
            Server.Transfer("~/Display.aspx?Name=" + name_txt.Text + "&Work=Mobile App
Developer");
        }
    }
}
```

**Display.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Display.aspx.cs"
Inherits="ExperimentNo1_3.Display" %>
```

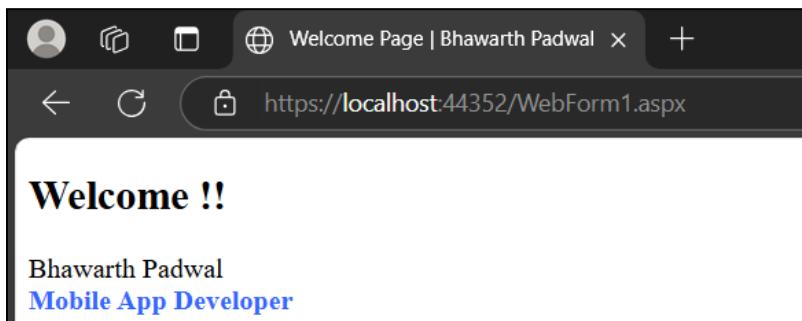
```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml" forecolor="#3333FF">
<head runat="server">
    <title>Welcome Page</title>
</head>
<body>
    <form id="form1" runat="server">
        <h2>Welcome !!</h2>
        <asp:Label ID="welcome_name_txt" runat="server"></asp:Label> <br />
        <asp:Label ID="work_txt" runat="server" Font-Bold="True"
ForeColor="#3366FF"></asp:Label>
    </form>
</body>
```

&lt;/html&gt;

**Display.aspx.cs:**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace ExperimentNo1_3
{
    public partial class Display : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (PreviousPage != null) {
                welcome_name_txt.Text = Request.QueryString["Name"];
                work_txt.Text = Request.QueryString["Work"];
            }
        }
    }
}
```

**Output:**

**EXPERIMENT NO 4:**

**Aim:** Develop a web application demonstrating AutoPostback using a dropdown list to select and display items.

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo1_4.WebForm1" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>AutoPostBack | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <table style="width: 100%;">
            <tr>
                <td><strong>Controls to Monitor the AutoPostBack</strong></td>
                <td>&nbsp;</td>
            </tr>
            <tr>
                <td>&nbsp;</td>
                <td>&nbsp;</td>
            </tr>
            <tr>
                <td>
                    <asp:TextBox ID="TextBox1" runat="server" AutoPostBack="True"
Height="30px" Width="250px" Placeholder="Type Something"
OnTextChanged="On_Change"></asp:TextBox></td>
                    <td>&nbsp;</td>
                </tr>
                <tr>
                    <td>&nbsp;</td>
                    <td>&nbsp;</td>
                </tr>
                <tr>
                    <td>
```

```
<asp:CheckBox ID="CheckBox1" runat="server" Text="Mark this"
AutoPostBack="True" OnCheckedChanged="On_Change"/></td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td>&nbsp;</td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td>
        <asp:RadioButton ID="RadioButton1" runat="server" Text="Either this"
AutoPostBack="True" OnCheckedChanged="On_Change"/>&nbsp;&nbsp;&nbsp;
            <asp:RadioButton ID="RadioButton2" runat="server" Text="Or this"
AutoPostBack="True" OnCheckedChanged="On_Change"/></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td><strong>Triggered Controls</strong></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td>
            <asp:ListBox ID="ListBox1" runat="server" Height="175px"
Width="250px"></asp:ListBox></td>
        </tr>
    </table>
</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 ExperimentNo1_4
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void On_Change(object sender, EventArgs e) {
            string ControlName = ((Control)sender).ID;
            ListBox1.Items.Add(ControlName);
            ListBox1.SelectedIndex = ListBox1.Items.Count - 1;
        }
    }
}
```

### **Output:**

The image displays two side-by-side screenshots of a web browser window titled "AutoPostBack | Bhawarth Padwal". The URL in the address bar is "https://localhost:44388/WebForm1.aspx".

**Screenshot 1 (Left):** The page title is "Controls to Monitor the AutoPostBack". It contains a text input field with the placeholder "Type Something", a checkbox labeled "Mark this" (unchecked), and two radio buttons labeled "Either this" and "Or this". Below the controls is a section titled "Triggered Controls" which is currently empty.

**Screenshot 2 (Right):** The page title is "Controls to Monitor the AutoPostBack". The text input field now contains the value "Student". The checkbox "Mark this" is checked. The radio button "Or this" is selected. Below the controls is a section titled "Triggered Controls" containing a list box with four items: "TextBox1", "CheckBox1", "RadioButton1", and "RadioButton2". The item "RadioButton2" is highlighted with a dark gray background.

**EXPERIMENT NO 5:**

**Aim:** Create a simple calculator using server-side controls and operators in ASP.NET

**Default.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="Experiment1_5.Default" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Calculator Bhawarth Padwal</title>
    <link href="Calculator.css" rel="stylesheet" />
</head>
<body>
    <form id="form1" runat="server">
        <div class="calculator-holder">
            <table class="calculator" id="calc">
                <tr>
                    <td colspan="4" class="calc_td_result">
                        <input type="text" readonly="readonly" runat="server" name="calc_result"
id="calc_result" class="calc_result" />
                    </td>
                </tr>
                <tr>
                    <td class="calc_td_btn">
                        <asp:Button ID="ButtonCE" runat="server" CssClass="calc_btn" Text="CE"
OnClick="ButtonCE_Click" />
                    </td>
                    <td class="calc_td_btn">
                        <asp:Button ID="ButtonReturn" runat="server" CssClass="calc_btn" Text="&larr;"
OnClick="ButtonReturn_Click" />
                    </td>
                    <td class="calc_td_btn">
                        <asp:Button ID="ButtonPercentage" runat="server" CssClass="calc_btn" Text="%"
OnClick="ButtonPercentage_Click" />
                    </td>
                    <td class="calc_td_btn">
                        <asp:Button ID="ButtonPlus" runat="server" CssClass="calc_btn" Text="+"
OnClick="ButtonPlus_Click" />
                    </td>
                
```

```
</td>
</tr>
<tr>
    <td class="calc_td_btn">
        <asp:Button ID="Button7" runat="server" CssClass="calc_btn" Text="7"
        OnClick="Button7_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="Button8" runat="server" CssClass="calc_btn" Text="8"
        OnClick="Button8_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="Button9" runat="server" CssClass="calc_btn" Text="9"
        OnClick="Button9_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="ButtonMinus" runat="server" CssClass="calc_btn" Text="-"
        OnClick="ButtonMinus_Click" />
    </td>
</tr>
<tr>
    <td class="calc_td_btn">
        <asp:Button ID="Button4" runat="server" CssClass="calc_btn" Text="4"
        OnClick="Button4_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="Button5" runat="server" CssClass="calc_btn" Text="5"
        OnClick="Button5_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="Button6" runat="server" CssClass="calc_btn" Text="6"
        OnClick="Button6_Click" />
    </td>
    <td class="calc_td_btn">
        <asp:Button ID="ButtonMultiply" runat="server" CssClass="calc_btn" Text="x"
        OnClick="ButtonMultiply_Click" />
    </td>
</tr>
<tr>
    <td class="calc_td_btn">
```

```
<asp:Button ID="Button1" runat="server" CssClass="calc_btn" Text="1"
OnClick="Button1_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="Button2" runat="server" CssClass="calc_btn" Text="2"
OnClick="Button2_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="Button3" runat="server" CssClass="calc_btn" Text="3"
OnClick="Button3_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="ButtonDivide" runat="server" CssClass="calc_btn" Text="&divide;"
OnClick="ButtonDivide_Click" />
</td>
</tr>
<tr>
<td class="calc_td_btn">
<asp:Button ID="Button0" runat="server" CssClass="calc_btn" Text="0"
OnClick="Button0_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="ButtonPlusMinus" runat="server" CssClass="calc_btn"
Text="&plusmn;" OnClick="ButtonPlusMinus_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="ButtonComa" runat="server" CssClass="calc_btn" Text=","
OnClick="ButtonComa_Click" />
</td>
<td class="calc_td_btn">
<asp:Button ID="ButtonEquals" runat="server" CssClass="calc_btn" Text="="
OnClick="ButtonEquals_Click" />
</td>
</tr>
</table>
</div>
</form>
</body></html>
```

**Default.aspx.cs:**

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

namespace Experiment1_5
{
    public partial class Default : System.Web.UI.Page
    {
        Calculator _Calculate;
        protected void Page_Load(object sender, EventArgs e)
        {
            _Calculate = new Calculator();
        }

        protected void Button0_Click(object sender, EventArgs e)
        {
            calc_result.Value = calc_result.Value + "0";
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            calc_result.Value = calc_result.Value + "1";
        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            calc_result.Value = calc_result.Value + "2";
        }

        protected void Button3_Click(object sender, EventArgs e)
        {
            calc_result.Value = calc_result.Value + "3";
        }

        protected void Button4_Click(object sender, EventArgs e)
        {
```

```
    calc_result.Value = calc_result.Value + "4";
}

protected void Button5_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + "5";
}

protected void Button6_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + "6";
}

protected void Button7_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + "7";
}

protected void Button8_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + "8";
}

protected void Button9_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + "9";
}

protected void ButtonComa_Click(object sender, EventArgs e)
{
    calc_result.Value = calc_result.Value + ",";
}

protected void ButtonPlusMinus_Click(object sender, EventArgs e)
{
    if (calc_result.Value == string.Empty)
    {
        Response.Write("<script>alert('No Value is given.')</script>");
    }
    else
```

```
{  
    calc_result.Value = "-" + calc_result.Value;  
}  
}  
  
protected void ButtonPlus_Click(object sender, EventArgs e)  
{  
    if (calc_result.Value == string.Empty)  
    {  
        Response.Write("<script>alert('No Value is given.')</script>");  
    }  
    else  
    {  
        ViewState["Value1"] = calc_result.Value;  
        ViewState["Operation"] = "Addition";  
        calc_result.Value = string.Empty;  
    }  
}  
  
protected void ButtonMinus_Click(object sender, EventArgs e)  
{  
    if (calc_result.Value == string.Empty)  
    {  
        Response.Write("<script>alert('No Value is given.')</script>");  
    }  
    else  
    {  
        ViewState["Value1"] = calc_result.Value;  
        ViewState["Operation"] = "Subtraction";  
        calc_result.Value = string.Empty;  
    }  
}  
  
protected void ButtonMultiply_Click(object sender, EventArgs e)  
{  
    if (calc_result.Value == string.Empty)  
    {  
        Response.Write("<script>alert('No Value is given.')</script>");  
    }  
    else
```

```
{  
    ViewState["Value1"] = calc_result.Value;  
    ViewState["Operation"] = "Multiplication";  
    calc_result.Value = string.Empty;  
}  
}  
  
protected void ButtonDivide_Click(object sender, EventArgs e)  
{  
    if (calc_result.Value == string.Empty)  
    {  
        Response.Write("<script>alert('No Value is given.')</script>");  
    }  
    else  
    {  
        ViewState["Value1"] = calc_result.Value;  
        ViewState["Operation"] = "Division";  
        calc_result.Value = string.Empty;  
    }  
}  
  
protected void ButtonPercentage_Click(object sender, EventArgs e)  
{  
    if (calc_result.Value == string.Empty)  
    {  
        Response.Write("<script>alert('No Value is given.')</script>");  
    }  
    else  
    {  
        ViewState["Value1"] = calc_result.Value;  
        ViewState["Operation"] = "Percentage";  
        calc_result.Value = string.Empty;  
    }  
}  
  
protected void ButtonCE_Click(object sender, EventArgs e)  
{  
    if ((string)ViewState["Operation"] != null)  
    {  
        ViewState["Operation"] = null;
```

```
}

else if ((string)ViewState["Value1"] != null)
{
    ViewState["Value1"] = null;
}
}

protected void ButtonReturn_Click(object sender, EventArgs e)
{
    if (calc_result.Value == string.Empty)
    {
        Response.Write("<script>alert('No Value is given.')</script>");
    }
    else
    {
        string CharactersInTextBox = calc_result.Value;
        string FinalCharactersInTextBox = string.Empty;

        for (int i = 0; i < CharactersInTextBox.Length - 1; i++)
        {
            FinalCharactersInTextBox = FinalCharactersInTextBox + CharactersInTextBox[i];
        }

        calc_result.Value = FinalCharactersInTextBox;
    }
}

protected void ButtonEquals_Click(object sender, EventArgs e)
{
    if (calc_result.Value == string.Empty)
    {
        Response.Write("<script>alert('No Value is given.')</script>");
    }
    else
    {
        ViewState["Value2"] = calc_result.Value;
        calc_result.Value = string.Empty;

        try
        {
```

```
if ((string)ViewState["Operation"] == "Addition")
{
    calc_result.Value = _Calculate.Add(Convert.ToInt32(ViewState["Value1"]),
Convert.ToInt32(ViewState["Value2"])).ToString();
}
else if ((string)ViewState["Operation"] == "Subtraction")
{
    calc_result.Value = _Calculate.Subtract(Convert.ToInt32(ViewState["Value1"]),
Convert.ToInt32(ViewState["Value2"])).ToString();
}
else if ((string)ViewState["Operation"] == "Multiplication")
{
    calc_result.Value = _Calculate.Multiply(Convert.ToInt32(ViewState["Value1"]),
Convert.ToInt32(ViewState["Value2"])).ToString();
}
else if ((string)ViewState["Operation"] == "Division")
{
    calc_result.Value = _Calculate.Divide(Convert.ToInt32(ViewState["Value1"]),
Convert.ToInt32(ViewState["Value2"])).ToString();
}
else if ((string)ViewState["Operation"] == "Percentage")
{
    calc_result.Value =
_Calculate.Percentage(Convert.ToInt32(ViewState["Value1"]),
Convert.ToInt32(ViewState["Value2"])).ToString();
}
else Response.Write("<script>alert('No Operation was recorded.')</script>");
}
catch (FormatException)
{
    Response.Write("<script>alert('Bad Input Format.')</script>");
}
}
```

