Roll no: C24042 MCA SEM 2 MCA DIV: A

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AWT LAB MANUAL

Name of the faculty: Ganesh Bhagwat

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AWT LAB MANUAL

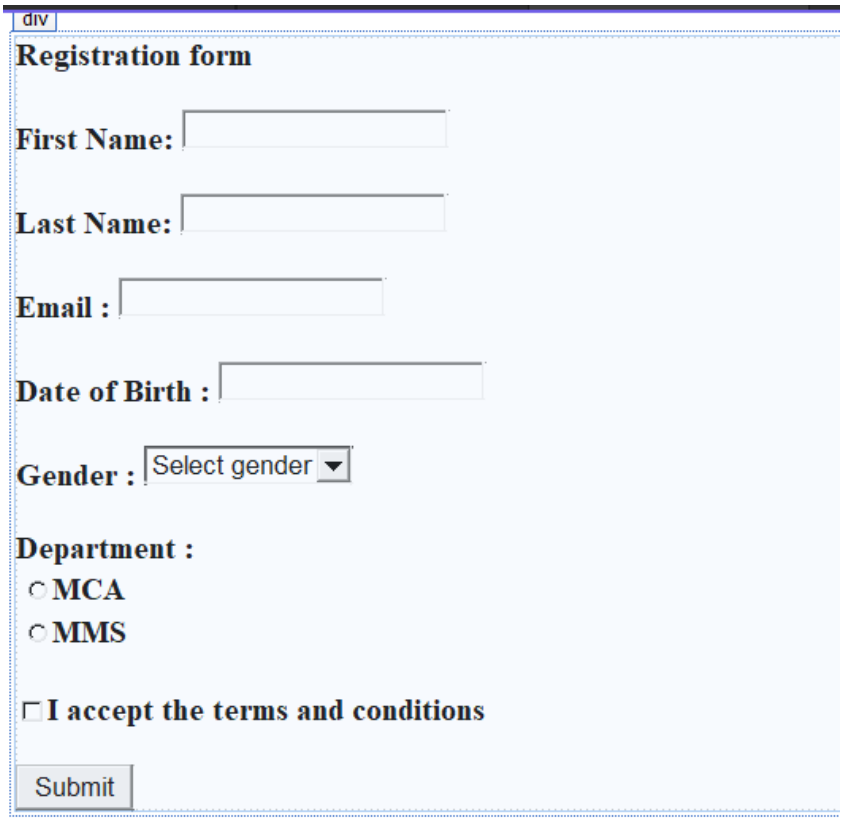
PRACTICAL NO. 1

Design a Web Application for an Organization with Registration forms and advanced controls.

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract1.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body style="font-weight: 700">
    <form id="form1" runat="server">
        <div>
            Registration form<br />
            <br />
            First Name:
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
            Last Name:
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <br />
            <br />
            Email :
            <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            <br />
            <br />
            Date of Birth :
```

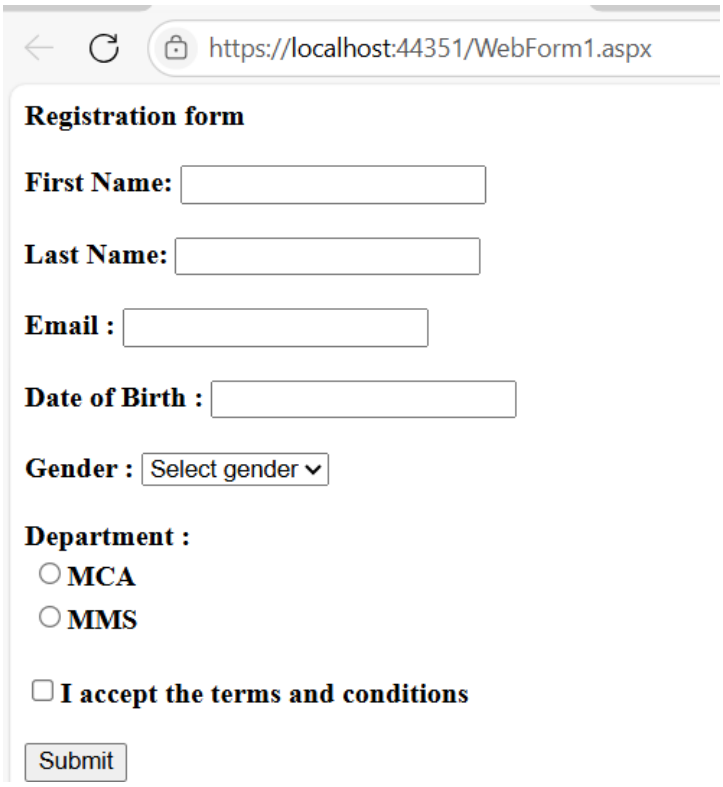
```
        <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
        <br />
        <br />
        Gender :
        <asp:DropDownList ID="DropDownList1" runat="server">
            <asp:ListItem>Select gender</asp:ListItem>
            <asp:ListItem>Male</asp:ListItem>
            <asp:ListItem>Female</asp:ListItem>
            <asp:ListItem>Other</asp:ListItem>
        </asp:DropDownList>
        <br />
        <br />
        Department :
        <asp:RadioButtonList ID="RadioButtonList2" runat="server">
            <asp:ListItem>MCA</asp:ListItem>
            <asp:ListItem>MMS</asp:ListItem>
        </asp:RadioButtonList>
        <br />
        <asp:CheckBox ID="CheckBox1" runat="server" Text="I accept the terms and conditions" />
        <br />
        <br />
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
      </div>
    </form>
</body>
</html>
```

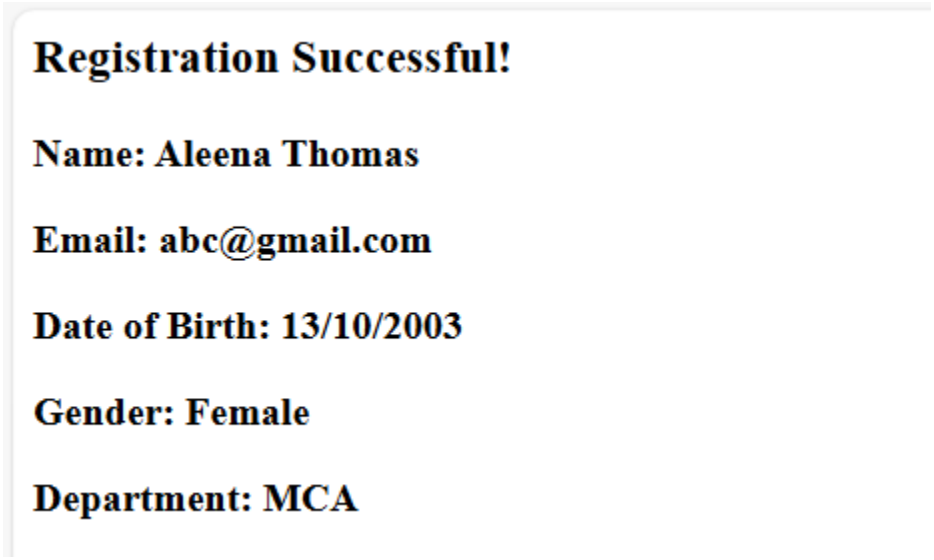


Webform.aspx.cs

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


namespace pract1
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }
```

```
    protected void Button1_Click(object sender, EventArgs e)
    {
        if (CheckBox1.Checked)
        {
            string firstName = TextBox1.Text;
            string lastName = TextBox2.Text;
            string email = TextBox3.Text;
            string dob = TextBox4.Text;
            string gender = DropDownList1.SelectedValue;
            string department = RadioButtonList2.SelectedValue;

            // Display confirmation message
            Response.Write($"<h3>Registration Successful!</h3>");
            Response.Write($"<p>Name: {firstName} {lastName}</p>");
            Response.Write($"<p>Email: {email}</p>");
            Response.Write($"<p>Date of Birth: {dob}</p>");
            Response.Write($"<p>Gender: {gender}</p>");
            Response.Write($"<p>Department: {department}</p>");
        }
        else
        {
            Response.Write("<h3 style='color:red'>Please accept the terms and conditions.</h3>");
        }

    }
  }
}
```


https://localhost:44351/WebForm1.aspx
Registration form
First Name:
Last Name:
Email :
Date of Birth :
Gender : Select gender
Department :
MCA
MMS
I accept the terms and conditions
Submit


Registration Successful!
Name: Aleena Thomas
Email: abc@gmail.com
Date of Birth: 13/10/2003
Gender: Female
Department: MCA

PRACTICAL-2

Create a website using the master page concept

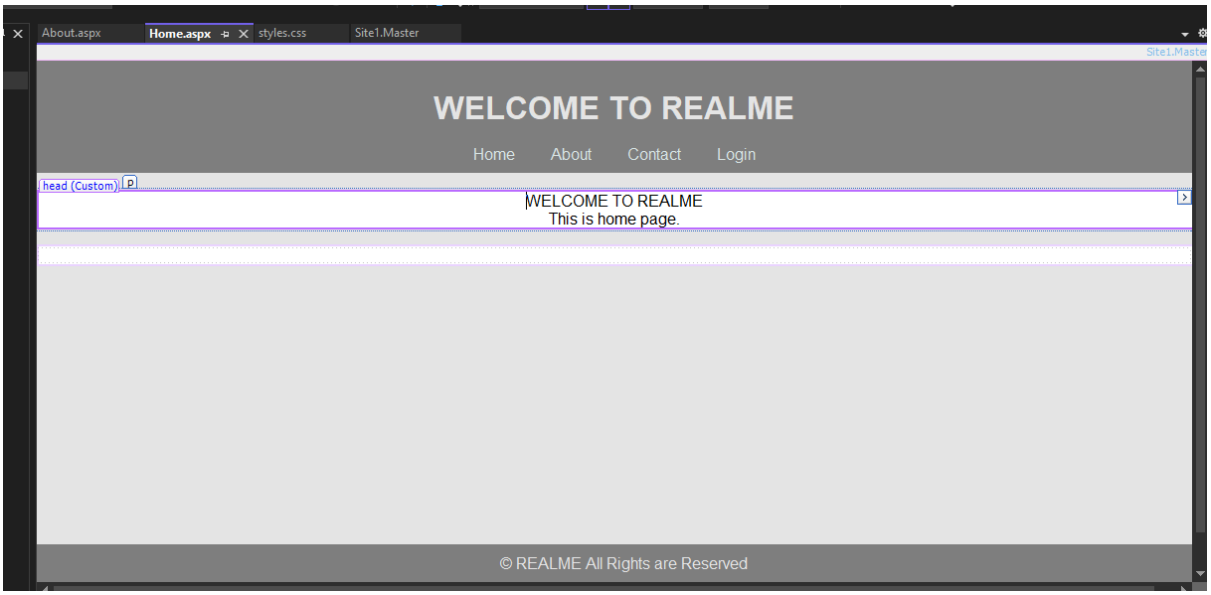
Master page.

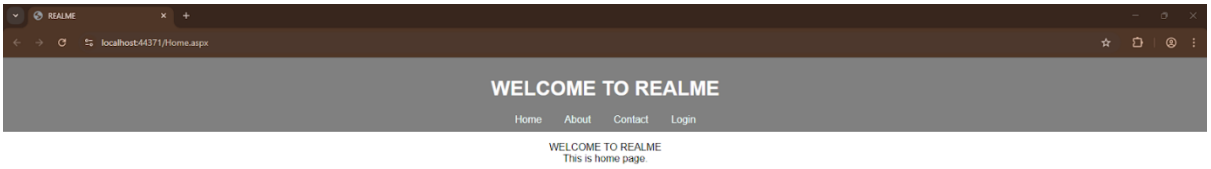
```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="practical_2.Site1" %>


<!DOCTYPE html>


<html>
<head runat="server">
   <title>REALME </title>
   <link rel ="stylesheet" href="styles.css" />
   </head>
   <body>
      <div class ="header">
         <h1> WELCOME TO REALME</h1>
         <nav>
            <a href="Home.aspx">Home</a>
            <a href="About.aspx">About</a>
            <a href="Contact.aspx">Contact</a>
            <a href="Login.aspx">Login</a>
         </nav>
      </div>



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


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

```
        <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
        </asp:ContentPlaceHolder>
      </div>
      <div class ="footer">
        <p>&copy; REALME All Rights are Reserved  </p>
      </div>
  </form>
</body>
</html>
```

Home.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true"
CodeBehind="Home.aspx.cs" Inherits="practical_2.WebForm1" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
  <p style="text-align:center"  >
 WELCOME TO REALME

  <br />
     This is home page.

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

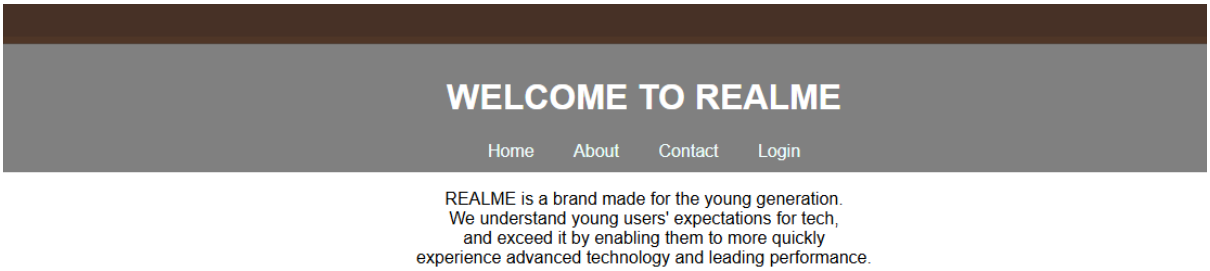




About.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master" AutoEventWireup="true" CodeBehind="About.aspx.cs" Inherits="practical_2.About" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    <p style="text-align:center">
        REALME is a brand made for the young generation.
        <br /> We understand young users' expectations for tech,
        <br /> and exceed it by enabling them to more quickly
        <br /> experience advanced technology and leading performance.
    </p>
```

```
</asp:Content>

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

</asp:Content>
```



PRACTICAL NO. 3

Design a web application using advanced controls.

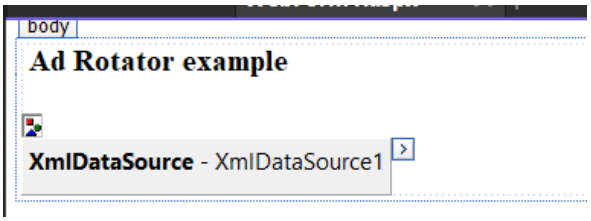
1. Ad Rotator

Create a new project and add webform, XML file and images.

After adding a AdRotator in the web form Add the xml file in the AdRotator.

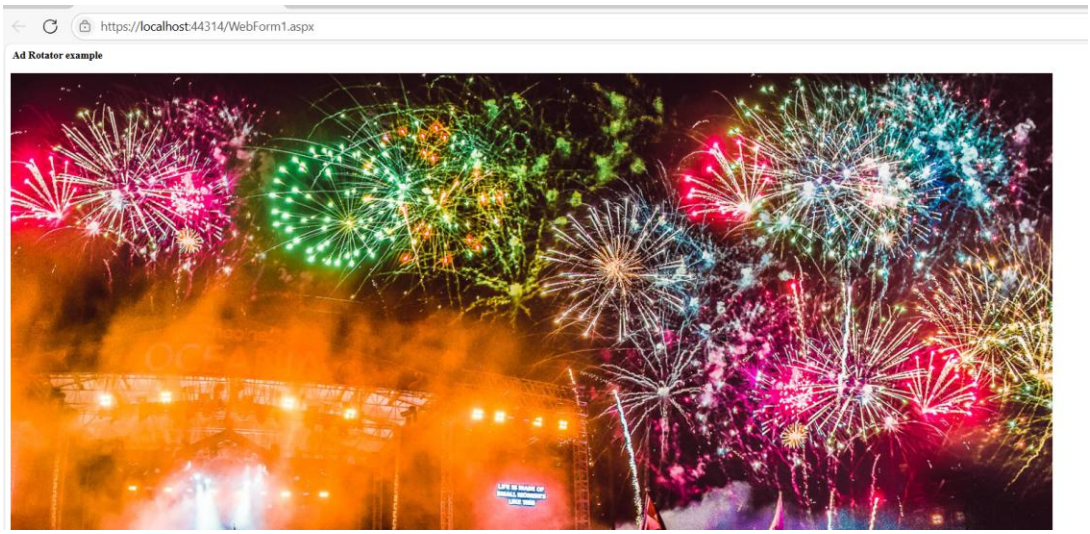
Webform.aspx

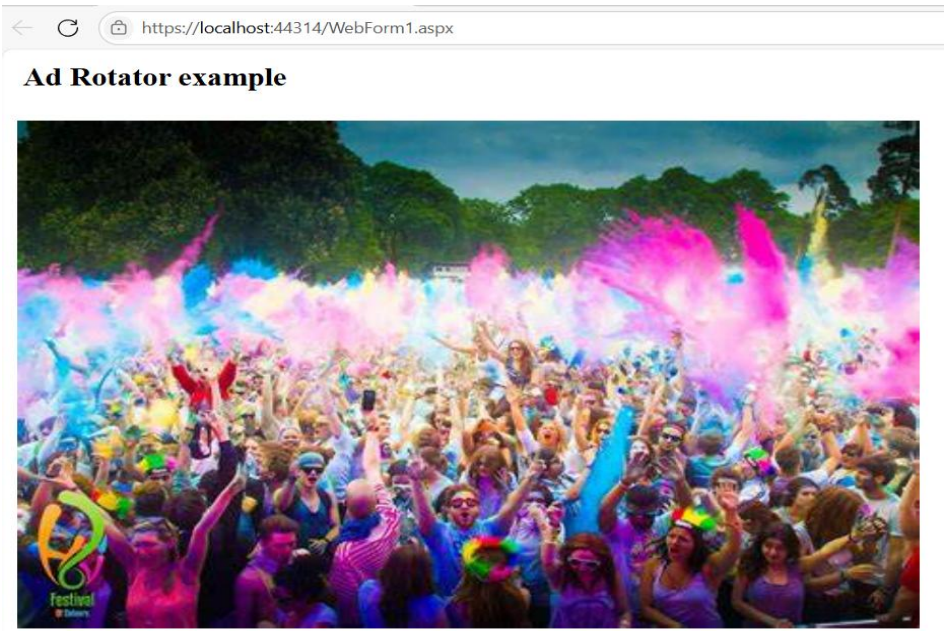
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract3.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body style="font-weight: 700">
    <form id="form1" runat="server">
        <div>
             Ad Rotator example<br />
            <br />
            <asp:AdRotator ID="AdRotator1" runat="server" DataSourceID="XmlDataSource1"
OnAdCreated="AdRotator1_AdCreated" />
            <asp:XmlDataSource ID="XmlDataSource1" runat="server"
DataFile="~/XMLFile1.xml"></asp:XmlDataSource>
        </div>
    </form>
</body>
</html>
```



Xmlfile.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<Advertisements>
    <Ad>
        <ImageUrl>image2.jpeg</ImageUrl>
        <NavigateUrl>google.com</NavigateUrl>
        <AlternateText>First Ad</AlternateText>
        <Impressions>50</Impressions>
    </Ad>
    <Ad>
        <ImageUrl>image3.jpeg</ImageUrl>
        <NavigateUrl>gmail.com</NavigateUrl>
        <AlternateText>Second Ad</AlternateText>
        <Impressions>30</Impressions>
    </Ad>
</Advertisements>
```

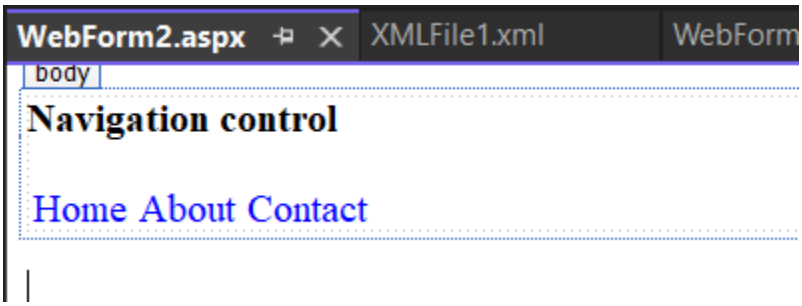


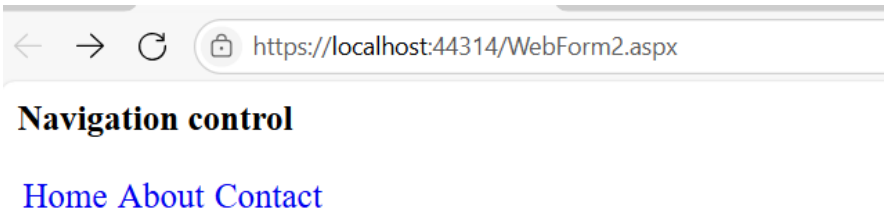


2. Navigation Control

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="pract3.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <strong>Navigation control<br />
         <br />
         </strong>
         <asp:Menu ID="Menu1" runat="server" Orientation="Horizontal">
      <Items>
         <asp:MenuItem Text="Home" NavigateUrl="Home.aspx"/>
         <asp:MenuItem Text="About" NavigateUrl="About.aspx"/>
         <asp:MenuItem Text="Contact" NavigateUrl="Contact.aspx"/>
      </Items>
   </asp:Menu>

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

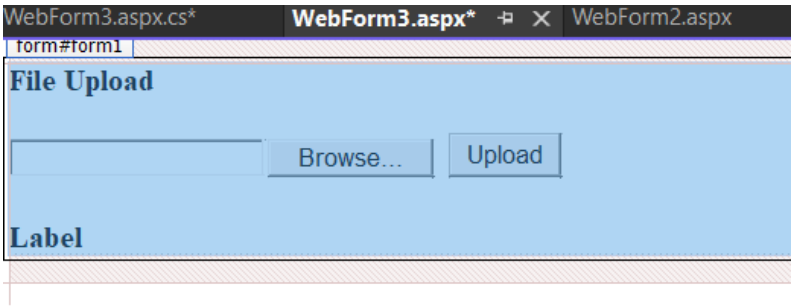




3. Upload File

Webform.aspx

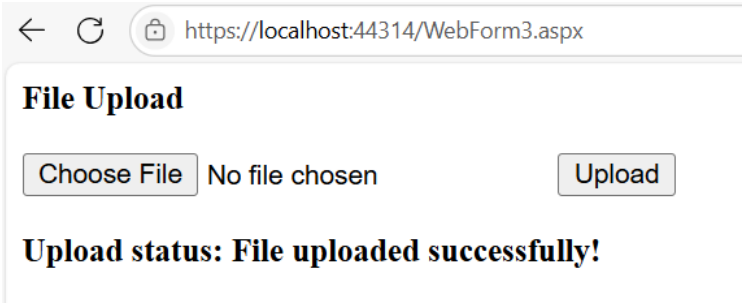
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="pract3.WebForm3" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div style="font-weight: 700">
            File Upload<br />
            <br />
            <asp:FileUpload ID="FileUpload1" runat="server" />
 
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Upload" />
            <br />
            <br />
            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        </div>
    </form>
</body>
</html>
```



Webform.aspx.cs

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

namespace pract3
{
   public partial class WebForm3 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         if (FileUpload1.HasFile)
         {
            try
            {
               string filename = Path.GetFileName(FileUpload1.FileName);

               Label1.Text = "Upload status: File uploaded successfully!";
            }
            catch (Exception ex)
            {
               Label1.Text = "Upload status: Error - " + ex.Message;
            }
         }
         else
         {
            Label1.Text = "Upload status: No file selected.";
         }

      }
```

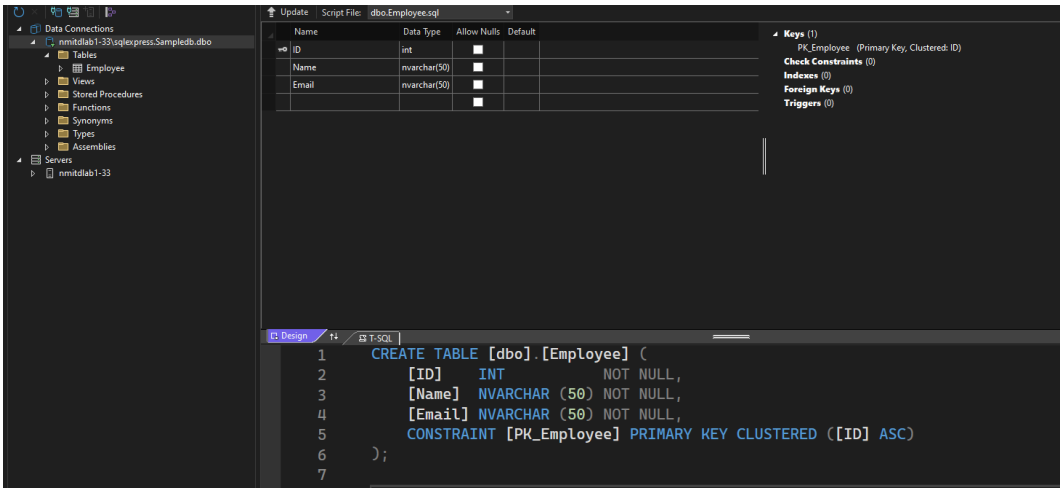
```
    }
}
```


https://localhost:44314/WebForm3.aspx
File Upload
Choose File
No file chosen
Upload
Upload status: File uploaded successfully!

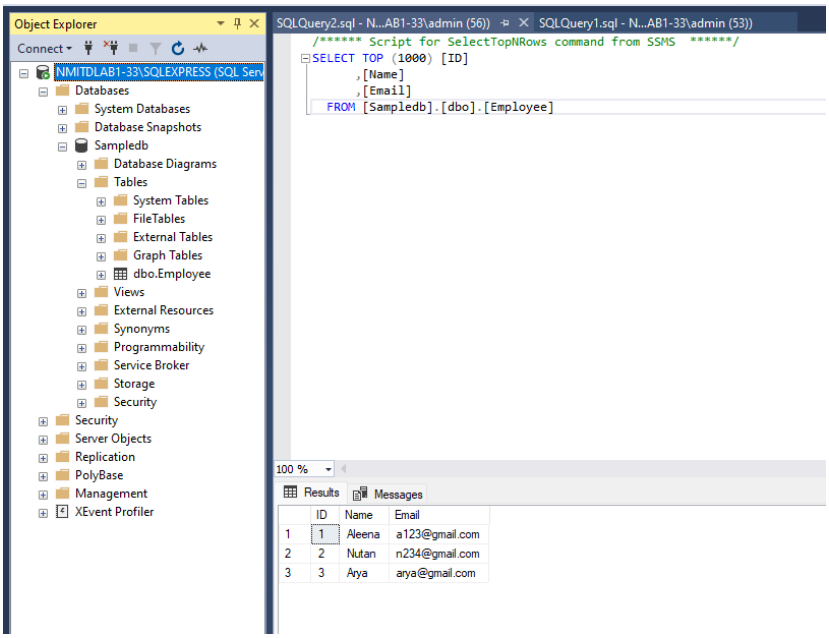
PRACTICAL NO. 4

Webpage Demonstrating Connection-Oriented Architecture (ASP.NET Web Forms with SQL Server Database)

Open SSMS and create a table in it.



Insert some values in the Table

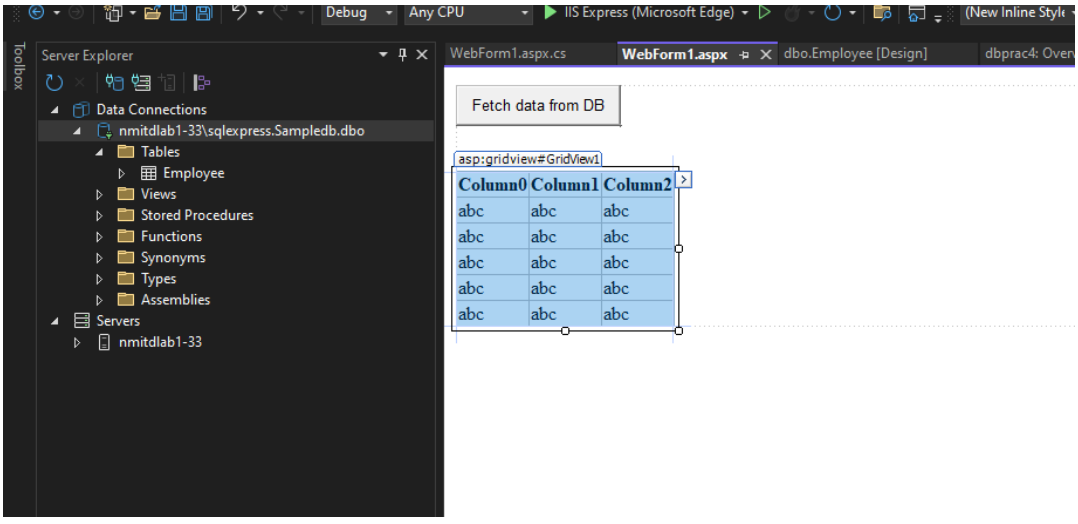


Open Visual studion and connect the Server and Database through Server Explorer.