## **Calculator.cs:**

## namespace Experiment1\_5

```
{  
    public class Calculator  
    {  
        public int Add(int Value1, int Value2)  
        {  
            return Value1 + Value2;  
        }  
        public int Subtract(int Value1, int Value2)  
        {  
            return Value1 - Value2;  
        }  
        public int Multiply(int Value1, int Value2)  
        {  
            return Value1 * Value2;  
        }  
        public double Divide(int Value1, int Value2)  
        {  
            return Value1 / Value2;  
        }  
        public string Percentage(int Value1, int Value2)  
        {  
            Value1 = Value1 * 100;  
  
            return Divide(Value1, Value2) + "%";  
        }  
    }  
}
```

**Calculator.css:**

```
body {  
}  
.calculator-holder {  
    position: relative;  
    top: 50%;  
    transform: translateY(+50%);  
}  
  
.calculator {
```

```
width: 300px;  
height: 300px;  
background-color: #eeeeee;  
border: 2px solid #CCCCCC;  
margin: 0 auto 0 auto;  
padding-left: 5px;  
padding-bottom: 5px;  
}
```

```
.calculator td {  
    height: 16.66%;  
}
```

```
.calc_td_result {  
    text-align: center;  
}
```

```
.calc_result {  
    width: 90%;  
    text-align: right;  
}
```

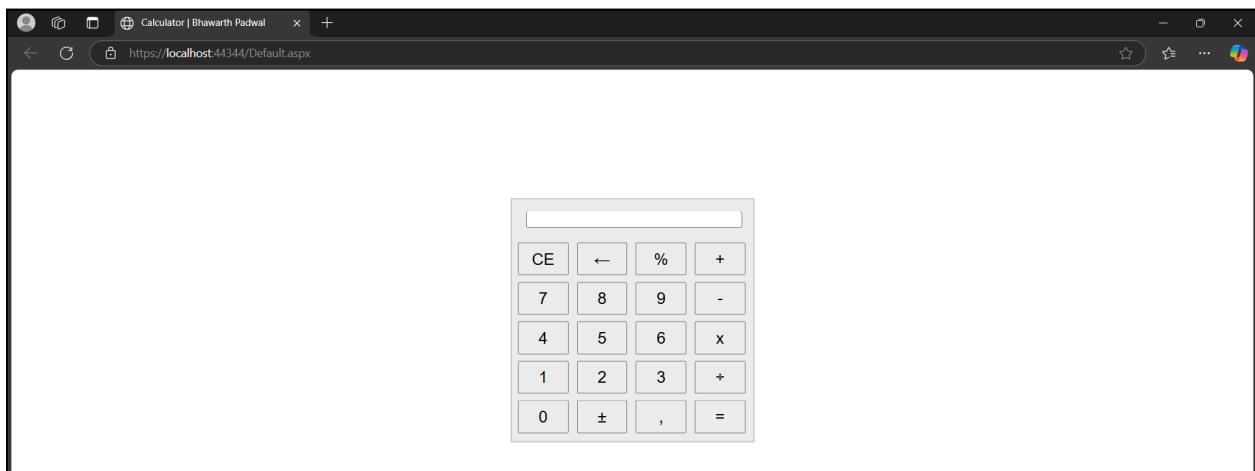
```
.calc_td_calculs {  
    text-align: center;  
}
```

```
.calc_calculs {  
    width: 90%;  
    text-align: left;  
}
```

```
.calc_td_btn {  
    width: 25%;  
    height: 100%;  
}
```

```
.calc_btn {  
    width: 90%;  
    height: 90%;  
    font-size: 20px;
```

{}

**Output:**

**EXPERIMENT NO 1:**

**Aim:** Design a registration form with validation controls for mandatory fields, email format, and passwords.

**Login2.aspx:**

```
<%@ Page Language="C#" UnobtrusiveValidationMode ="None" AutoEventWireup="true"  
CodeBehind="Login2.aspx.cs" Inherits="ExperimentNo2_1.Login2" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">  
<head runat="server">  
    <title>Validation and Control | Bhawarth Padwal (107)</title>  
    <style type="text/css">  
        .auto-style1 {  
            width: 200px;  
        }  
        .auto-style2 {  
            width: 200px;  
            height: 23px;  
        }  
        .auto-style4 {  
            margin-right: 1px;  
        }  
        .auto-style5 {  
            width: 200px;  
            height: 26px;  
        }  
        .auto-style6 {  
            width: 550px;  
        }  
        .auto-style7 {  
            width: 550px;  
            height: 26px;  
        }  
        .auto-style8 {  
            width: 550px;  
            height: 23px;  
        }  
    </style>
```

```
</style>
</head>
<body>
<form id="form1" runat="server">
<div>
    <asp:Label ID="Label1" runat="server" Font-Bold="True" Font-Names="Comic Sans MS" Font-Size="X-Large" ForeColor="#CC6600" Text="Using Validation Controls"></asp:Label>
    <br />
    <br />
    <table style="width:100%;">
        <tr>
            <td class="auto-style1">
                <asp:Label ID="Label2" runat="server" Text="First Name"></asp:Label>
            </td>
            <td class="auto-style6">
                <asp:TextBox ID="TextBox1" runat="server" Width="175px"></asp:TextBox>
                &nbsp;
                <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server" ControlToValidate="TextBox1" ErrorMessage="Please enter your First Name..." ForeColor="Red" SetFocusOnError="True">*</asp:RequiredFieldValidator>
            </td>
        </tr>
        <tr>
            <td class="auto-style1">
                <asp:Label ID="Label3" runat="server" Text="Last Name"></asp:Label>
            </td>
            <td class="auto-style6">
                <asp:TextBox ID="TextBox2" runat="server" CssClass="auto-style4" Width="175px"></asp:TextBox>
                &nbsp;
                <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server" ControlToValidate="TextBox2" ErrorMessage="Please enter Second name..." ForeColor="Red" SetFocusOnError="True">*</asp:RequiredFieldValidator>
            </td>
        </tr>
        <tr>
            <td class="auto-style5">
                <asp:Label ID="Label4" runat="server" Text="Email Id"></asp:Label>
            </td>
```

```
<td class="auto-style7">
    <asp:TextBox ID="TextBox3" runat="server" Width="175px"></asp:TextBox>
    &nbsp;
    <asp:RequiredFieldValidator ID="RequiredFieldValidator3" runat="server"
ControlToValidate="TextBox3" ErrorMessage="Enter Email id..." ForeColor="Red"
SetFocusOnError="True">*</asp:RequiredFieldValidator>
    &nbsp;<asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
ControlToValidate="TextBox3" ErrorMessage="Invalid Email Id..." ForeColor="Red"
SetFocusOnError="True"
ValidationExpression="\w+([-.\']\w+)*@\w+([-.\']\w+)*\.\w+([-.\']\w+)*">*</asp:RegularExpressionValidator>
</td>
</tr>
<tr>
    <td class="auto-style1">
        <asp:Label ID="Label5" runat="server" Text="Age"></asp:Label>
    </td>
    <td class="auto-style6">
        <asp:TextBox ID="TextBox4" runat="server" Width="175px"></asp:TextBox>
        &nbsp;
        <asp:RequiredFieldValidator ID="RequiredFieldValidator4" runat="server"
ControlToValidate="TextBox4" ErrorMessage="Enter Age..." ForeColor="Red"
SetFocusOnError="True">*</asp:RequiredFieldValidator>
        &nbsp;<asp:RangeValidator ID="RangeValidator1" runat="server"
ControlToValidate="TextBox4" ErrorMessage="Age should be in range 18 - 60"
ForeColor="Red" MaximumValue="60" MinimumValue="18"
SetFocusOnError="True">*</asp:RangeValidator>
    </td>
</tr>
<tr>
    <td class="auto-style2">
        <asp:Label ID="Label6" runat="server" Text="Password"></asp:Label>
    </td>
    <td class="auto-style8">
        <asp:TextBox ID="TextBox5" runat="server" Width="175px"></asp:TextBox>
        &nbsp;
        <asp:RequiredFieldValidator ID="RequiredFieldValidator5" runat="server"
ControlToValidate="TextBox5" ErrorMessage="Enter Password..." ForeColor="Red"
SetFocusOnError="True">*</asp:RequiredFieldValidator>
    </td>
```

```
</tr>
<tr>
    <td class="auto-style1">
        <asp:Label ID="Label7" runat="server" Text="Re-enter
Password"></asp:Label>
    </td>
    <td class="auto-style6">
        <asp:TextBox ID="TextBox6" runat="server" Width="175px"></asp:TextBox>
        &nbsp;
        <asp:RequiredFieldValidator ID="RequiredFieldValidator6" runat="server"
ControlToValidate="TextBox6" ErrorMessage="Re-enter Password..." ForeColor="Red"
SetFocusOnError="True">*</asp:RequiredFieldValidator>
        <asp:CompareValidator ID="CompareValidator1" runat="server"
ControlToCompare="TextBox5" ControlToValidate="TextBox6" ErrorMessage="Passwords
do not match..." ForeColor="Red" SetFocusOnError="True">*</asp:CompareValidator>
    </td>
</tr>
<tr>
    <td class="auto-style2">
        <asp:Label ID="Label8" runat="server" Text="Select Gender"></asp:Label>
    </td>
    <td class="auto-style8">
        <asp:RadioButtonList ID="RadioButtonList1" runat="server"
RepeatDirection="Horizontal">
            <asp:ListItem>Male</asp:ListItem>
            <asp:ListItem>Female</asp:ListItem>
            <asp:ListItem>Others</asp:ListItem>
        </asp:RadioButtonList>
    </td>
</tr>
<tr>
    <td class="auto-style2"></td>
    <td class="auto-style8">
        <asp:RequiredFieldValidator ID="RequiredFieldValidator7" runat="server"
ControlToValidate="RadioButtonList1" ErrorMessage="Select Gender..."
ForeColor="Red">*</asp:RequiredFieldValidator>
    </td>
</tr>
<tr>
    <td class="auto-style1">
```

```
<asp:ValidationSummary ID="ValidationSummary1" runat="server"
ForeColor="Red" HeaderText="Page Errors" />
</td>
<td class="auto-style6">&nbsp;</td>
</tr>
<tr>
<td class="auto-style1">
<asp:Button ID="Button1" runat="server" Text="Submit" BackColor="White"
Font-Bold="True" Font-Overline="False" />
</td>
<td class="auto-style6">&nbsp;</td>
</tr>
</table>
</div>
</form>
</body>
</html>
```