Webform.aspx

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="prac2.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:Button ID="Button1" runat="server" Text="Fetch Data from DB" />
            <br />
            <br />
            <asp:GridView ID="GridView1" runat="server">
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```

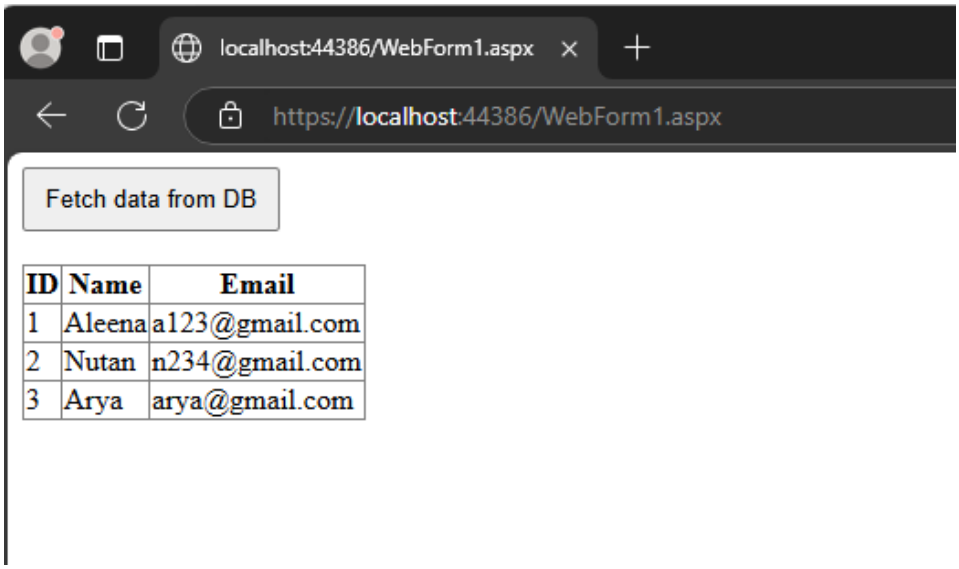


Webform.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
```

```
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
using System.Data;
namespace dbprac4
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }


      protected void Button1_Click(object sender, EventArgs e)
      {
         string connectionString = "Data Source=NMITDLAB1-33\\SQLEXPRESS;Initial
Catalog=Sampledb;Integrated Security=True";
         using (SqlConnection conn = new SqlConnection(connectionString))
         {
            try
            {
               conn.Open();
               string query = "Select * from Employee";
               SqlDataAdapter da = new SqlDataAdapter(query, conn);
               DataTable dt = new DataTable();
               da.Fill(dt);
               GridView1.DataSource = dt;
               GridView1.DataBind();
            }
```

```
            catch (Exception ex)
            {
                Response.Write("<script>alert('Error" + ex.Message + "');</script>");


            }
        }


    }
  }
}
```

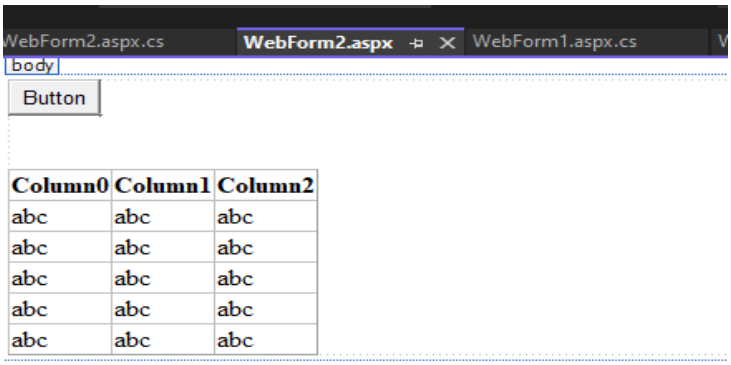


PRACTICAL NO. 5

Webpage Demonstrating Disconnected Architecture (ASP.NET Web Forms with SQL Server Database)

Webform.aspx

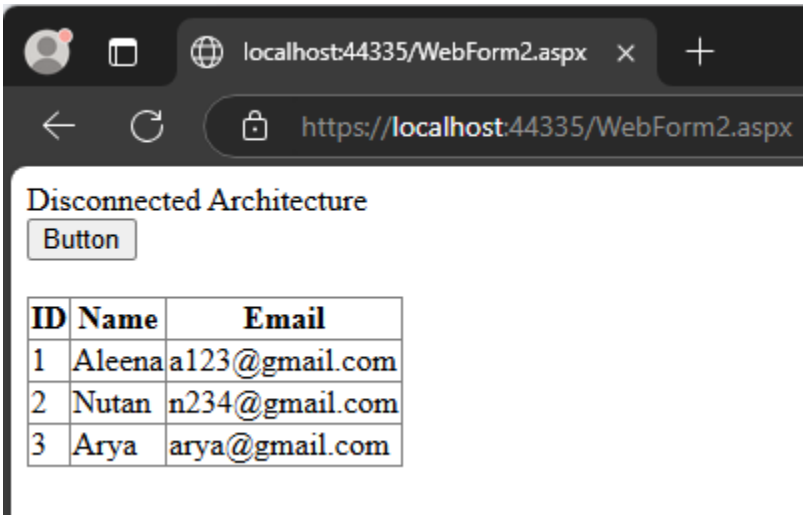
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs" Inherits="PRAC_7_042.WebForm2" %>


<!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" OnClick="Button1_Click" Text="Button" />
            <br />
            <br />
            <asp:GridView ID="GridView1" runat="server">
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```



Webform.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 PRAC_7_042
{
   public partial class WebForm2 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         string connStr = "Data Source=NMITDLAB1-33\\SQLEXPRESS;Initial
Catalog=Sampledb;Integrated Security=True";
```

```
        SqlDataAdapter da;
        DataSet ds = new DataSet();
        try
        {
           using (SqlConnection conn = new SqlConnection(connStr))
           {
              string query = "Select * from Employee";
              da = new SqlDataAdapter(query, conn);
              da.Fill(ds, "Employee");
           }
           GridView1.DataSource = ds.Tables["Employee"];
           GridView1.DataBind();

        }
        catch (Exception ex)
        {
           Response.Write("<script>alert('Error: " + ex.Message + "');</script>");
        }
     }
  }
}
```



PRACTICAL NO. 6

Create a webpage that demonstrates the use of data bound controls of ASP.NET.

In SSMS, create a table and insert values into it

Open Visual Studio, create a new project and connect it to sever through Server explorer

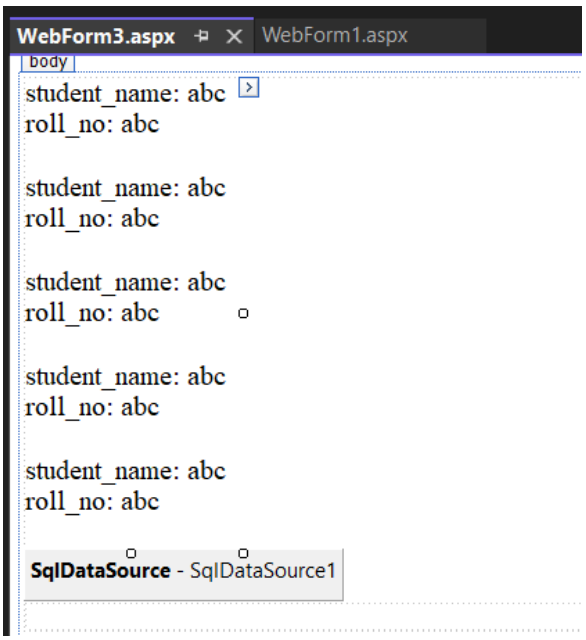
Add a webform and the add a datalist into that webform .

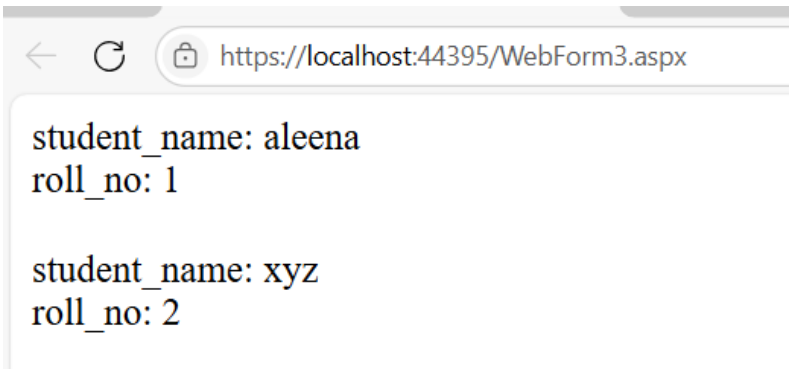
Now add SQL data source to the datalist and also select the table name and columns from it.

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="prac2.WebForm3" %>

<!DOCTYPE html>

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

<head runat="server">

   <title></title>

</head>

<body>

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

      <asp:DataList ID="DataList1" runat="server" DataSourceID="SqlDataSource1" Width="155px">

         <ItemTemplate>

            student_name:

            <asp:Label ID="student_nameLabel" runat="server" Text='<%# Eval("student_name") %>' />

            <br />

            roll_no:

            <asp:Label ID="roll_noLabel" runat="server" Text='<%# Eval("roll_no") %>' />

            <br />

<br />

         </ItemTemplate>

      </asp:DataList>

      <asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%$
ConnectionStrings:pract1ConnectionString %>" ProviderName="<%$
ConnectionStrings:pract1ConnectionString.ProviderName %>" SelectCommand="SELECT
[student_name], [roll_no] FROM [slist]"></asp:SqlDataSource>

      <div>
```

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



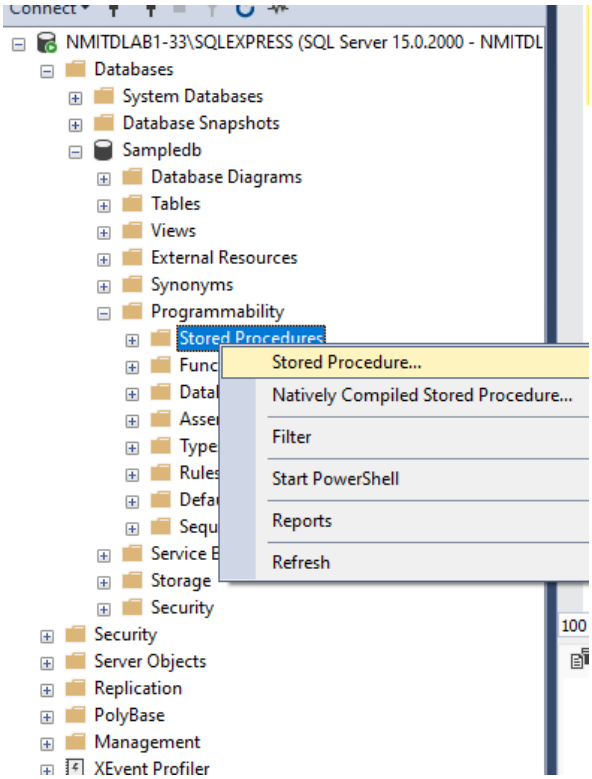


PRACTICAL NO. 7

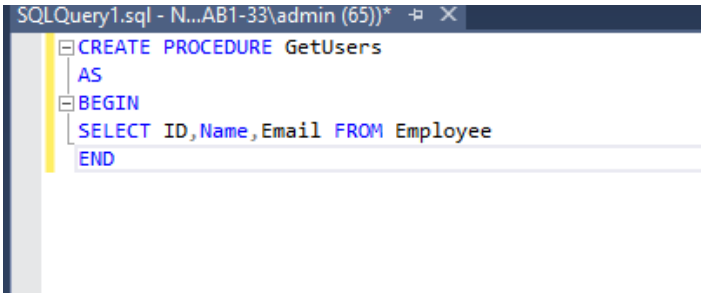
Design a webpage to demonstrate the working of a simple stored procedure.

In SSMS, create a table and insert values in it.

Now to create a Stored procedure, Click on programmability →Stored procedure



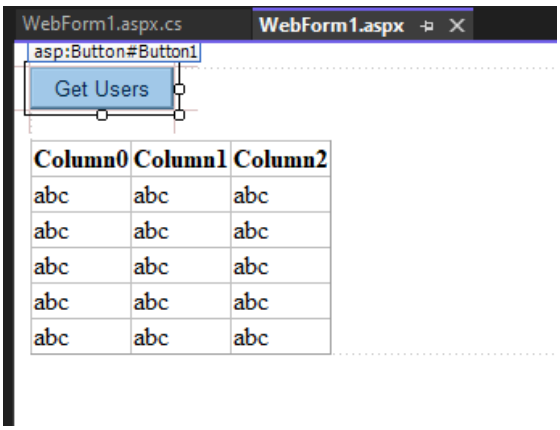
Write the procedure in it.



Webform.aspx

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="PRAC_7_042.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:Button ID="Button1" runat="server" Text="Get Users" OnClick="Button1_Click" />
            <br />
            <br />
            <asp:GridView ID="GridView1" runat="server">
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```

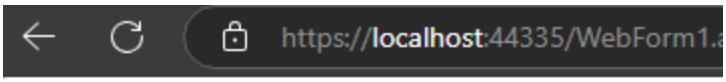


Webform.aspx.cs

```
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 PRAC_7_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         string connStr = "Data Source=NMITDLAB1-33\\SQLEXPRESS;Initial
Catalog=Sampledb;Integrated Security=True";
         using (SqlConnection conn = new SqlConnection(connStr))
         {
            using (SqlCommand cmd = new SqlCommand("GetUsers", conn))
            {
               cmd.CommandType = System.Data.CommandType.StoredProcedure;
               conn.Open();
               SqlDataAdapter da = new SqlDataAdapter(cmd);
               DataTable dt = new DataTable();
               da.Fill(dt);
               GridView1.DataSource = dt;
               GridView1.DataBind();
```

```
            }
        }
    }
  }
}
```



Stored procedure

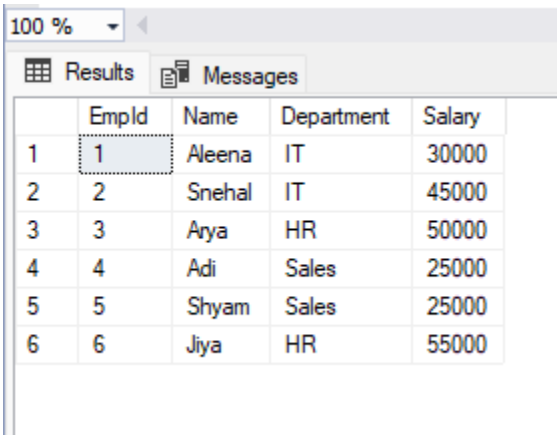
Get Users

ID	Name	Email
1	Aleena	a123@gmail.com
2	Nutan	n234@gmail.com
3	Arya	arya@gmail.com

PRACTICAL NO. 8

Design a webpage to demonstrate the working of parameterized stored procedure.

Create a table in SSMS and insert values in to it.



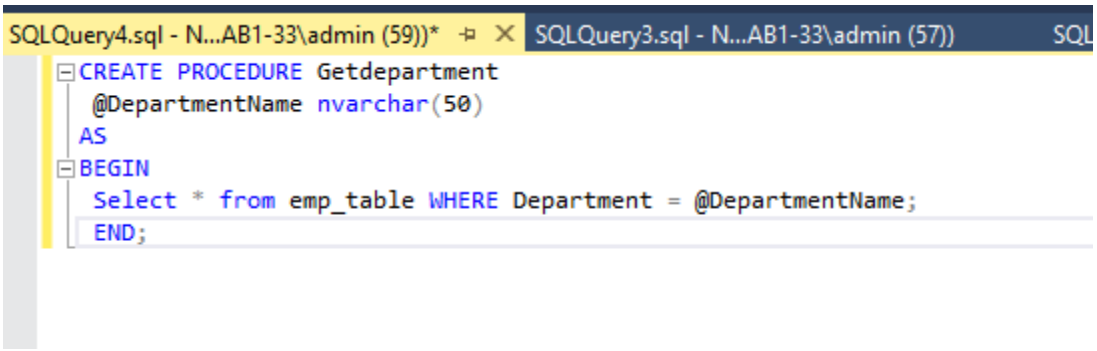
100 %

Results Messages

	EmpId	Name	Department	Salary
1	1	Aleena	IT	30000
2	2	Snehal	IT	45000
3	3	Arya	HR	50000
4	4	Adi	Sales	25000
5	5	Shyam	Sales	25000
6	6	Jiya	HR	55000

Create a stored procedure

```
CREATE PROCEDURE Getdepartment
 @DepartmentName nvarchar(50)
AS
BEGIN
 Select * from emp_table WHERE Department = @DepartmentName;
 END;
```



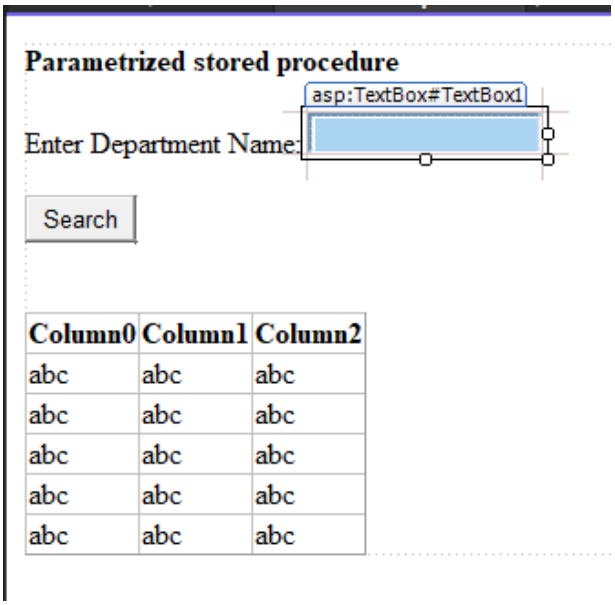
SQLQuery4.sql - N...AB1-33\admin (59))* SQLQuery3.sql - N...AB1-33\admin (57)) SQL

```
CREATE PROCEDURE Getdepartment
  @DepartmentName nvarchar(50)
 AS
BEGIN
  Select * from emp_table WHERE Department = @DepartmentName;
  END;
```

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="prac8_042.WebForm1" %>
```

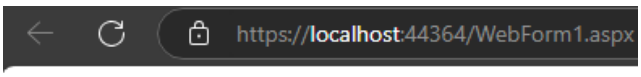
```
<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <b>Parametrized stored procedure</b><br />
            <br />
            Enter Department Name:
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" Text="Search" OnClick="Button1_Click" />
            <br />
            <br />
            <asp:GridView ID="GridView1" runat="server">
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```



Webform.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 prac8_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
```

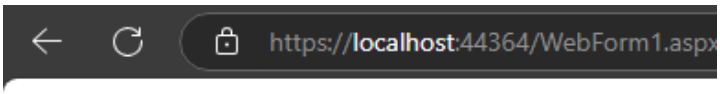
```
    {
        string connStr = "Data Source=NMITDLAB1-33\\SQLEXPRESS;Initial
Catalog=Employeedb;Integrated Security=True";
        {
            SqlConnection conn = new SqlConnection(connStr);
            SqlCommand cmd = new SqlCommand("Getdepartment", conn);

            cmd.CommandType = System.Data.CommandType.StoredProcedure;
            cmd.Parameters.AddWithValue("@DepartmentName", TextBox1.Text);
            SqlDataAdapter da = new SqlDataAdapter(cmd);
            DataTable dt = new DataTable();
            da.Fill(dt);
            GridView1.DataSource = dt;
            GridView1.DataBind();


        }
    }
  }
}
```



Parametrized stored procedure

Enter Department Name:

Search

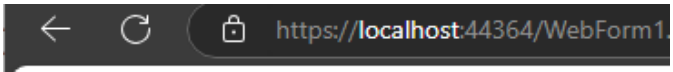


Parametrized stored procedure

Enter Department Name: IT

Search

EmpId	Name	Department	Salary
1	Aleena	IT	30000
2	Snehal	IT	45000



Parametrized stored procedure

Enter Department Name: Sales

Search

EmpId	Name	Department	Salary
4	Adi	Sales	25000
5	Shyam	Sales	25000

Parametrized stored procedure

Enter Department Name: HR

Search

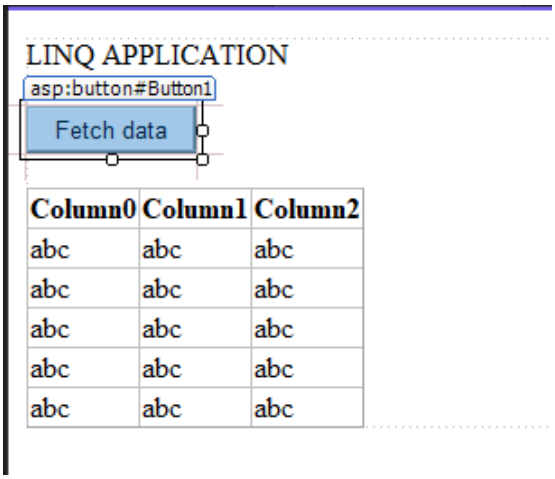
EmpId	Name	Department	Salary
3	Arya	HR	50000
6	Jiya	HR	55000

PRACTICAL NO. 9

Design a webpage to display the use of LINQ.

Webform.aspx

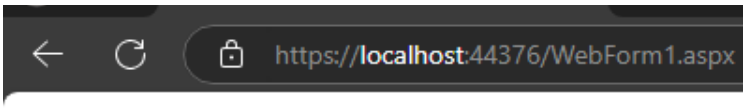
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract_9_042.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            LINQ APPLICATION<br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Fetch data" />
            <br />
        </div>
        <asp:GridView ID="GridView1" runat="server">
        </asp:GridView>
    </form>


</body>
</html>
```



Webform.aspx.cs

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

namespace pract_9_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      public class Employee
      {
         public int EmpID { get; set; }
         public String Name { get; set; }
         public String Department { get; set; }

         public decimal Salary { get; set; }
      }
      private List<Employee> employees = new List<Employee> {
         new Employee {EmpID=1,Name="Aleena",Department="IT",Salary=55000 },
```

```
        new Employee {EmpID=2,Name="Arya",Department="IT",Salary=45000 },
        new Employee {EmpID=3,Name="Adi",Department="HR",Salary=65000 },
        new Employee {EmpID=4,Name="Sharath",Department="IT",Salary=55000 }
    };
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        var result=from emp in employees
                   where emp.Department=="IT" && emp.Salary>50000
                   select emp;
        GridView1.DataSource=result.ToList();
        GridView1.DataBind();
    }
  }
}
```