**Output:**

Using Validation Controls

First Name \*  
Last Name \*  
Email Id \*  
Age \*  
Password \*  
Re-enter Password \*  
Select Gender \* Male Female Others \*

Page Errors

- Please enter your First Name...
- Please enter Second name...
- Enter Email id...
- Enter Age...
- Enter Password...
- Re-enter Password...
- Select Gender...

Submit

Using Validation Controls

First Name: Bhawarth

Last Name: Padwal

Email Id: bhawarhpadwal7@gmail.com

Age: 21

Password: 1234567

Re-enter Password: 1234567

Select Gender:

Male  Female  Others

**Submit**

**EXPERIMENT NO 2:**

**Aim:** Design an ASP.NET Application to Display Random Advertisements using ADRotator Control

**AdsData.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="AdsData.aspx.cs"
Inherits="ExperimentNo2_2.AdsData" %>
```

```
<!DOCTYPE html>
```

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

```
<div>
    <asp:AdRotator ID="AdRotator1" runat="server"
AdvertisementFile="~/XMLFile1.xml" Height="600px" Width="1500px"/>
</div>
</form>
</body>
</html>
```

**XMLFile1.xml:**

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
    <Ad>
        <ImageUrl>~/Images/kingfisher.jpeg</ImageUrl>

        <NavigateUrl>https://www.britannica.com/animal/kingfisher-bird</NavigateUrl>
            <AlternateText>My Birds</AlternateText>
            <Impressions>50</Impressions>
            <Keyword>Meera</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>~/Images/parrot.jpeg</ImageUrl>
        <NavigateUrl>https://www.britannica.com/animal/parrot</NavigateUrl>
        <AlternateText>My Birds</AlternateText>
        <Impressions>50</Impressions>
        <Keyword>Meera</Keyword>
    </Ad>
    <Ad>
        <ImageUrl>~/Images/sparrow.jpg</ImageUrl>
        <NavigateUrl>https://www.britannica.com/animal/sparrow</NavigateUrl>
        <AlternateText>My Birds</AlternateText>
        <Impressions>50</Impressions>
        <Keyword>Meera</Keyword>
    </Ad>
</Advertisements>
```

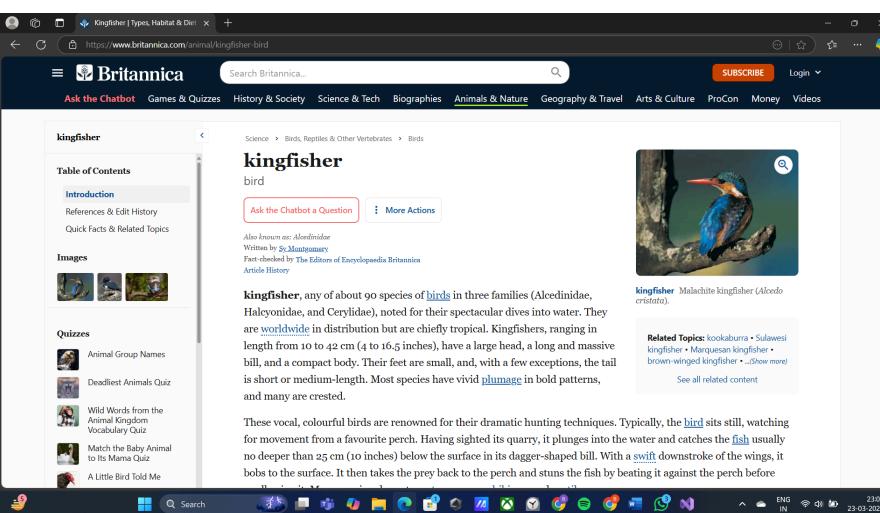
**Output:**



The image shows a Kingfisher bird with a bright blue head and neck, and a reddish-orange breast and belly, perched on a dark, textured branch. The background is blurred green foliage.

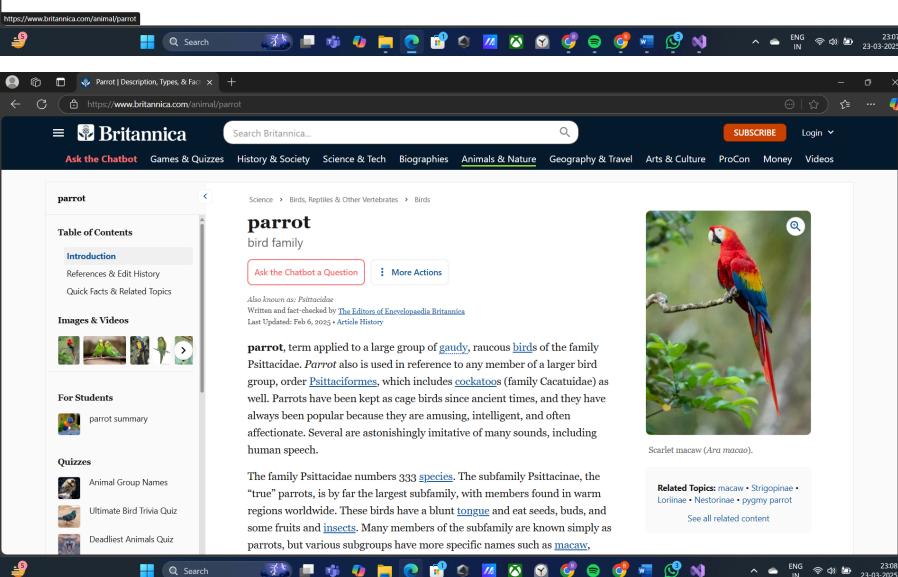

This row contains two screenshots. The top one is a local development page titled "Adicitator | Bhawarth Padwal" showing the same Kingfisher image. The bottom one is a screenshot of a Microsoft Edge browser displaying the Britannica article page for "Kingfisher | Types, Habitat & Diet".

This screenshot shows the full Britannica article page for "kingfisher". The main content discusses the bird's classification, hunting techniques, and various species like the Malachite kingfisher. It includes a sidebar with quizzes and related topics.



The screenshot shows a vibrant red and blue parrot in flight, captured mid-flight against a blurred green background. This image is displayed in a browser window, likely as part of a web application or a search result.

The screenshot shows a Microsoft Edge browser window displaying the Britannica website for the term "parrot". The page includes a sidebar with navigation links like "Table of Contents", "Introduction", and "Images & Videos". The main content area features a large image of a Scarlet macaw (Ara macao) perched on a branch. Below the image, there is descriptive text about the parrot family, mentioning its scientific name Psittacidae, and details about its appearance and behavior. The Britannica logo is visible at the top of the page.

**EXPERIMENT NO 3:**

**Aim:** Create a web page with an interactive calendar control to select a date and display it in a label. Display Current Month's Calendar. Show Some image in the cell along with a message.