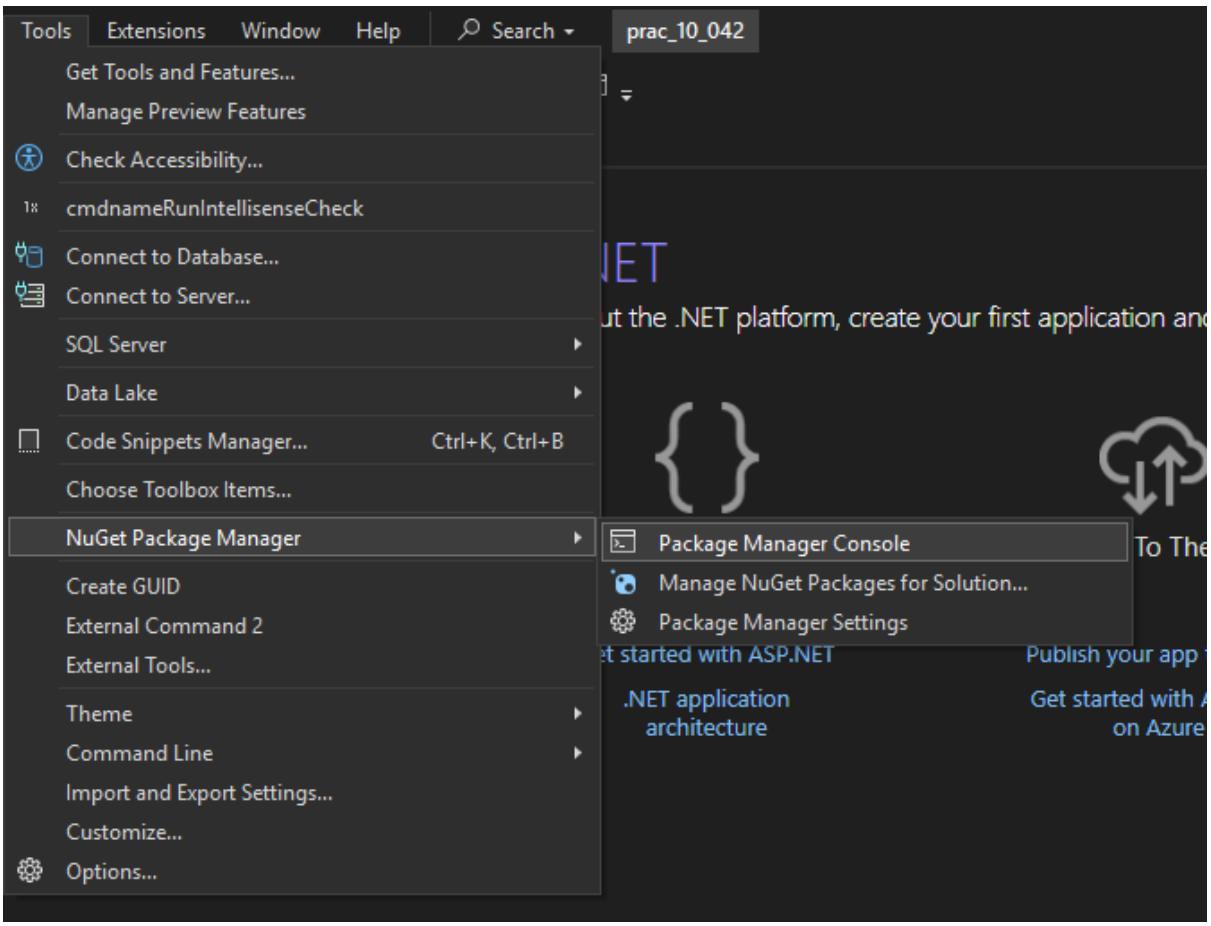
LINQ APPLICATION

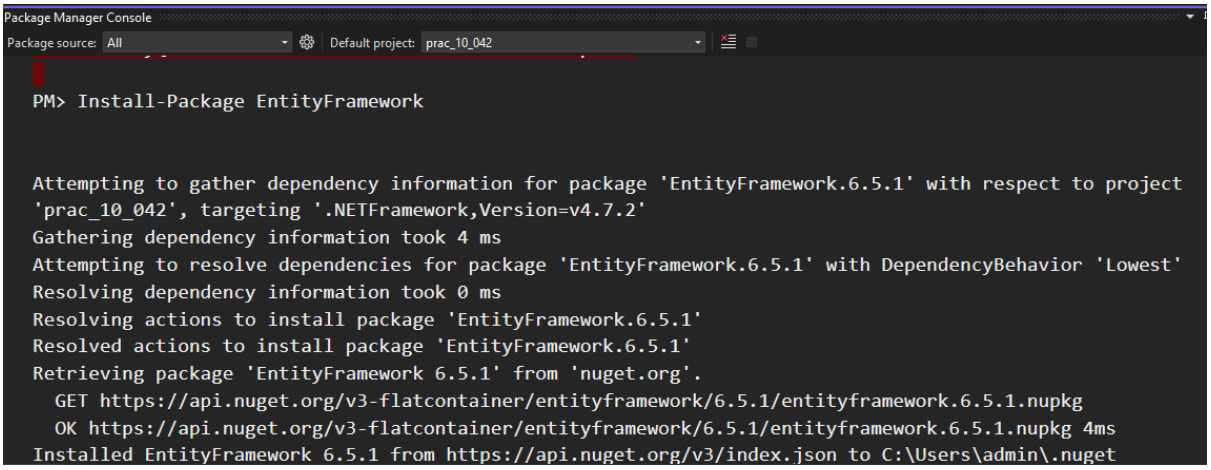
Fetch data

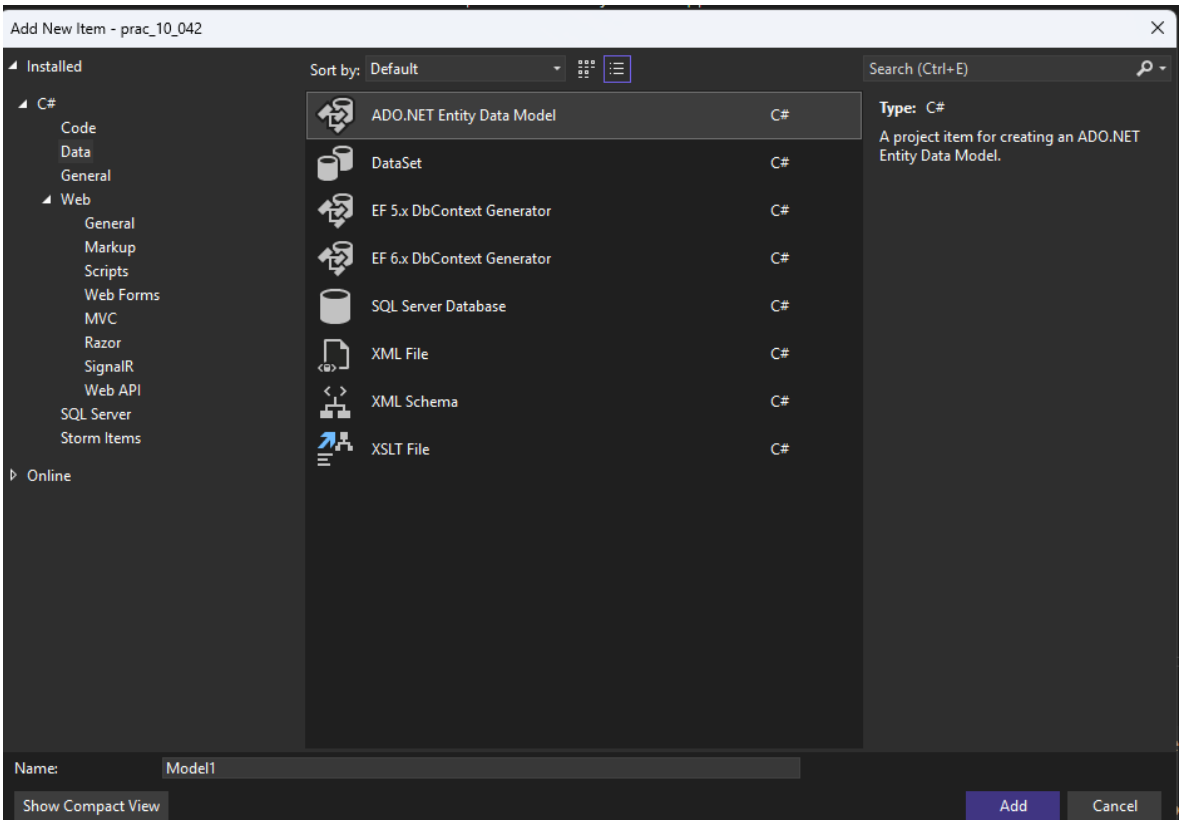
EmpID	Name	Department	Salary
1	Aleena	IT	55000
4	Sharath	IT	55000

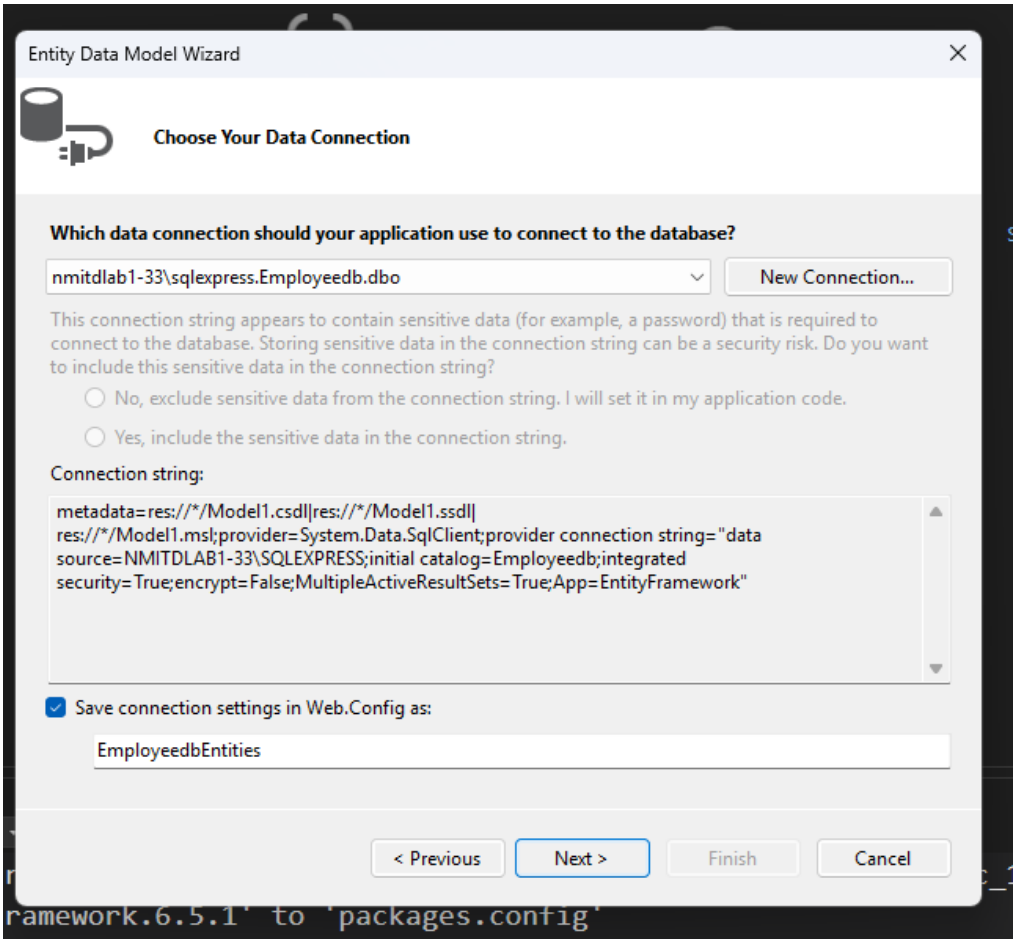
PRACTICAL NO. 10

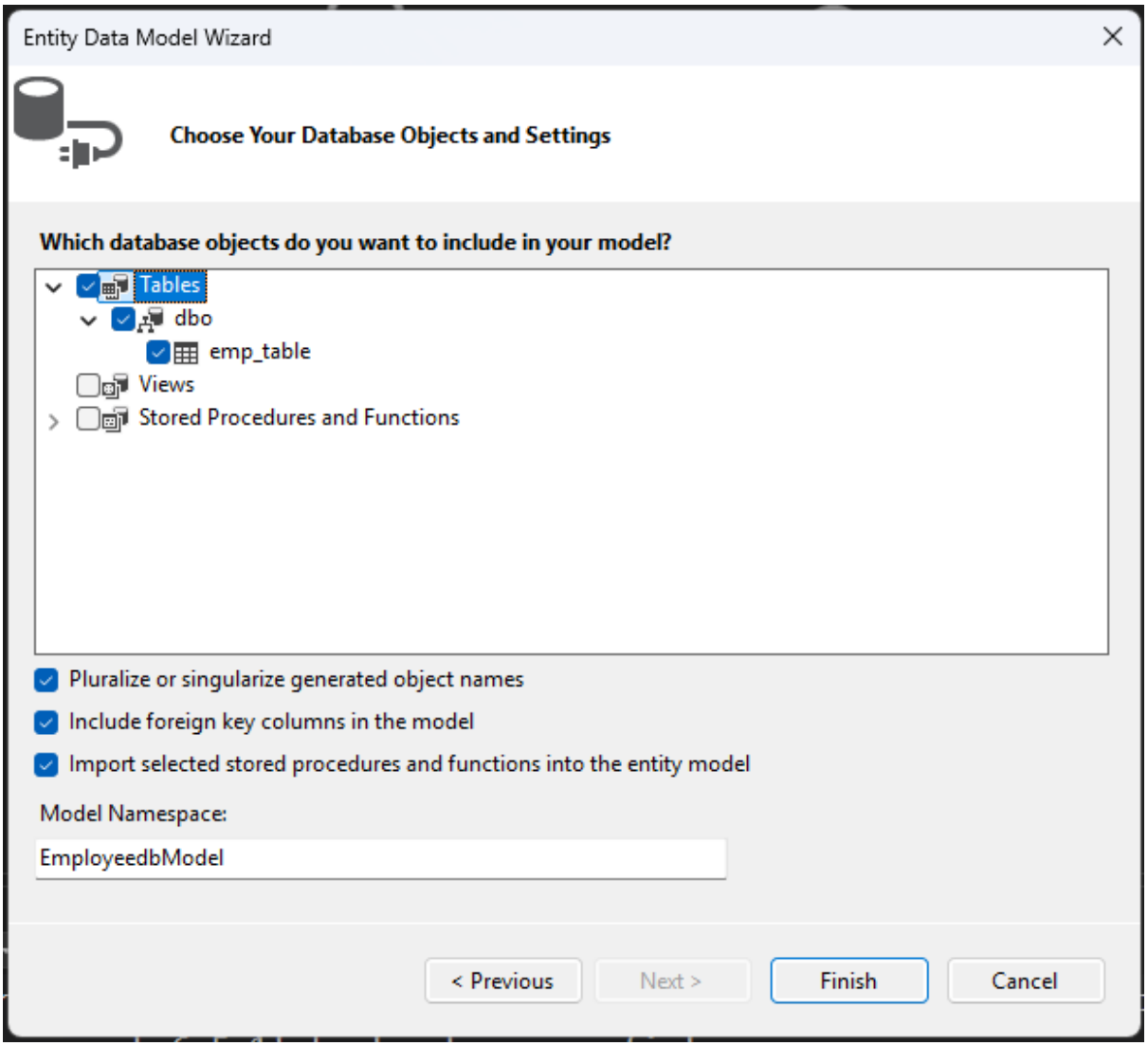
Build websites to demonstrate the working of entity frameworks in dot net.

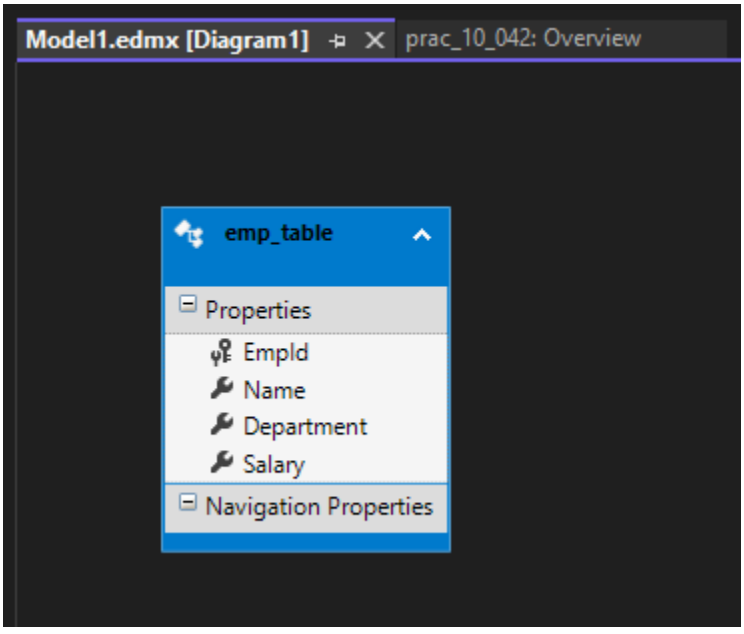





Add New Item - prac_10_042
Installed
C#
Code
Data
General
Web
General
Markup
Scripts
Web Forms
MVC
Razor
SignalR
Web API
SQL Server
Storm Items
Online
Sort by: Default
ADO.NET Entity Data Model C#
DataSet C#
EF 5.x DbContext Generator C#
EF 6.x DbContext Generator C#
SQL Server Database C#
XML File C#
XML Schema C#
XSLT File C#
Search (Ctrl+E)
Type: C#
A project item for creating an ADO.NET Entity Data Model.
Name: Model1
Show Compact View
Add
Cancel


Entity Data Model Wizard
Choose Your Data Connection
Which data connection should your application use to connect to the database?
nmitdlab1-33\sqlexpress.Employeedb.dbo
New Connection...
This connection string appears to contain sensitive data (for example, a password) that is required to connect to the database. Storing sensitive data in the connection string can be a security risk. Do you want to include this sensitive data in the connection string?
No, exclude sensitive data from the connection string. I will set it in my application code.
Yes, include the sensitive data in the connection string.
Connection string:
metadata=res://*/Model1.csdl|res://*/Model1.ssdl|
res://*/Model1.msl;provider=System.Data.SqlClient;provider connection string="data
source=NMITDLAB1-33\SQLEXPRESS;initial catalog=Employeedb;integrated
security=True;encrypt=False;MultipleActiveResultSets=True;App=EntityFramework"
Save connection settings in Web.Config as:
EmployeedbEntities
< Previous
Next >
Finish
Cancel
ramework.6.5.1' to 'packages.config'

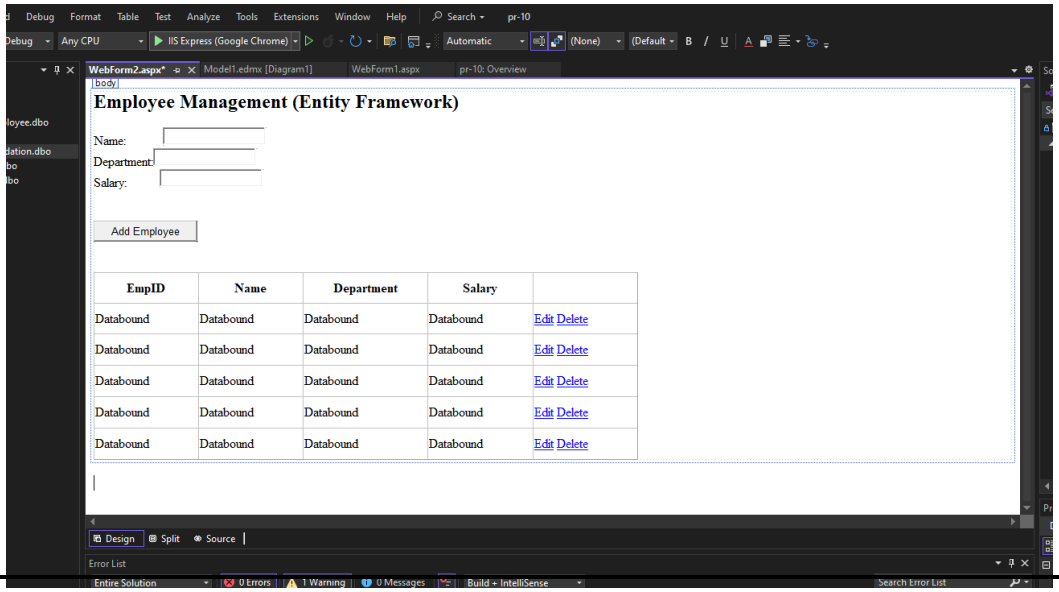




<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="prac_10_042.WebForm1" %>

```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Employee Management (Entity Framework)</h2>

            <!-- Add Employee Form -->
            <asp:Label runat="server" Text="Name:"></asp:Label>
            <asp:TextBox ID="txtName" runat="server" style="margin-left: 46px"></asp:TextBox>

            <br />

            <asp:Label runat="server" Text="Department:"></asp:Label>
              
            <asp:TextBox ID="txtDepartment" runat="server"></asp:TextBox> <br />


            <asp:Label runat="server" Text="Salary:"></asp:Label>
             <asp:TextBox ID="txtSalary" runat="server" style="margin-left: 41px"></asp:TextBox>
            <br />
            <br />
            <br />
            <asp:Button ID="btnAdd" runat="server" Text="Add Employee" OnClick="btnAdd_Click" />

            <br /><br />
```

```
        <!-- Display Employees -->
        <asp:GridView ID="gvEmployees" runat="server" AutoGenerateColumns="False"
DataKeyNames="EmpID"
            OnRowEditing="gvEmployees_RowEditing" OnRowUpdating="gvEmployees_RowUpdating"
            OnRowCancelingEdit="gvEmployees_RowCancelingEdit"
OnRowDeleting="gvEmployees_RowDeleting" Height="233px" Width="677px">
            <Columns>
                <asp:BoundField DataField="EmpID" HeaderText="EmpID" ReadOnly="True" />
                <asp:BoundField DataField="Name" HeaderText="Name" />
                <asp:BoundField DataField="Department" HeaderText="Department" />
                <asp:BoundField DataField="Salary" HeaderText="Salary" />

                <asp:CommandField ShowEditButton="True" ShowDeleteButton="True" />
            </Columns>
        </asp:GridView>

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



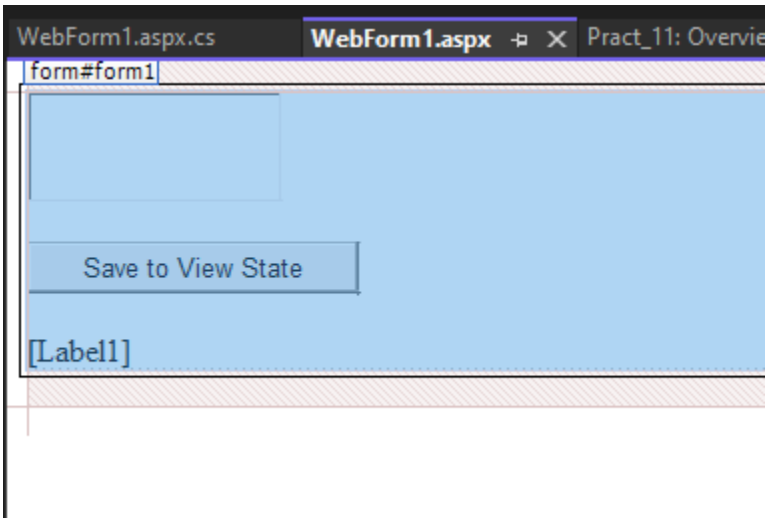
PRACTICAL NO. 11

Design Web Applications using Client Side Session Management

1, View State

webform1.aspx

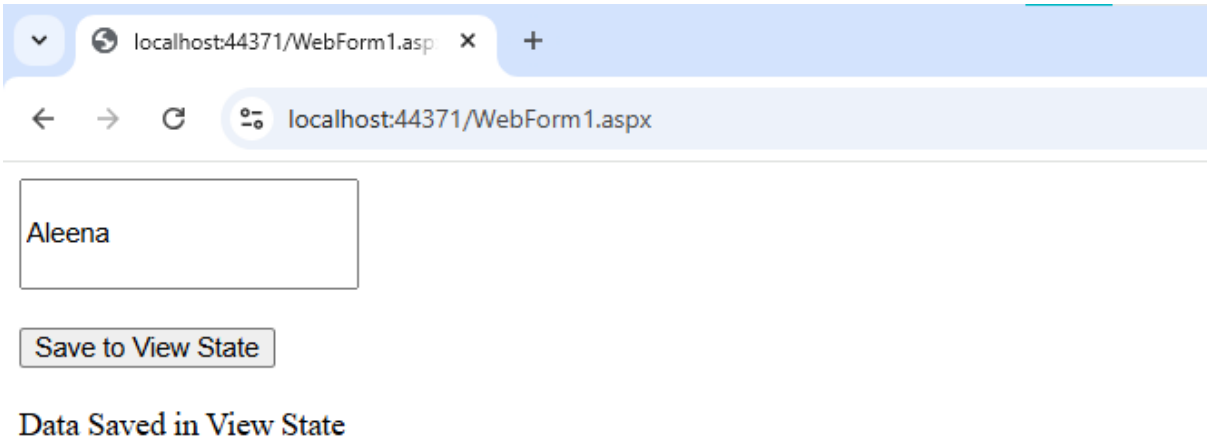
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Pract_11.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server" Height="50px"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Save to View State" />
            <br />
            <br />
            <asp:Label ID="Label1" runat="server"></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 Pract_11
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (ViewState["Username"]!=null)
         {
            Label1.Text="Stored in View State " + ViewState["Username"].ToString();
         }
      }

      protected void Button1_Click(object sender, EventArgs e)
      {
```

```
        ViewState["Username"] = TextBox1.Text;
        Label1.Text = "Data Saved in View State";
    }
  }
}
```

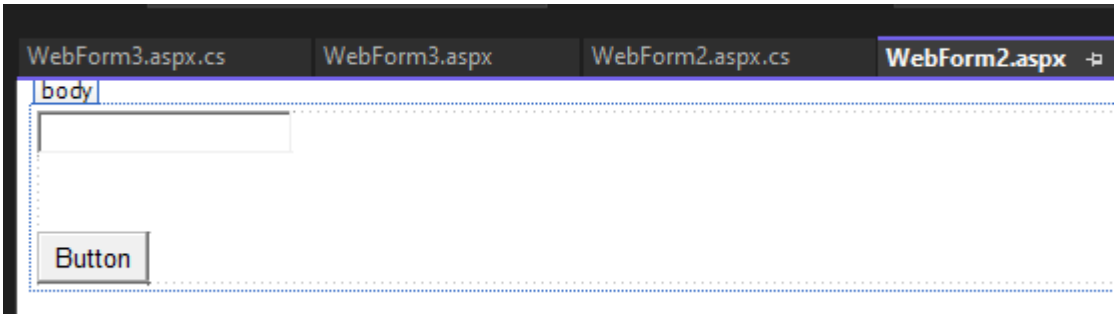


2. Query string

Webform2.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="Pract_11.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:TextBox ID="TextBox1" runat="server"></asp:TextBox>
      <br />
      <br />
```

```
        </div>
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Button" />
    </form>
</body>
</html>
```



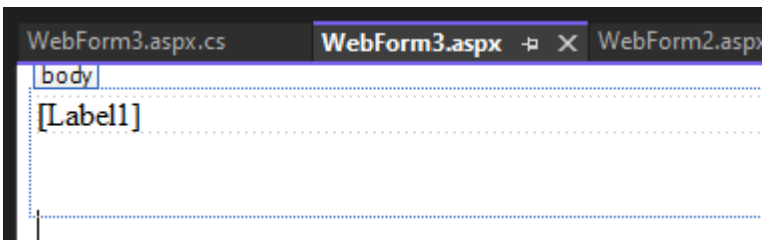
Webform2.aspx.cs

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

namespace Pract_11
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Response.Redirect("WebForm3.aspx?name="+TextBox1.Text);
```

```
    }
  }
}
```

Webform3.aspx

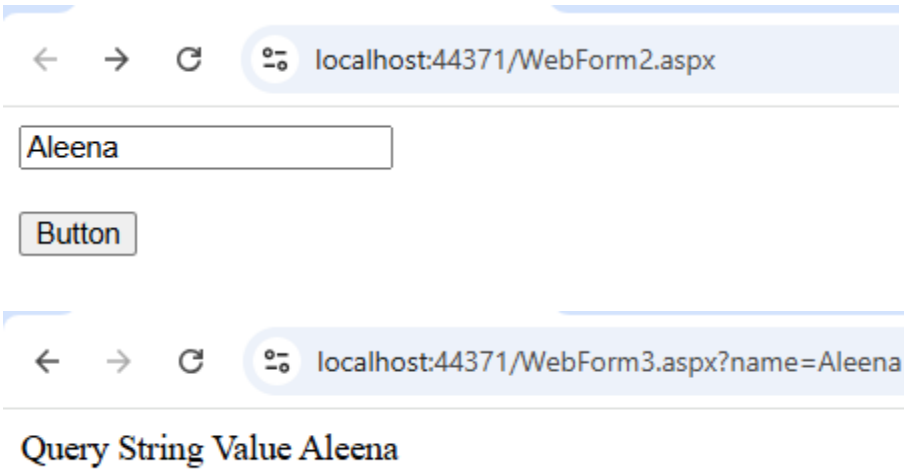
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
Inherits="Pract_11.WebForm3" %>


<!DOCTYPE html>


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



Webform3.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
```

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


namespace Pract_11
{
   public partial class WebForm3 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (Request.QueryString["name"]!=null)
         {
            Label1.Text="Query String Value "+Request.QueryString["name"];
         }
      }
   }
}
```

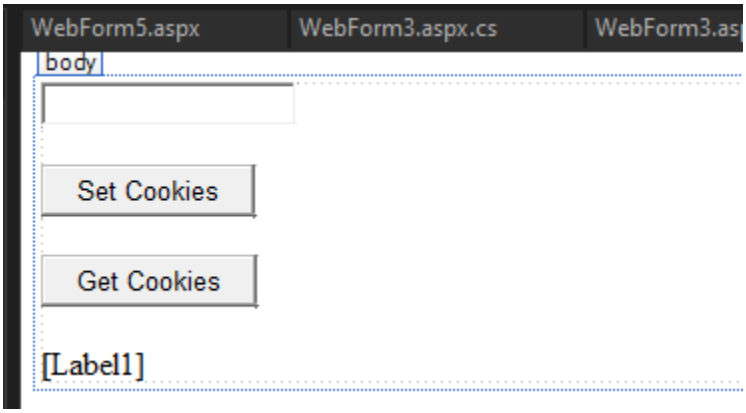


3.Cookies

Webform4.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm4.aspx.cs"
Inherits="Pract_11.WebForm4" %>
```

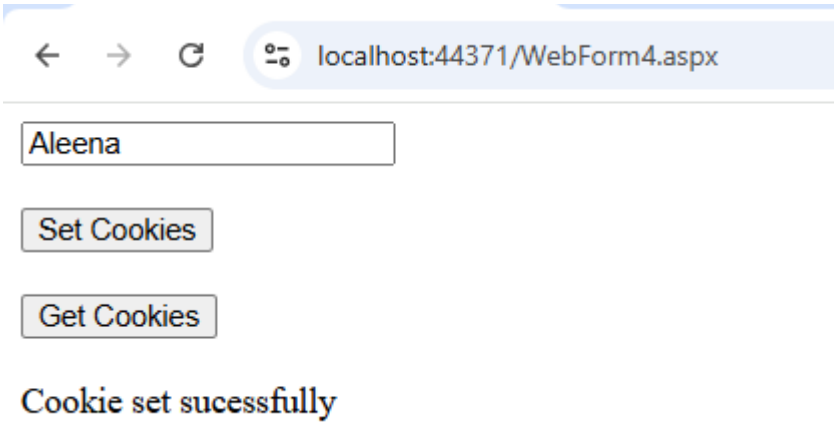
```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Set Cookies" />
            <br />
            <br />
            <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Get Cookies" />
            <br />
            <br />
            <asp:Label ID="Label1" runat="server"></asp:Label>
        </div>
    </form>
</body>
</html>
```

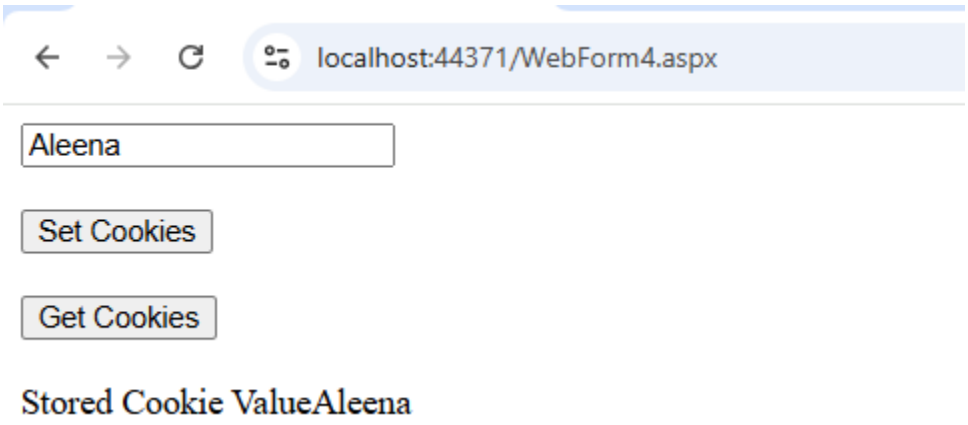


Webform4.aspx.cs

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

namespace Pract_11
{
    public partial class WebForm4 : System.Web.UI.Page
    {
```