**Default.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="ExperimentNo2_3.Default" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Calendar | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <p style="text-align: center">
                <b></b>
                <asp:Label ID="Label1" runat="server" Font-Bold="True" Font-Names="Arial
Black" 
                    Font-Size="Medium" ForeColor="#0066FF">
                    Indian List of Holidays 2025
                </asp:Label>
                <br />
                <b></b>
            </p>

            <asp:Calendar ID="Calendar1" runat="server" BackColor="#FFFFCC"
BorderColor="#FFCC66"
                BorderWidth="1px" DayNameFormat="Shortest" Font-Names="Verdana"
Font-Size="8pt"
                ForeColor="#663399" ShowGridLines="True"
OnDayRender="Calendar1_DayRender"
                OnSelectionChanged="Calendar1_SelectionChanged"
OnVisibleMonthChanged="Calendar1_VisibleMonthChanged">
                <SelectedDayStyle BackColor="#CCCCFF" Font-Bold="True" />
                <SelectorStyle BackColor="#FFCC66" />
                <TodayDayStyle BackColor="#FFCC66" ForeColor="White" />
            </asp:Calendar>
        </div>
    </form>
</body>
</html>
```

```

<OtherMonthDayStyle ForeColor="#CC9966" />
<NextPrevStyle Font-Size="9pt" ForeColor="#FFFFCC" />
<DayHeaderStyle BackColor="#FFCC66" Font-Bold="True" Height="1px" />
<TitleStyle BackColor="#990000" Font-Bold="True" Font-Size="9pt"
ForeColor="#FFFFCC" />
</asp:Calendar>

<br />
<b></b>
<asp:Label ID="LabelAction" runat="server"></asp:Label>
<br />
<b></b>
</div>
</form>
</body>
</html>

```

**Default.aspx.cs:**

```

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

namespace ExperimentNo2_3
{
    public partial class Default : System.Web.UI.Page
    {
        Hashtable HolidayList;

        protected void Page_Load(object sender, EventArgs e)
        {
            HolidayList = Getholiday();
            Calendar1.Caption = " ";
            Calendar1.FirstDayOfWeek = FirstDayOfWeek.Sunday;
            Calendar1.NextPrevFormat = NextPrevFormat.ShortMonth;
            Calendar1.TitleFormat = TitleFormat.Month;
            Calendar1.ShowGridLines = true;
        }
    }
}

```

```
Calendar1.DayStyle.Height = new Unit(50);
Calendar1.DayStyle.Width = new Unit(150);
Calendar1.DayStyle.HorizontalAlign = HorizontalAlign.Center;
Calendar1.DayStyle.VerticalAlign = VerticalAlign.Middle;
Calendar1.OtherMonthDayStyle.BackColor = System.Drawing.Color.AliceBlue;
}

private Hashtable Getholiday()
{
    Hashtable holiday = new Hashtable();
    holiday[new DateTime(2025, 1, 1)] = "New Year";
    holiday[new DateTime(2025, 1, 14)] = "Pongal";
    holiday[new DateTime(2025, 1, 26)] = "Republic Day";
    holiday[new DateTime(2025, 3, 14)] = "Holi";
    holiday[new DateTime(2025, 4, 10)] = "Good Friday";
    holiday[new DateTime(2025, 4, 14)] = "Dr. Ambedkar Jayanti & Tamil New Year";
    holiday[new DateTime(2025, 5, 1)] = "May Day";
    holiday[new DateTime(2025, 5, 14)] = "Buddha Purnima";
    holiday[new DateTime(2025, 7, 10)] = "Rath Yatra";
    holiday[new DateTime(2025, 8, 15)] = "Independence Day";
    holiday[new DateTime(2025, 8, 16)] = "Parsi New Year";
    holiday[new DateTime(2025, 9, 7)] = "Ganesh Chaturthi";
    holiday[new DateTime(2025, 10, 2)] = "Gandhi Jayanti";
    holiday[new DateTime(2025, 10, 21)] = "Dussehra";
    holiday[new DateTime(2025, 10, 31)] = "Diwali";
    holiday[new DateTime(2025, 11, 1)] = "Govardhan Puja";
    holiday[new DateTime(2025, 11, 3)] = "Bhai Dooj";
    holiday[new DateTime(2025, 11, 7)] = "Chhath Puja";
    holiday[new DateTime(2025, 12, 25)] = "Christmas";
    return holiday;
}

protected void Calendar1_SelectionChanged(object sender, EventArgs e)
{
    LabelAction.Text = "Date changed to :" +
    Calendar1.SelectedDate.ToShortDateString();
}
```

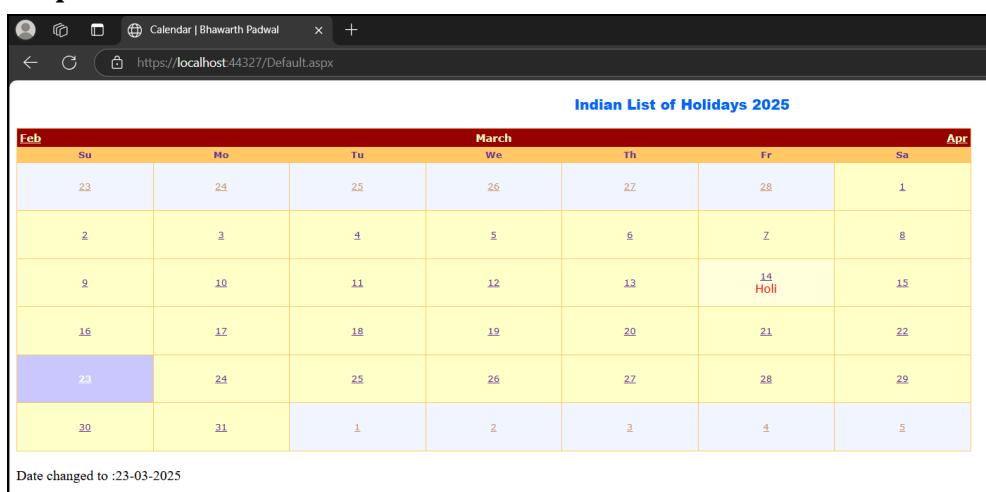
```
protected void Calendar1_VisibleMonthChanged(object sender,
MonthChangedEventArgs e)
{
    LabelAction.Text = "Month changed to :" + e.NewDate.ToShortDateString();
}

protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
{
    if (HolidayList.ContainsKey(e.Day.Date))
    {
        Literal literal1 = new Literal();
        literal1.Text = "<br/>";
        e.Cell.Controls.Add(literal1);

        Label label1 = new Label();
        label1.Text = (string)HolidayList[e.Day.Date];
        label1.Font.Size = new FontUnit(FontSize.Small);
        label1.ForeColor = System.Drawing.Color.Red;
        e.Cell.Controls.Add(label1);

        e.Cell.BackColor = System.Drawing.Color.LightYellow;
    }
}
```

## Output:



**EXPERIMENT NO 4:**

**Aim:** Implement a navigation menu to link multiple pages of your web application.

**Default.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="ExperimentNo2_4.Default" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Link Pages | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TreeView ID="TreeView1" runat="server" Height="230px" Width="119px">
                <Nodes>
                    <asp:TreeNode NavigateUrl("~/Home.aspx" Text="Home" Value="Home"></asp:TreeNode>
                        <asp:TreeNode Text="Employee" Value="Employee">
                            <asp:TreeNode NavigateUrl "~/ProfilePage.aspx" Text="Profile" Value="Profile"></asp:TreeNode>
                                <asp:TreeNode NavigateUrl "~/Resume.aspx" Text="Upload Resume" Value="Upload Resume"></asp:TreeNode>
                        </asp:TreeNode>
                    <asp:TreeNode Text="Admin" Value="Admin">
                        <asp:TreeNode NavigateUrl "~/AddUser.aspx" Text="Add User" Value="Add User"></asp:TreeNode>
                    </asp:TreeNode>
                </Nodes>
            </asp:TreeView>
        </div>
    </form>
</body>
</html>
```

**Home.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Home.aspx.cs"
Inherits="ExperimentNo2_4.Home" %>
```

```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Home Page | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>HOME PAGE</h2>
        </div>
    </form>
</body>
</html>
```

**ProfilePage.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ProfilePage.aspx.cs"
Inherits="ExperimentNo2_4.ProfilePage" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Profile Page | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>PROFILE PAGE</h2>
        </div>
    </form>
</body>
</html>
```

**AddUser.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="AddUser.aspx.cs"
Inherits="ExperimentNo2_4.AddUser" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Add User Page | Bhawarth Padwak</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>ADD USER PAGE</h2>
        </div>
    </form>
</body>
</html>
```

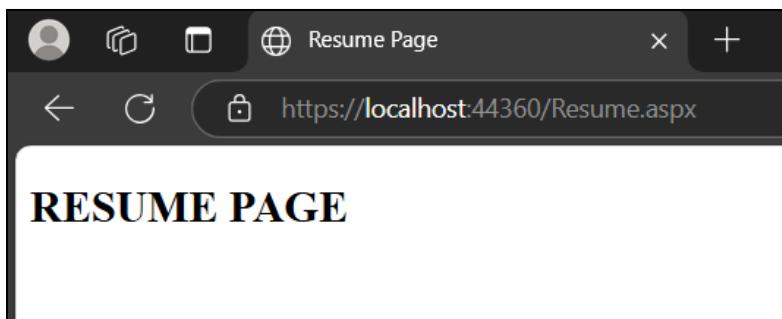
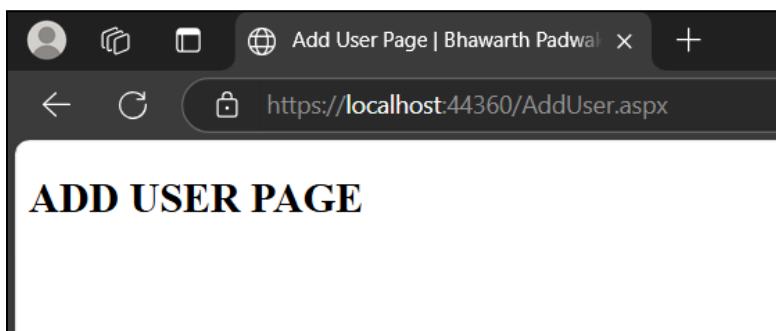
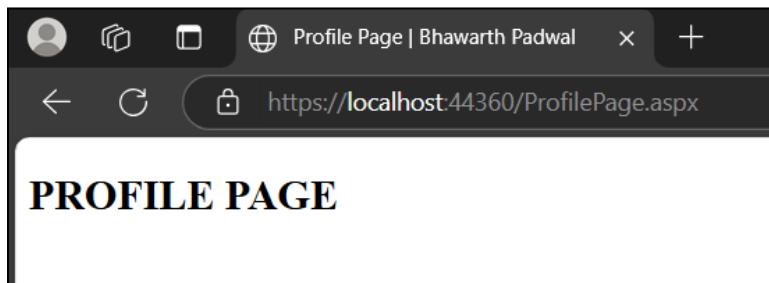
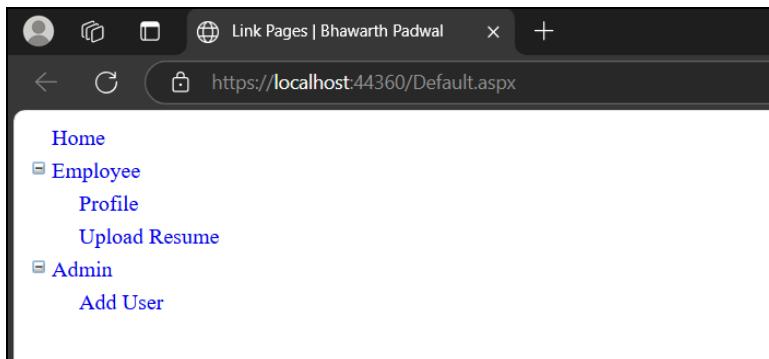
**Resume.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Resume.aspx.cs"
Inherits="ExperimentNo2_4.Resume" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Resume Page</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>RESUME PAGE</h2>
        </div>
    </form>
</body>
</html>
```