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

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        HttpCookie cookie = new HttpCookie("Username", TextBox1.Text);
        cookie.Expires = DateTime.Now.AddDays(7);
        Response.Cookies.Add(cookie);
        Label1.Text = "Cookie set sucessfully";
    }

    protected void Button2_Click(object sender, EventArgs e)
    {
        HttpCookie cookie = Request.Cookies["Username"];
        if (cookie != null)
        {
            Label1.Text = "Stored Cookie Value" + cookie.Value;
        }
        else
        {
            Label1.Text = "No cookies found";
        }
    }
  }
}
```





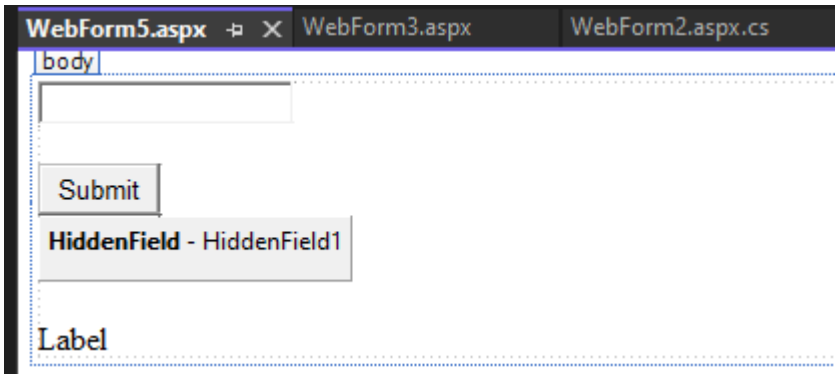
4. **Hidden state**

Webform5.aspx

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm5.aspx.cs" Inherits="Pract_11.WebForm5" %>

```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
                <br />

            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
            <br />
            <asp:HiddenField ID="HiddenField1" runat="server" Value="1234" />
            <br />
```

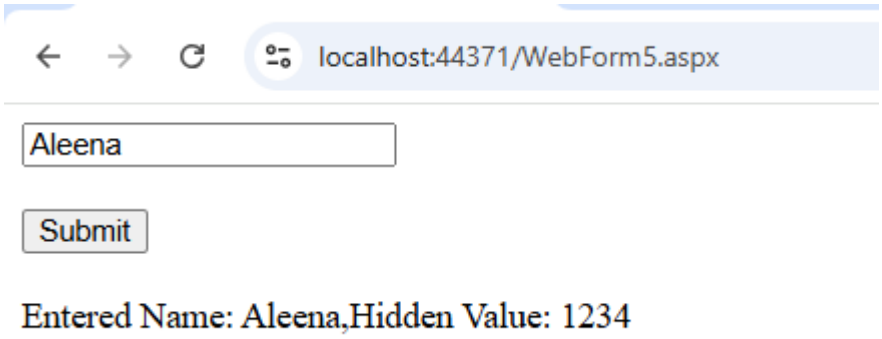
```
        <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
    </div>
  </form>
</body>
</html>
```



Webform5.aspx.cs

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

namespace Pract_11
{
  public partial class WebForm5 : System.Web.UI.Page
  {
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
```

```
        Label1.Text = "Entered Name: " + TextBox1.Text + ",Hidden Value: " + HiddenField1.Value;
    }
  }
}
```

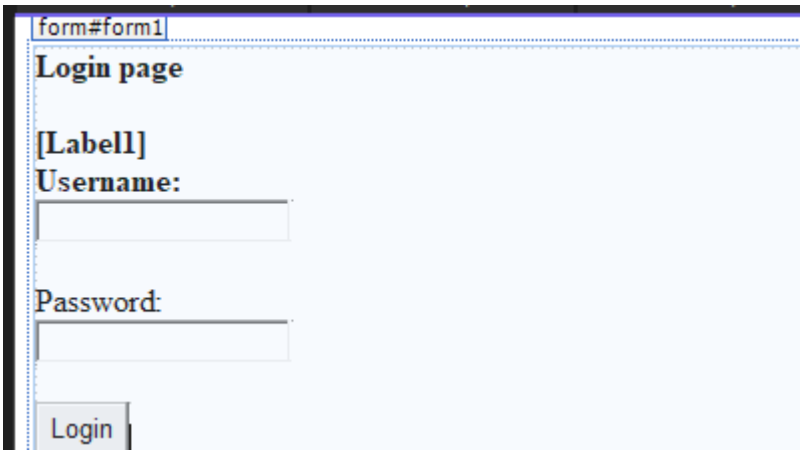


PRACTICAL NO. 12

Design Web Applications using Server Side Session Management Techniques

Webform1.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract_12_042.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div style="font-weight: 700">
            Login page<br />
            <br />
            <asp:Label ID="Label1" runat="server"></asp:Label>
            <br />
            Username:</div>
        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        <br />
        <br />
        Password:<br />
        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
        <br />
        <br />
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Login" />
    </form>
</body>
</html>
```



Webform1.aspx.cs

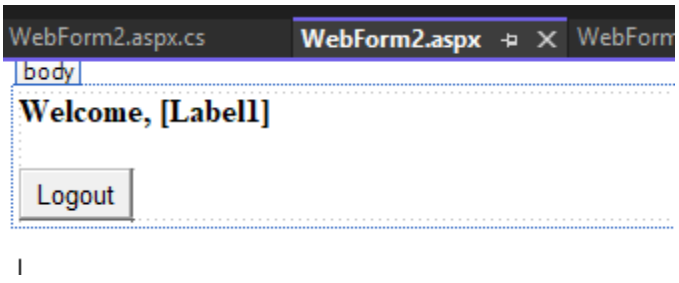
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace pract_12_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (Session["Username"]!=null)
         {
            Response.Redirect("WebForm2.aspx");
         }
      }

      protected void Button1_Click(object sender, EventArgs e)
      {
```

```
        string username=TextBox1.Text;
        string password=TextBox2.Text;
        if(username=="Aleena" && password=="3456")
        {
           Session["Username"] = username;
           Response.Redirect("WebForm2.aspx");
        }
        else
        {
           {
              Label1.Text = "Invalid username or password";
           }
        }
     }
  }
}
```

Webform2.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="pract_12_042.WebForm2" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body style="font-weight: 700">
   <form id="form1" runat="server">
      <div>
         Welcome,
         <asp:Label ID="Label1" runat="server"></asp:Label>
```

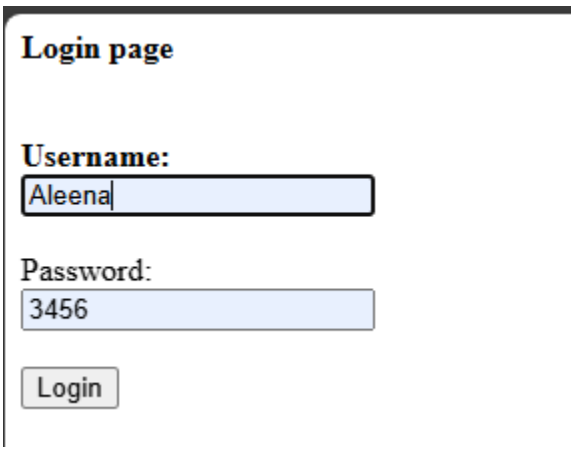
```
        <br />
      </div>
      <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Logout" />
   </form>
</body>
</html>
```

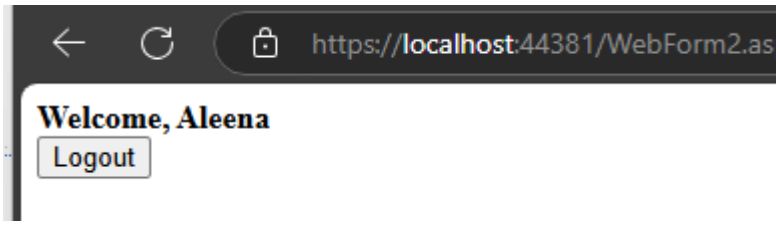


Webform2.aspx.cs

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


namespace pract_12_042
{
   public partial class WebForm2 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if (Session["Username"] == null)
         {
            Response.Redirect("WebForm1.aspx");
         }
         else
```

```
        {
            Label1.Text = Session["Username"].ToString();
        }
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        Session.Abandon();
        Response.Redirect("WebForm1.aspx");
    }
  }
}
```





PRACTICAL NO. 13

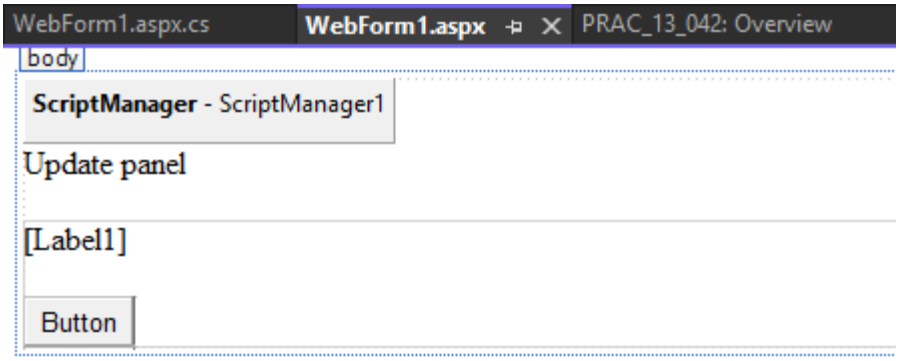
Build a web page using AJAX Controls.

Partial page update

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="PRAC_13_042.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>
         Update panel<br />
         <asp:UpdatePanel ID="UpdatePanel1" runat="server">
            <ContentTemplate>
               <asp:Label ID="Label1" runat="server"></asp:Label>
               <br />
               <br />
               <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Button" />
            </ContentTemplate>
         </asp:UpdatePanel>
      </div>
   </form>
</body>
```

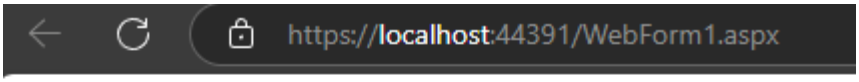
```
</html>
```



Webform.aspx.cs

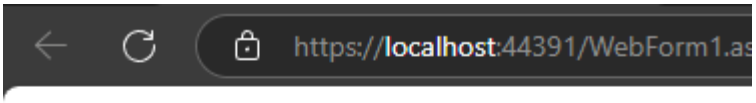
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace PRAC_13_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         if(!IsPostBack)
         {
            Label1.Text = "Last updated time:" + DateTime.Now.ToString("hh:mm:ss");
         }
      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         Label1.Text = "Last updated time:" + DateTime.Now.ToString("hh:mm:ss");
```

```
    }
  }
}
```



Update panel
Last updated time:04:16:10

Button



Update panel
Last updated time:04:16:25

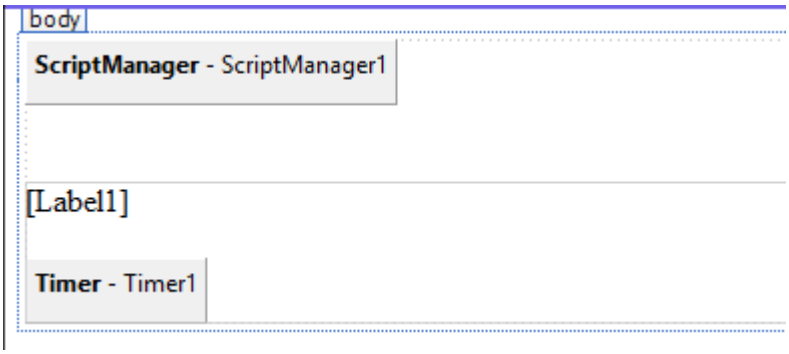
Button

Auto refresh without full page load

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="PRAC_13_042.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:ScriptManager ID="ScriptManager1" runat="server">
         </asp:ScriptManager>
```

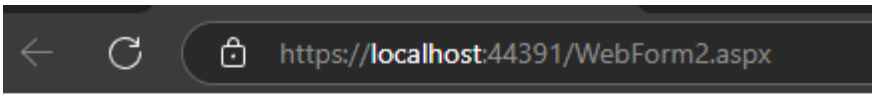
```
        <br />

        <asp:UpdatePanel ID="UpdatePanel1" runat="server">
            <ContentTemplate>
                <asp:Label ID="Label1" runat="server"></asp:Label>
                <br />
                <asp:Timer ID="Timer1" runat="server" Interval="1000" OnTick="Timer1_Tick">
                </asp:Timer>
            </ContentTemplate>
        </asp:UpdatePanel>
    </div>
  </form>
</body>
</html>
```



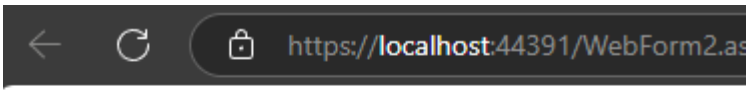
Webform.aspx.cs

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

namespace PRAC_13_042
{
```

```
public partial class WebForm2 : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {
            Label1.Text = "Current Time:" + DateTime.Now.ToString("hh:mm:ss");
        }
    }

    protected void Timer1_Tick(object sender, EventArgs e)
    {
        Label1.Text = "updated time:" + DateTime.Now.ToString("hh:mm:ss");
    }
}
}
```



Updated time:04:37:32



Updated time:04:37:48

PRACTICAL NO. 14

Build a web application to create and use web service in ASP.net

1. **Calculator**

To create .asmx file

ADD→New item→webservice(asmx)

Webservice.asmx

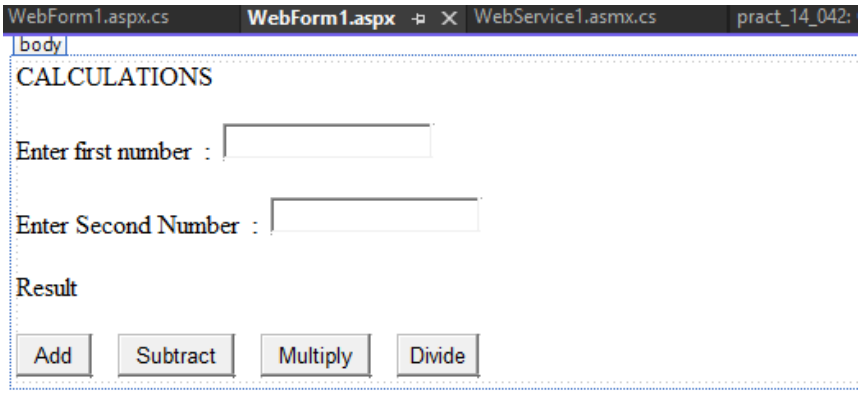
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Services;

namespace pract_14_042
{
    /// <summary>
    /// Summary description for WebService1
    /// </summary>
    [WebService(Namespace = "http://tempuri.org/")]
    [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
    [System.ComponentModel.ToolboxItem(false)]
    // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
    // [System.Web.Script.Services.ScriptService]
    public class WebService1 : System.Web.Services.WebService
    {