**Output:**



**EXPERIMENT NO 5:**

**Aim:** Develop a file upload application that saves the uploaded file and displays its name and size.

**Default.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="ExperimentNo2_5.Default" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Files | Bhawarth Padwal
    </title>
</head>
<body>
    <form id="upload" runat="server">
        <div>
            <p>Browse to Upload File</p>
            <asp:FileUpload ID="FileUpload" runat="server" />
        </div>
        <p>
            <asp:Button ID="Button1" runat="server" Text="Upload File" OnClick="Button_Click"
/>
        </p>
        <p>
            <asp:Label runat="server" ID="UploadStatus"></asp:Label>
        </p>
        Click on the button to download a file
        <br /><br />
        <asp:Label ID="lblFilename" runat="server"></asp:Label>
        <asp:Button ID="downloadButton" runat="server" Text="Download"
OnClick="downloadButton_Click" />
        <br />
        <br />
        <asp:Label ID="downloadLabel" runat="server"></asp:Label>
    </form>
</body>
</html>
```

**Default.aspx.cs:**

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

namespace ExperimentNo2_5
{
    public partial class Default : System.Web.UI.Page
    {
        protected System.Web.UI.HtmlControls.HtmlInputFile File;
        protected System.Web.UI.HtmlControls.HtmlInputButton Submit;
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        string filename = string.Empty;
        protected void Button_Click(object sender, EventArgs e)
        {
            if ((FileUpload.PostedFile != null) && (FileUpload.PostedFile.ContentLength > 0))
            {
                filename = System.IO.Path.GetFileName(FileUpload.PostedFile.FileName);
                string SaveLocation = Server.MapPath("upload") + "\\\" + filename;
                try
                {
                    FileUpload.PostedFile.SaveAs(SaveLocation);
                    UploadStatus.Text = "The file has been uploaded.";
                    lblFilename.Text = "upload/" + FileUpload.FileName;
                }
                catch (Exception ex)
                {
                    UploadStatus.Text = "Error: " + ex.Message;
                }
            }
            else
            {
                UploadStatus.Text = "Please select a file to upload.";
            }
        }
    }
}
```

```
}

protected void downloadButton_Click(object sender, EventArgs e)
{

    // To download uploaded file

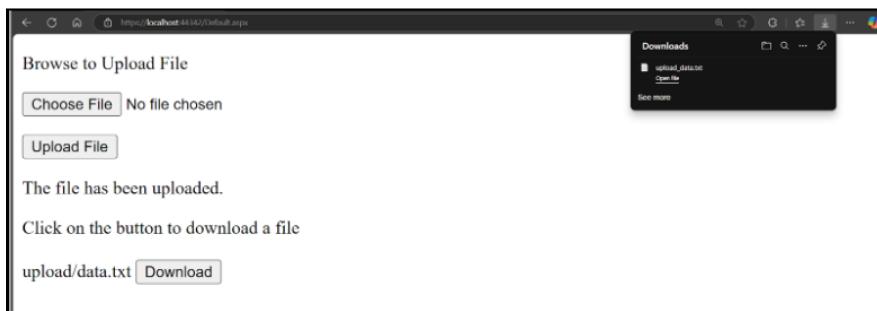
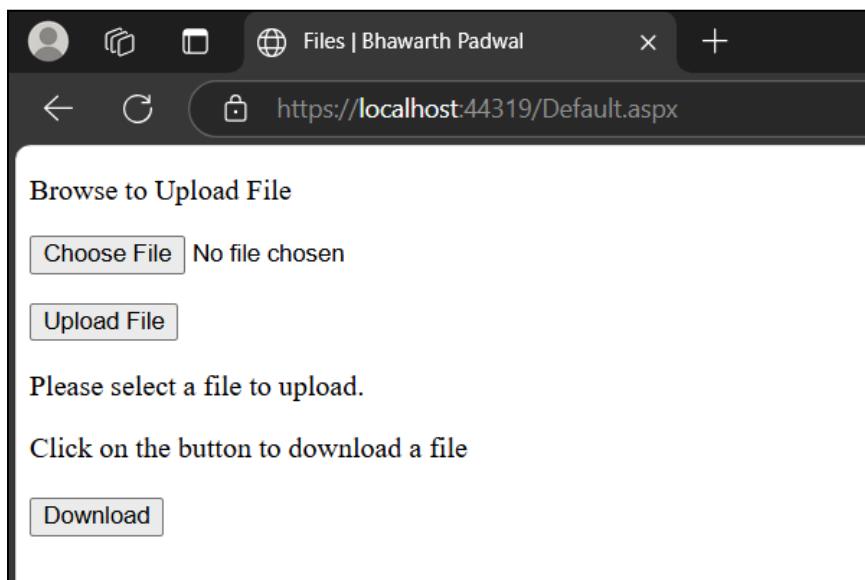
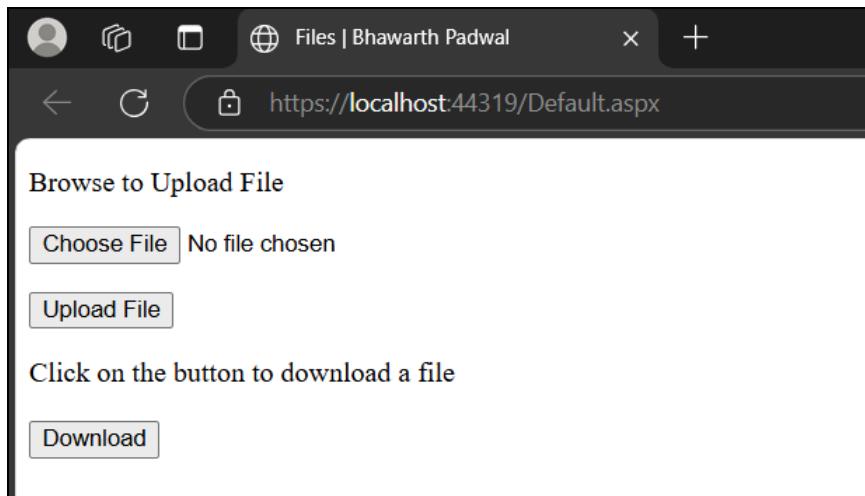
    if (lblFilename.Text != string.Empty)
    {
        if (lblFilename.Text.EndsWith(".txt"))
        {
            Response.ContentType = "application/txt";
        }
        else if (lblFilename.Text.EndsWith(".pdf"))
        {
            Response.ContentType = "application/pdf";
        }
        else if (lblFilename.Text.EndsWith(".docx"))
        {
            Response.ContentType = "application/docx";
        }
        else
        {
            Response.ContentType = "image/jpg";
        }

        string filePath = lblFilename.Text;

        Response.AddHeader("Content-Disposition", "attachment;filename=" + filePath +
"\\");

        Response.TransmitFile(Server.MapPath(filePath));
        Response.End();
    }
}
```

**Output:**



**EXPERIMENT NO 6:**

**Aim:** Create a Master Page for a website and add different content pages for Home, About, and Contact Us.

**Site1.Master:**

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

```
<!DOCTYPE html>  
  
<html>  
<head runat="server">  
    <title>  
        <asp:ContentPlaceHolder ID="head" runat="server">  
  
    </asp:ContentPlaceHolder>  
    </title>  
  
<style type="text/css">  
    .auto-style1 {  
        width: 100%;  
    }  
    .auto-style2 {  
        width: 113px;  
    }  
    .auto-style3 {  
        width: 113px;  
        height: 78px;  
    }  
    .auto-style4 {  
        height: 78px;  
    }  
</style>  
  
</head>  
<body>  
    <form id="form1" runat="server">  
        <div>
```

```
<table class="auto-style1">
  <tr>
    <td class="auto-style3"></td>
    <td class="auto-style4"><strong>Bhawarth Solutions Pvt
Limited</strong></td>
  </tr>
  <tr>
    <td class="auto-style2">
      <asp:HyperLink ID="HyperLink1" runat="server"
NavigateUrl="~/Home.aspx">Home</asp:HyperLink>
      <br />
      <asp:HyperLink ID="HyperLink2" runat="server"
NavigateUrl="~/About_Us.aspx">About Us</asp:HyperLink>
    </td>
    <td>&nbsp;</td>
  </tr>
  <tr>
    <td class="auto-style2">&nbsp;</td>
    <td rowspan="3">
      <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
        </asp:ContentPlaceHolder>
    </td>
  </tr>
  <tr>
    <td class="auto-style2">&nbsp;</td>
  </tr>
  <tr>
    <td class="auto-style2">&nbsp;</td>
  </tr>
  <tr>
    <td class="auto-style2">&nbsp;</td>
    <td>&copy; Bhawarth Solution Pvt Limited</td>
  </tr>
</table>
```

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

**Home.aspx:**

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="Home.aspx.cs"
Inherits="Master_Page_Experiment.WebForm1" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    Home Page | Bhawarth Padwal
</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server">

    <p>
        This is the <strong><span style="text-decoration: underline">HOME
        PAGE</span></strong></p>
    <p>
        &nbsp;</p>
    <p>
        &nbsp;</p>
    <p>
        &nbsp;</p>

</asp:Content>
```

**About\_Us.aspx:**

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="About_Us.aspx.cs"
Inherits="Master_Page_Experiment.WebForm2" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    About Us Page | Bhawarth Padwal
</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server">
```

<p>This is the <span style="text-decoration: underline"><strong>ABOUT US PAGE.</strong></span></p>

<p>&nbsp;</p>

<p>&nbsp;</p>

<p>&nbsp;</p>

</asp:Content>

**Output:**

The screenshot shows a web browser window with the title "Home Page | Bhawarth Padwal". The address bar displays "https://localhost:44303/Home.aspx". Below the address bar, there are links for "Import favorites", "Document", "Gmail", "YouTube", and "Maps". The main content area of the browser shows the following HTML output:

**Bhawarth Solutions Pvt Limited**

[Home](#)  
[About Us](#)

This is the **HOME PAGE.**

At the bottom of the page, there is a copyright notice: © Bhawarth Solution Pvt Limited

The screenshot shows a web browser window with the title "About Us Page | Bhawarth Padwal". The address bar displays "https://localhost:44303/About\_Us.aspx". Below the address bar, there are links for "Import favorites", "Document", "Gmail", "YouTube", and "Maps". The main content area of the browser shows the following HTML output:

**Bhawarth Solutions Pvt Limited**

[Home](#)  
[About Us](#)

This is the **ABOUT US PAGE.**

At the bottom of the page, there is a copyright notice: © Bhawarth Solution Pvt Limited

**MODULE 3: DATABASE PROGRAMMING IN ASP.NET****EXPERIMENT NO 1:**

**Aim:** Create a web application to connect to a database using ADO.NET (Active Data Object) and display data in a GridView (Connected and Disconnected).

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo3_1.WebForm1" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>ADO.NET | Bhawarth Padwal</title>
    <style type="text/css">
        .auto-style1 {
            width: 100%;
        }
        .auto-style2 {
            height: 66px;
        }
        .auto-style3 {
            height: 50px;
        }
        .auto-style5 {
            width: 297px;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <table class="auto-style1">
            <tr>
                <td class="auto-style2" colspan="2">
                    <asp:Label ID="Label1" runat="server" Font-Bold="True" Font-Size="X-Large"
Text="Employee Data."></asp:Label>
                </td>
            </tr>
    </table>
</form>
</body>
</html>
```

```
<tr>
    <td class="auto-style3" colspan="2">
        <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataKeyNames="eid" DataSourceID="SqlDataSource1">
            <Columns>
                <asp:BoundField DataField="eid" HeaderText="eid" ReadOnly="True"
SortExpression="eid" />
                <asp:BoundField DataField="ename" HeaderText="ename"
SortExpression="ename" />
                <asp:BoundField DataField="edesignation" HeaderText="edesignation"
SortExpression="edesignation" />
                <asp:BoundField DataField="econtact" HeaderText="econtact"
SortExpression="econtact" />
                <asp:BoundField DataField="eaddress" HeaderText="eaddress"
SortExpression="eaddress" />
            </Columns>
        </asp:GridView>
        <asp:SqlDataSource ID="SqlDataSource1" runat="server"
ConnectionString "<%$ ConnectionStrings:ConnectionString %>" ProviderName="<%$ ConnectionStrings:ConnectionString.ProviderName %>" SelectCommand="SELECT * FROM [EmployeeData]"></asp:SqlDataSource>
    </td>
</tr>
<tr>
    <td class="auto-style5">&nbsp;</td>
    <td>&nbsp;</td>
</tr>
<tr>
    <td class="auto-style5">&nbsp;</td>
    <td>&nbsp;</td>
</tr>
</table>
</form>
</body>
</html>
```

**Design:**

dbo.EmployeeData [Data] WebForm1.aspx.cs WebForm1.aspx

body

### Employee Data.

<b>eid</b>	<b>ename</b>	<b>edesignation</b>	<b>econtact</b>	<b>eaddress</b>
0	abc	abc	0	abc
1	abc	abc	0.1	abc
2	abc	abc	0.2	abc
3	abc	abc	0.3	abc
4	abc	abc	0.4	abc

SqlDataSource - SqlDataSource1

**Table Data:**

Server Explorer    dbo.EmployeeData [Data]    WebForm1.aspx.cs    WebForm1.aspx    dbo.EmployeeData [Design]

Update | Script File: dbo.Table.sql

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. On the left, the Server Explorer pane displays a tree view of database objects, including Data Connections, Database1.mdf (Tables: EmployeeData), and Servers. The Object Explorer pane shows the structure of the EmployeeData table, which has columns: eid (int, primary key), ename (varchar(50)), edesignation (varchar(50)), econtact (numeric(18,0)), and eaddress (varchar(50)). The Design tab on the right shows the T-SQL script for creating the EmployeeData table:

```

CREATE TABLE [dbo].[EmployeeData]
(
    [eid] INT NOT NULL PRIMARY KEY,
    [ename] VARCHAR(50) NOT NULL,
    [edesignation] VARCHAR(50) NOT NULL,
    [econtact] NUMERIC NOT NULL,
    [eaddress] VARCHAR(50) NOT NULL
)

```

dbo.EmployeeData [Data]					
WebForm1.aspx.cs					
WebForm1.aspx					
	eid	ename	edesignation	econtact	eaddress
▶	101	Bhawarth Padwal	Senior Manager	9191919191	Khar Road
	102	Dattaram Kolte	Tech Lead	8181818181	Ghansoli
	103	Shruti Dalvi	UI/UX Designer	7171717171	Ambivli
	104	Ritesh Singh	Senior Developer	9090909090	Thane
*	105	Shriram Gunjal	SEO	6161616161	Kalyan
	NULL	NULL	NULL	NULL	NULL

**Output:**

The screenshot shows a web browser window titled "ADO.NET | Bhawarth Padwal". The address bar displays the URL "https://localhost:44351/WebForm1.aspx". The main content area of the browser shows the heading "Employee Data." followed by a table with the same data as the previous screenshot.

eid	ename	edesignation	econtact	eaddress
101	Bhawarth Padwal	Senior Manager	9191919191	Khar Road
102	Dattaram Kolte	Tech Lead	8181818181	Ghansoli
103	Shruti Dalvi	UI/UX Designer	7171717171	Ambivli
104	Ritesh Singh	Senior Developer	9090909090	Thane
105	Shriram Gunjal	SEO	6161616161	Kalyan

**EXPERIMENT NO 2:**

**Aim:** Implement a form to insert, update, delete, and display student records using connected architecture.

**WebForm1.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ExperimentNo3_2.WebForm1" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>CRUD | Bhawarth Padwal</title>
    <style type="text/css">
        .auto-style1 {
            width: 100%;
        }
        .auto-style2 {
            height: 52px;
        }
        .auto-style4 {
            height: 50px;
        }
        .auto-style5 {
            height: 50px;
            width: 226px;
        }
        .auto-style7 {
            height: 208px;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <table class="auto-style1">
                <tr>
                    <td class="auto-style2" colspan="2">
```

```
<asp:Label ID="Label1" runat="server" Font-Bold="True" Font-Size="Large"
Text="Employee Form."></asp:Label>
</td>
</tr>
<tr>
    <td class="auto-style5">
        <asp:Label ID="Label2" runat="server" Text="Employee Id"></asp:Label>
    </td>
    <td class="auto-style4">
        <asp:TextBox ID="eid_txt" runat="server" Height="35px"
Width="250px"></asp:TextBox>
    </td>
</tr>
<tr>
    <td class="auto-style5">
        <asp:Label ID="Label3" runat="server" Text="Employee Name"></asp:Label>
    </td>
    <td class="auto-style4">
        <asp:TextBox ID="ename_txt" runat="server" Height="35px"
Width="250px"></asp:TextBox>
    </td>
</tr>
<tr>
    <td class="auto-style5">
        <asp:Label ID="Label4" runat="server" Text="Employee
Designation"></asp:Label>
    </td>
    <td class="auto-style4">
        <asp:TextBox ID="edesign_txt" runat="server" Height="35px"
Width="250px"></asp:TextBox>
    </td>
</tr>
<tr>
    <td class="auto-style5">
        <asp:Label ID="Label5" runat="server" Text="Employee
Contact"></asp:Label>
    </td>
    <td class="auto-style4">
        <asp:TextBox ID="econtact_txt" runat="server" Height="35px" Width="250px"
style="margin-left: 0px"></asp:TextBox>
```

```
</td>
</tr>
<tr>
    <td class="auto-style5">
        <asp:Label ID="Label6" runat="server" Text="Employee
Address"></asp:Label>
    </td>
    <td class="auto-style4">
        <asp:TextBox ID="eaddress_txt" runat="server" Height="35px"
Width="250px"></asp:TextBox>
    </td>
</tr>
<tr>
    <td class="auto-style4" colspan="2">
        <asp:Button ID="insert_btn" runat="server" Font-Bold="True" Text="Insert"
Height="35px" Width="100px" OnClick="insert_btn_Click" />
        &nbsp;&nbsp;&nbsp;
        <asp:Button ID="update_btn" runat="server" Font-Bold="True" Text="Update"
Height="35px" Width="100px" OnClick="update_btn_Click"/>
        &nbsp;&nbsp;&nbsp;&nbsp;
        <asp:Button ID="delete_btn" runat="server" Font-Bold="True" Text="Delete"
Height="35px" Width="100px" OnClick="delete_btn_Click"/>
        &nbsp;&nbsp;&nbsp;
        <asp:Button ID="show_btn" runat="server" Font-Bold="True" Text="Show
Data" Height="35px" Width="100px" OnClick="show_btn_Click"/>
    </td>
</tr>
<tr>
    <td class="auto-style7" colspan="2">
        <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="true"
BorderColor="Black" BorderWidth="1px" CellPadding="5">
            </asp:GridView>
    </td>
</tr>
</table>
</div>
</form>
</body>
</html>
```

**Design:**

Column0	Column1	Column2
abc	abc	abc

**WebForm1.aspx.cs:**

```

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

namespace ExperimentNo3_2
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\"D:\\DotNet
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\";Integrated Security=True");
        protected void Page_Load(object sender, EventArgs e)
        {
    
```

```
}

//protected void insert_btn_Click(object sender, EventArgs e)
//{
//  string connectionString = "Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\"D:\\DotNet
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\";Integrated Security=True";
  // SqlConnection con = new SqlConnection(connectionString);
  // con.Open();
  // string empId = eid_txt.Text;
  // string empName = ename_txt.Text;
  // string empDesign = edesign_txt.Text;
  // string empContact = econtact_txt.Text;
  // string empAddress = eaddress_txt.Text;
  // string query = "Insert into EmployeeTable(eid,ename,edesign,econtact,eaddress)
values(" + empId + "," + empName + "," + empDesign + "," + empContact + "," + empAddress
+ ")";
  // SqlCommand cmd = new SqlCommand(query, con);
  // cmd.ExecuteNonQuery();
  // con.Close();
  // ScriptManager.RegisterStartupScript(this, this.GetType(), "alert", "alert('Record
Inserted');", true);
}
protected void insert_btn_Click(object sender, EventArgs e)
{
  string connectionString = "Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\"D:\\DotNet
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\";Integrated Security=True";

  using (SqlConnection con = new SqlConnection(connectionString))
  {
    con.Open();

    // Safe SQL query using parameters
    string query = "INSERT INTO EmployeeTable (eid, ename, edesign, econtact,
eaddress) VALUES (@eid, @ename, @edesign, @econtact, @eaddress)";

    using (SqlCommand cmd = new SqlCommand(query, con))
    {
      // Convert eid to integer (if required)
```

```

        cmd.Parameters.AddWithValue("@eid", Convert.ToInt32(eid_txt.Text));
        cmd.Parameters.AddWithValue("@ename", ename_txt.Text);
        cmd.Parameters.AddWithValue("@edesign", edesign_txt.Text);
        cmd.Parameters.AddWithValue("@econtact", econtact_txt.Text);
        cmd.Parameters.AddWithValue("@eaddress", eaddress_txt.Text);

        cmd.ExecuteNonQuery();
    }
}

// Clear textboxes after successful insertion
eid_txt.Text = "";
ename_txt.Text = "";
edesign_txt.Text = "";
econtact_txt.Text = "";
eaddress_txt.Text = "";

ScriptManager.RegisterStartupScript(this, this.GetType(), "alert", "alert('Record Inserted Successfully');", true);
}

protected void update_btn_Click(object sender, EventArgs e)
{
    string connectionString = "Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\\D:\\DotNet
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\\;Integrated Security=True";

    using (SqlConnection con = new SqlConnection(connectionString))
    {
        con.Open();

        // Correct SQL UPDATE statement
        string query = "UPDATE EmployeeTable SET ename = @ename, edesign =
@edesign, econtact = @econtact, eaddress = @eaddress WHERE eid = @eid";

        using (SqlCommand cmd = new SqlCommand(query, con))
        {
            cmd.Parameters.AddWithValue("@ename", ename_txt.Text);
            cmd.Parameters.AddWithValue("@edesign", edesign_txt.Text);
            cmd.Parameters.AddWithValue("@econtact", econtact_txt.Text);
            cmd.Parameters.AddWithValue("@eaddress", eaddress_txt.Text);
        }
    }
}

```

```
cmd.Parameters.AddWithValue("@eid", Convert.ToInt32(eid_txt.Text)); //  
Ensure eid is an integer  
  
int rowsAffected = cmd.ExecuteNonQuery(); // Execute query  
  
if (rowsAffected > 0)  
{  
    ScriptManager.RegisterStartupScript(this, this.GetType(), "alert",  
"alert('Record Updated Successfully');", true);  
}  
else  
{  
    ScriptManager.RegisterStartupScript(this, this.GetType(), "alert", "alert('No  
record found with this ID');", true);  
}  
}  
  
// Clear textboxes after updating  
eid_txt.Text = "";  
ename_txt.Text = "";  
edesign_txt.Text = "";  
econtact_txt.Text = "";  
eaddress_txt.Text = "";  
}  
  
protected void delete_btn_Click(object sender, EventArgs e)  
{  
    string connectionString = "Data  
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\"D:\\DotNet  
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\";Integrated Security=True";  
  
    using (SqlConnection con = new SqlConnection(connectionString))  
{  
        con.Open();  
  
        // Correct DELETE query  
        string query = "DELETE FROM EmployeeTable WHERE eid = @eid";  
  
        using (SqlCommand cmd = new SqlCommand(query, con))
```

```

{
    cmd.Parameters.AddWithValue("@eid", Convert.ToInt32(eid_txt.Text)); //
Ensure eid is an integer

    int rowsAffected = cmd.ExecuteNonQuery(); // Execute the DELETE command

    if (rowsAffected > 0)
    {
        ScriptManager.RegisterStartupScript(this, this.GetType(), "alert",
"alert('Record Deleted Successfully');", true);
    }
    else
    {
        ScriptManager.RegisterStartupScript(this, this.GetType(), "alert", "alert('No
record found with this ID');", true);
    }
}

// Clear textboxes after deletion
eid_txt.Text = "";
}

protected void show_btn_Click(object sender, EventArgs e)
{
    LoadData();
}
private void LoadData()
{
    string connectionString = "Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\\D:\\DotNet
Projects\\ExperimentNo3_2\\App_Data\\Database1.mdf\\;Integrated Security=True";
    using (SqlConnection con = new SqlConnection(connectionString))
    {
        con.Open();
        string query = "SELECT * FROM EmployeeTable"; // Adjust table name if necessary
        using (SqlCommand cmd = new SqlCommand(query, con))
        {
            using (SqlDataAdapter sda = new SqlDataAdapter(cmd))
            {

```

```
        DataTable dt = new DataTable();
        sda.Fill(dt); // Fetch data into DataTable
        GridView1.DataSource = dt; // Bind data to GridView
        GridView1.DataBind(); // Refresh GridView
    }
}
}
}
}
```

## Table:

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. On the left, the Server Explorer pane displays the database structure, including 'Data Connections' (Database1.mdf), 'Tables' (EmployeeTable), and other objects like Views, Stored Procedures, Functions, Synonyms, Types, and Assemblies. The 'Servers' section shows a connection to 'LAPTOP-TIE10RRG'. The main area is titled 'dbo.EmployeeTable [Design]' and contains a table definition and its data. The table has five columns: eid (int, primary key, not null), ename (varchar(50), not null), edesign (varchar(50), not null), econtact (numeric(18,0), not null), and eaddress (varchar(50), not null). Below the table definition, the T-SQL code for creating the table is visible:

```
1 CREATE TABLE [dbo].[EmployeeTable]
2 (
3     [eid] INT NOT NULL PRIMARY KEY,
4     [ename] VARCHAR(50) NOT NULL,
5     [edesign] VARCHAR(50) NOT NULL,
6     [econtact] NUMERIC NOT NULL,
7     [eaddress] VARCHAR(50) NOT NULL
8 )
```

## Output:

The screenshot shows a web browser window titled "CRUD | Bhawarth Padwal". The URL in the address bar is "https://localhost:44319/WebForm1.aspx". The page content is titled "Employee Form." and contains five input fields for "Employee Id", "Employee Name", "Employee Designation", "Employee Contact", and "Employee Address". Below these fields are four buttons: "Insert", "Update", "Delete", and "Show Data".

Employee Id	<input type="text"/>
Employee Name	<input type="text"/>
Employee Designation	<input type="text"/>
Employee Contact	<input type="text"/>
Employee Address	<input type="text"/>

**Buttons:** Insert, Update, Delete, Show Data

The screenshot shows a web browser window titled "CRUD | Bhawarth Padwal". The URL in the address bar is "https://localhost:44319/WebForm1.aspx". The page content is titled "Employee Form." and contains five input fields filled with sample data: "Employee Id" (107), "Employee Name" (Mr. Bean), "Employee Designation" (Database Admin), "Employee Contact" (1212121212), and "Employee Address" (Nerul). Below these fields are four buttons: "Insert", "Update", "Delete", and "Show Data".

Employee Id	<input type="text" value="107"/>
Employee Name	<input type="text" value="Mr. Bean"/>
Employee Designation	<input type="text" value="Database Admin"/>
Employee Contact	<input type="text" value="1212121212"/>
Employee Address	<input type="text" value="Nerul"/>

**Buttons:** Insert, Update, Delete, Show Data

The screenshot shows a web application titled "CRUD | Bhawarth Padwal" running on "https://localhost:44319/WebForm1.aspx". The page is titled "Employee Form." and contains five input fields for Employee Id, Employee Name, Employee Designation, Employee Contact, and Employee Address. Below these fields are four buttons: "Insert", "Update", "Delete", and "Show Data". A data grid table follows, displaying seven rows of employee data with columns for eid, ename, edesign, econtact, and eaddress.

<b>eid</b>	<b>ename</b>	<b>edesign</b>	<b>econtact</b>	<b>eaddress</b>
101	Bhawarth Padwal	Senior Manager	9191919191	Khar Road
102	Dattaram Kolte	Tech Lead	8181818181	Ghansoli
103	Shruti Dalvi	UI/UX Designer	7171717171	Ambivli
104	Ritesh Singh	Frontend Dev	9898989898	Thane
105	Shriram Gunjal	Backend Dev	7676767676	Kalyan
106	Amar Bhagat	Finance Lead	8787878787	Khar Road
107	Mr. Bean	Database Admin	1212121212	Nerul

**EXPERIMENT NO 3:**

**Aim:** Design a web application using disconnected architecture (**DataSet and DataAdapter**) for managing data.

**Default.aspx:**

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Connected Disconnected | Bhawarth Padwal</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server" BackColor="White"
                BorderColor="#CC9966"
                BorderStyle="None" BorderWidth="1px" CellPadding="4">
                <FooterStyle BackColor="#FFFFCC" ForeColor="#330099" />
                <RowStyle BackColor="White" ForeColor="#330099" />
                <PagerStyle BackColor="#FFFFCC" ForeColor="#330099"
                    HorizontalAlign="Center" />
                <SelectedRowStyle BackColor="#FFCC66" Font-Bold="True"
                    ForeColor="#663399" />
                <HeaderStyle BackColor="#990000" Font-Bold="True" ForeColor="#FFFFCC" />
            </asp:GridView>
            <br />
            <asp:Button ID="Connected" runat="server" OnClick="Connected_Click"
                Text="Connected" />
            <asp:Button ID="Disconnected" runat="server" EnableTheming="False"
                OnClick="Disconnected_Click"
                Text="Disconnected" />
            <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$"
                ConnectionStrings:ConnectionString %>" ProviderName="<%$"
                ConnectionStrings:ConnectionString.ProviderName %>" SelectCommand="SELECT * FROM
                [Employee]"></asp:SqlDataSource>
        </div>
```

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

```
</html>
```

**Default.aspx.cs:**

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

namespace Connected_Disconnected_Architecture
{
    public partial class Default : System.Web.UI.Page
    {
        String strSQL = "";
        String strConnection = "";

        protected void Page_Load(object sender, EventArgs e)
        {
            strSQL = "SELECT * FROM Employee";
            strConnection = "Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\USER\Documents\B
hawarth\Connected_Disconnected_Architecture\App_Data\Database1.mdf;Integrated
Security=True";

        }

        protected void Connected_Click(object sender, EventArgs e)
        {
            SqlConnection objConn = new SqlConnection(strConnection);

            SqlCommand objCmd = new SqlCommand(strSQL, objConn);
            objCmd.CommandType = CommandType.Text;
            objConn.Open();
```

```

SqlDataReader objDr = objCmd.ExecuteReader();
GridView1.DataSource = objDr;
GridView1.DataBind();
objConn.Close();
}

protected void Disconnected_Click(object sender, EventArgs e)
{
    SqlDataAdapter objDa = new SqlDataAdapter();
    DataSet objDs = new DataSet();
    SqlConnection objConn = new SqlConnection(StrConnection);

    SqlCommand objCmd = new SqlCommand(StrSQL, objConn);
    objCmd.CommandType = CommandType.Text;
    objDa.SelectCommand = objCmd;
    objDa.Fill(objDs, "Employee");
    GridView1.DataSource = objDs.Tables[0];
    GridView1.DataBind();
}

}
}
}

```

**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="ConnectionString" connectionString="Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\USER\Documents\Bhawa
rth\Connected_Disconnected_Architecture\App_Data\Database1.mdf;Integrated
Security=True" providerName="System.Data.SqlClient"/>
    </connectionStrings>
    <system.web>
        <compilation debug="true" targetFramework="4.7.2" />
        <httpRuntime targetFramework="4.7.2" />
    </system.web>
</configuration>

```

```

</system.web>
<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='Web' /optionInfer+" />
  </compilers>
</system.codedom>
</configuration>

```

## Database:

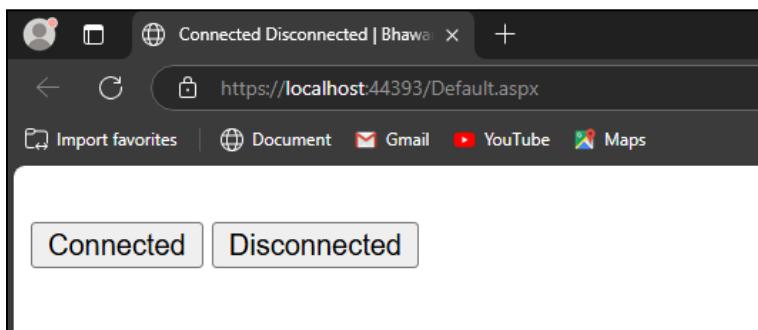
The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. On the left, the Server Explorer pane displays 'Data Connections' and 'ConnectionString (C)'. Under 'ConnectionString (C)', there is a 'Tables' node which contains 'Employee'. The main area shows the 'Web.config' tab, which includes a table definition for 'dbo.Employee [Data]'. The table has four columns: 'Name' (eid, int), 'Data Type' (int), 'Allow Nulls' (checkbox), and 'Default' (empty). Below this is a 'Script File' dropdown set to 'dbo.Table.sql'. At the bottom, the 'T-SQL' tab shows the following SQL code:

```

CREATE TABLE [dbo].[Employee]
(
    [eid] INT NOT NULL PRIMARY KEY,
    [ename] VARCHAR(50) NOT NULL,
    [edesign] VARCHAR(50) NOT NULL,
    [esal] NUMERIC NOT NULL
)

```

The status bar at the bottom indicates 'Connection Ready' and '(LocalDB)\MSSQLLocalDB'.

**Output:**A screenshot of a web browser window titled "Connected Disconnected | Bhawar". The address bar shows the URL "https://localhost:44393/Default.aspx". Below the address bar, there are links for "Import favorites", "Document", "Gmail", "YouTube", and "Maps". The main content area displays a table with five rows of employee information. The table has four columns: eid, ename, edesign, and esal. The data is as follows:

<b>eid</b>	<b>ename</b>	<b>edesign</b>	<b>esal</b>
101	Bhawarth	Manager	70000
102	Dattaram	Marketing Manager	70000
103	Shruti	UI/UX Designer	80000
104	Ritesh	Senior Developer	65000
105	Shriram	Database Admin	75000

Connected    Disconnected

**EXPERIMENT NO 4:**

**Aim:** Develop a stored procedure to fetch employee details and display them using a DetailsView control.

**Default.aspx:**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="ExperimentNo3_4.Default" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Stored Procedure | Bhawarth Padwal</title>
    </head>
<body>
    <form id="form1" runat="server">
        <table class="auto-style1">
            <tr>
                <td class="auto-style2" colspan="3" style="font-size: larger"><strong>Employee
Form</strong></td>
            </tr>
            <tr>
                <td class="auto-style4">Employee ID</td>
                <td class="auto-style6">:</td>
                <td class="auto-style3">
                    <asp:TextBox ID="TextBox1" runat="server" Height="26px"
Width="278px"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td class="auto-style4">Employee Name</td>
                <td class="auto-style6">:</td>
                <td class="auto-style3">
                    <asp:TextBox ID="TextBox2" runat="server" Height="26px"
Width="278px"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td class="auto-style5">Employee City</td>
```

```
<td class="auto-style7"></td>
<td>
    <asp:TextBox ID="TextBox3" runat="server" Height="26px"
Width="278px"></asp:TextBox>
</td>
</tr>
<tr>
    <td class="auto-style4"></td>
    <td class="auto-style6"></td>
    <td class="auto-style3"></td>
</tr>
<tr>
    <td colspan="3">
        <asp:Button ID="Button1" runat="server" Font-Bold="True" Height="42px"
Text="Insert" Width="216px" OnClick="Button1_Click" />
        &nbsp;&nbsp;&nbsp;
        <asp:Button ID="Button2" runat="server" Font-Bold="True" Height="39px"
Text="Update" Width="131px" OnClick="Button2_Click" />
        &nbsp;&nbsp;&nbsp;
        <asp:Button ID="Button3" runat="server" Font-Bold="True" Height="39px"
Text="Delete" Width="130px" OnClick="Button3_Click" />
    </td>
</tr>
<tr>
    <td class="auto-style4"></td>
    <td class="auto-style6"></td>
    <td class="auto-style3"></td>
</tr>
<tr>
    <td colspan="3">
        <asp:GridView ID="GridView1" runat="server" Height="214px" Width="521px">
            </asp:GridView>
    </td>
</tr>
</table>
<div>
</div></form></body>

</html>
```

**Employee Form**

Employee ID	:	<input type="text"/>
Employee Name	:	<input type="text"/>
Employee City	:	<input type="text"/>

**Insert      Update      Delete**

Column0	Column1	Column2
abc	abc	abc
abc div	abc	abc

**Default.aspx.cs:**

```

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

namespace ExperimentNo3_4
{
    public partial class Default : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!this.IsPostBack)
            {
                this.BindTable();
            }
        }

        public void BindTable()
    }
}

```

```
{  
    string sp_name = "selectSP";  
    SqlConnection con = new SqlConnection("Data  
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\\D:\\DotNet  
Projects\\ExperimentNo3_4\\App_Data\\Database1.mdf\\;Integrated Security=True");  
    SqlCommand cmd = new SqlCommand(sp_name, con);  
    cmd.CommandType = CommandType.StoredProcedure;  
    con.Open();  
  
    using (SqlDataAdapter sqa = new SqlDataAdapter(cmd))  
    {  
        using (DataTable dt = new DataTable())  
        {  
            sqa.Fill(dt);  
            GridView1.DataSource = dt;  
            GridView1.DataBind();  
        }  
    }  
  
    con.Close();  
}  
  
protected void Button1_Click(object sender, EventArgs e)  
{  
    string sp_name = "insertSP";  
    SqlConnection con = new SqlConnection("Data  
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=\\D:\\DotNet  
Projects\\ExperimentNo3_4\\App_Data\\Database1.mdf\\;Integrated Security=True");  
    con.Open();  
  
    SqlCommand cmd = new SqlCommand(sp_name, con);  
    cmd.CommandType = CommandType.StoredProcedure;  
    cmd.Parameters.AddWithValue("@e_id", TextBox1.Text);  
    cmd.Parameters.AddWithValue("@e_name", TextBox2.Text);  
    cmd.Parameters.AddWithValue("@e_city", TextBox3.Text);  
    cmd.ExecuteNonQuery();  
  
    con.Close();  
    this.BindTable();  
    TextBox1.Text = "";
```

```
    TextBox2.Text = "";
    TextBox3.Text = "";

}

protected void Button2_Click(object sender, EventArgs e)
{
    string sp_name = "updateSP";
    SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\D:\DotNet
Projects\ExperimentNo3_4\App_Data\Database1.mdf\;Integrated Security=True");
    con.Open();
    SqlCommand cmd = new SqlCommand(sp_name, con);
    cmd.CommandType = CommandType.StoredProcedure;
    cmd.Parameters.AddWithValue("@e_id", TextBox1.Text);
    cmd.Parameters.AddWithValue("@e_name", TextBox2.Text);
    cmd.Parameters.AddWithValue("@e_city", TextBox3.Text);
    cmd.ExecuteNonQuery();

    con.Close();
    this.BindTable();
    TextBox1.Text = "";
    TextBox2.Text = "";
    TextBox3.Text = "";
}

protected void Button3_Click(object sender, EventArgs e)
{
    string sp_name = "deleteSP";
    SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\D:\DotNet
Projects\ExperimentNo3_4\App_Data\Database1.mdf\;Integrated Security=True");
    con.Open();
    SqlCommand cmd = new SqlCommand(sp_name, con);
    cmd.CommandType = CommandType.StoredProcedure;
    cmd.Parameters.AddWithValue("@e_id", TextBox1.Text);
    cmd.ExecuteNonQuery();

    con.Close();
    this.BindTable();
```

```
    TextBox1.Text = "";
    TextBox2.Text = "";
    TextBox3.Text = "";

}

}

}
```

**Stored Procedures:****SelectSP:**

```
CREATE PROCEDURE [dbo].[selectSP]
AS
    SELECT * from EmployeeData;
RETURN 0
```

**InsertSP:**

```
CREATE PROCEDURE [dbo].[insertSP]
    @e_id int,
    @e_name varchar(50),
    @e_city varchar(50)
AS
    insert into EmployeeData (eid,ename,ecity) values (@e_id, @e_name, @e_city);
RETURN 0
```

**UpdateSP:**

```
CREATE PROCEDURE [dbo].[updateSP]
    @e_id int,
    @e_name varchar(50),
    @e_city varchar(50)
AS
    Update EmployeeData set ename=@e_name, ecity=@e_city where eid=@e_id;
RETURN 0
```

**DeleteSP:**

```
CREATE PROCEDURE [dbo].[deleteSP]
    @e_id int
AS
    DELETE FROM EmployeeData WHERE eid = @e_id;
```

RETURN 0

**Output:**

**Employee Form**

Employee ID :

Employee Name :

Employee City :

**Buttons:** Insert, Update, Delete

**Employee Form**

Employee ID :

Employee Name :

Employee City :

**Buttons:** Insert, Update, Delete

<b>eid</b>	<b>ename</b>	<b>ecity</b>
107	Bhawarth Padwal	Khar Road

Employee Form		
Employee ID	:	<input type="text" value="107"/>
Employee Name	:	<input type="text" value="Bhawarth Padwal"/>
Employee City	:	<input type="text" value="Dadar"/>
<input type="button" value="Insert"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>		
eid	ename	ecity
97	Dattaram Kolte	Ghansoli
107	Bhawarth Padwal	Khar Road

Employee Form		
Employee ID	:	<input type="text"/>
Employee Name	:	<input type="text"/>
Employee City	:	<input type="text"/>
<input type="button" value="Insert"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>		
eid	ename	ecity
97	Dattaram Kolte	Ghansoli
107	Bhawarth Padwal	Dadar

Employee Form		
Employee ID	:	<input type="text" value="107"/>
Employee Name	:	<input type="text"/>
Employee City	:	<input type="text"/>
<input type="button" value="Insert"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>		
eid	ename	ecity
97	Dattaram Kolte	Ghansoli
107	Bhawarth Padwal	Dadar

Employee Form		
Employee ID	:	<input type="text"/>
Employee Name	:	<input type="text"/>
Employee City	:	<input type="text"/>
<input type="button" value="Insert"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>		
eid	ename	ecity
97	Dattaram Kolte	Ghansoli