        [WebMethod]
        public double add(double a,double b)
```

```
    {
        return (a+b);
    }
    [WebMethod]
    public double subtract(double a, double b)
    {
        return (a - b);
    }
    [WebMethod]
    public double multiply(double a, double b)
    {
        return (a * b);
    }
    [WebMethod]
    public double divide(double a, double b)
    {
        return (a / b);
    }
  }
}
```

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract_14_042.WebForm1" %>


<!DOCTYPE html>


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

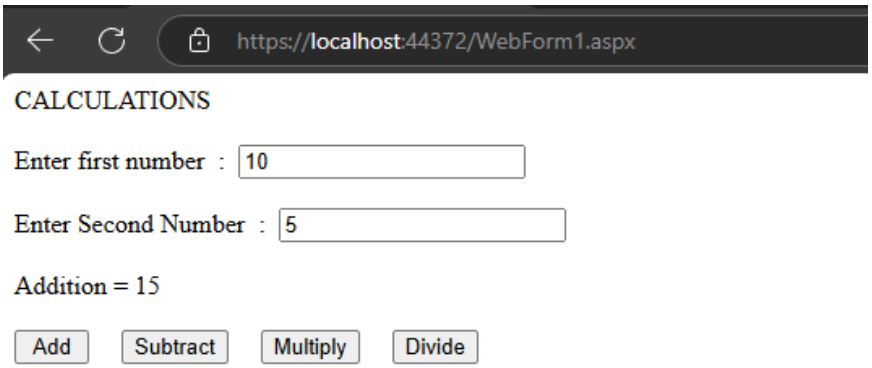
```
   <form id="form1" runat="server">
      <div>
         CALCULATIONS<br />
         <br />
         Enter first number  : 
         <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         <br />
         <br />
         Enter Second Number  : 
         <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Label ID="Label1" runat="server" Text="Result"></asp:Label>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Add" Width="46px" />
   
         <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Subtract" />
   
         <asp:Button ID="Button3" runat="server" OnClick="Button3_Click" Text="Multiply" />
   
         <asp:Button ID="Button4" runat="server" OnClick="Button4_Click" Text="Divide" />
      </div>
   </form>
</body>
</html>
```

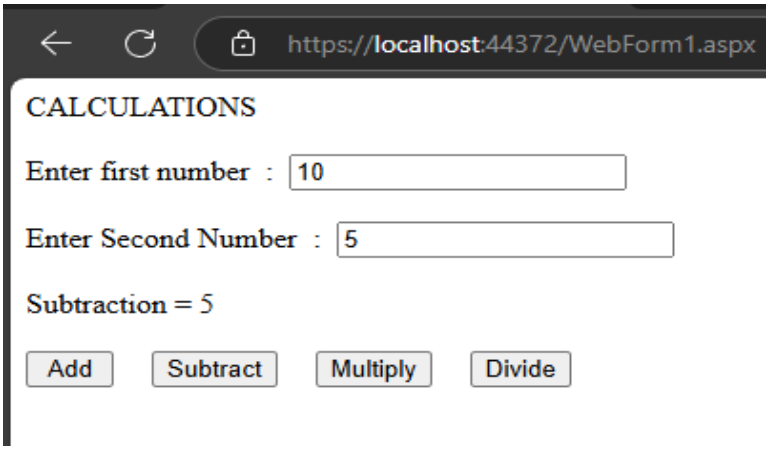


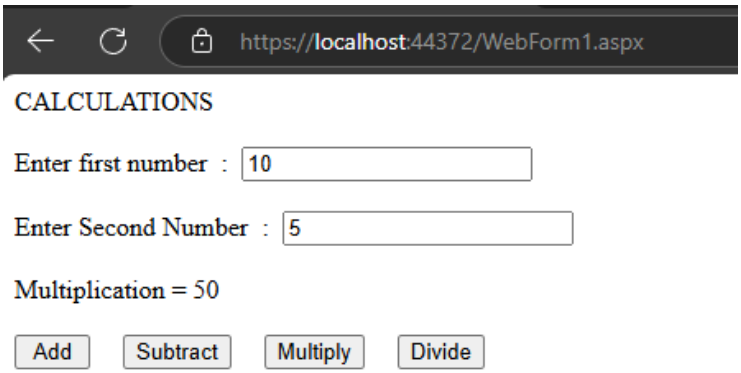
Webform.aspx.cs

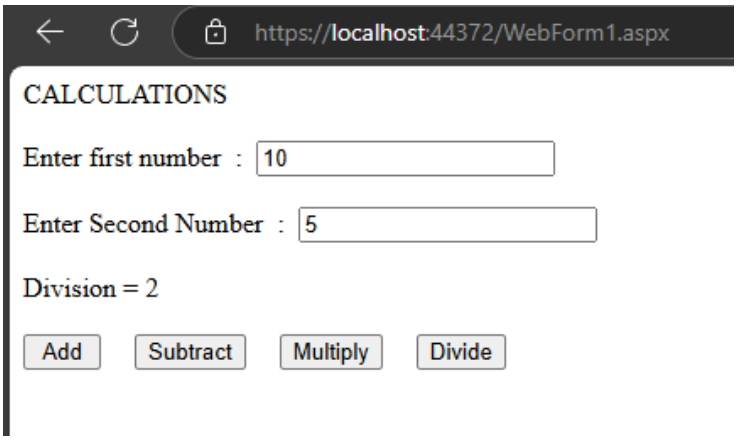
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;


namespace pract_14_042
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      WebService1 wb=new WebService1();
      protected void Page_Load(object sender, EventArgs e)
      {


      }


      protected void Button1_Click(object sender, EventArgs e)
      {
         double no1=Convert.ToDouble(TextBox1.Text);
         double no2=Convert.ToDouble(TextBox2.Text);
         double result=wb.add(no1, no2);
         Label1.Text = "Addition = "+result.ToString();
```

```
    }

    protected void Button2_Click(object sender, EventArgs e)
    {
        double no1 = Convert.ToDouble(TextBox1.Text);
        double no2 = Convert.ToDouble(TextBox2.Text);
        double result = wb.subtract(no1, no2);
        Label1.Text = "Subtraction = " + result.ToString();
    }

    protected void Button3_Click(object sender, EventArgs e)
    {
        double no1 = Convert.ToDouble(TextBox1.Text);
        double no2 = Convert.ToDouble(TextBox2.Text);
        double result = wb.multiply(no1, no2);
        Label1.Text = "Multiplication = " + result.ToString();
    }

    protected void Button4_Click(object sender, EventArgs e)
    {
        double no1 = Convert.ToDouble(TextBox1.Text);
        double no2 = Convert.ToDouble(TextBox2.Text);
        double result = wb.divide(no1, no2);
        Label1.Text = "Division = " + result.ToString();
    }
  }
}
```


https://localhost:44372/WebForm1.aspx
CALCULATIONS
Enter first number : 10
Enter Second Number : 5
Addition = 15
Add
Subtract
Multiply
Divide


https://localhost:44372/WebForm1.aspx
CALCULATIONS
Enter first number : 10
Enter Second Number : 5
Subtraction = 5
Add
Subtract
Multiply
Divide


https://localhost:44372/WebForm1.aspx
CALCULATIONS
Enter first number : 10
Enter Second Number : 5
Multiplication = 50
Add
Subtract
Multiply
Divide


https://localhost:44372/WebForm1.aspx
CALCULATIONS
Enter first number : 10
Enter Second Number : 5
Division = 2
Add
Subtract
Multiply
Divide

2. Simple interest

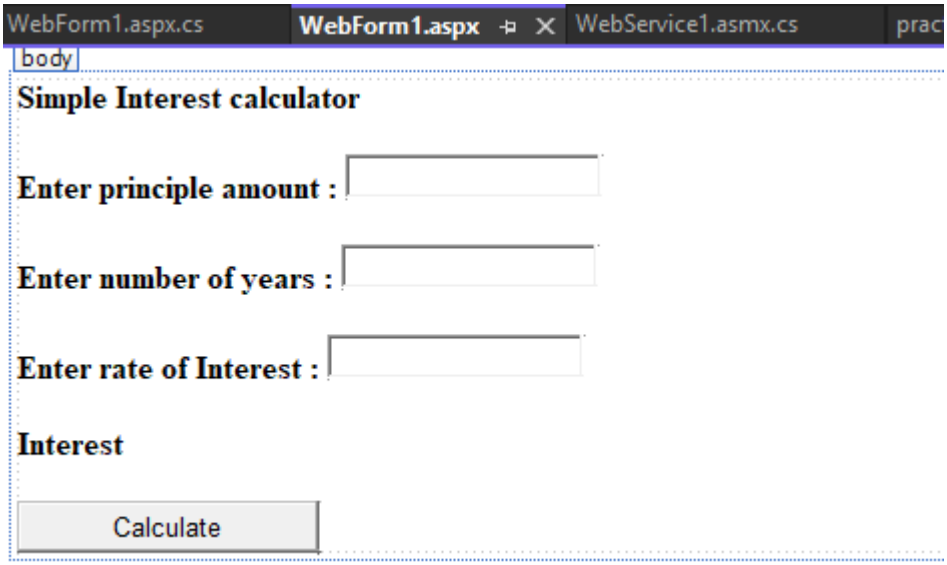
Webservice.asmx

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


namespace pract14_2__042
{
   /// <summary>
   /// Summary description for WebService1
   /// </summary>
   [WebService(Namespace = "http://tempuri.org/")]
   [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
   [System.ComponentModel.ToolboxItem(false)]
   // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
   // [System.Web.Script.Services.ScriptService]
   public class WebService1 : System.Web.Services.WebService
   {


      [WebMethod]
      public double SI(double p,double n,double r)
      {
         return (p*n*r)/100;
      }
   }
}
```

Webform.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="pract14_2__042.WebForm1" %>


<!DOCTYPE html>


<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body style="font-weight: 700">
   <form id="form1" runat="server">
      <div>
         Simple Interest calculator<br />
         <br />
         Enter principle amount :
         <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         <br />
         <br />
         Enter number of years :
         <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <br />
         <br />
         Enter rate of Interest :
         <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
         <br />
         <br />
         <asp:Label ID="Label1" runat="server" Text="Interest"></asp:Label>
         <br />
         <br />
         <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Calculate"
Width="151px" />
      </div>
```

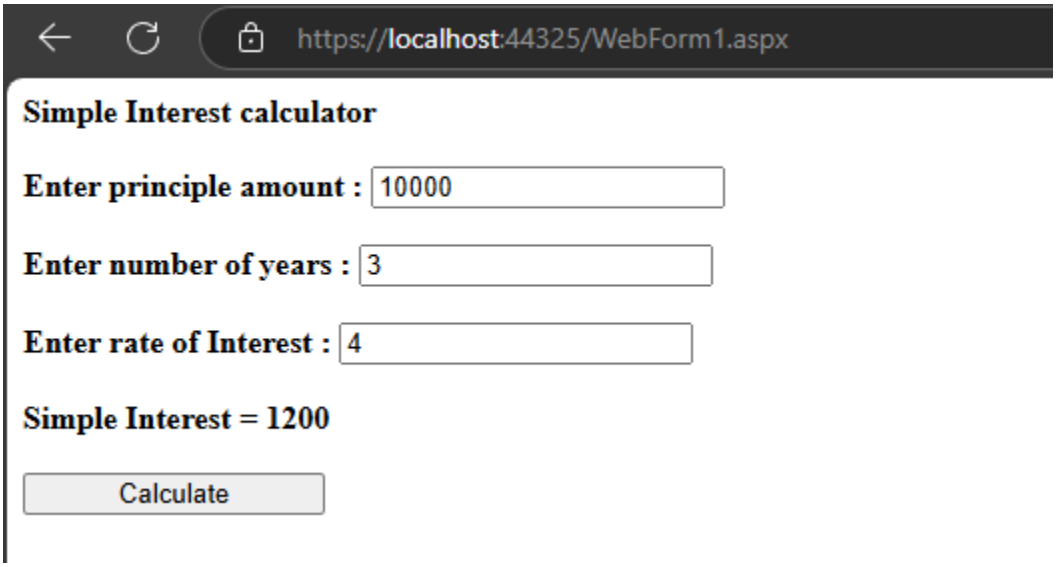
```
    </form>
</body>
</html>
```



Webform.aspx.cs

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

namespace pract14_2__042
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        WebService1 service1=new WebService1();
        protected void Page_Load(object sender, EventArgs e)
        {

        }
```

```
    protected void Button1_Click(object sender, EventArgs e)
    {
        double p=Convert.ToDouble(TextBox1.Text);
        double n = Convert.ToDouble(TextBox2.Text);
        double r = Convert.ToDouble(TextBox3.Text);
        double result=service1.SI(p, n, r);
        Label1.Text = "Simple Interest = "+result.ToString();
    }
  }
}
```



SQLQuery2.sql - AL...AALFIN\aleen (68))* aleenaalfin\SQLEXP

```
use Student

CREATE TABLE Students (
    Id INT PRIMARY KEY IDENTITY,
    Name NVARCHAR(100) NOT NULL,
    Email NVARCHAR(100) NOT NULL,
    Age INT NOT NULL
);
```

Results Messages

	Id	Name	Email	Age
1	1	Aleena	a@gmail.com	21
2	2	Aditi	adi@gmail.com	21
3	3	Adarsh	adarsh@gmail.com	21

PRACTICAL NO. 15

Build a web application to create and WCF service in ASP.net

In Visual Studio, open a new project and select **WCF SERVICE.**

IService.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Runtime.Serialization;

using System.ServiceModel;

using System.ServiceModel.Web;

using System.Text;


// NOTE: You can use the "Rename" command on the "Refactor" menu to change the interface name "IService" in both code and config file together.

[ServiceContract]

public interface IService

{


        [OperationContract]

        string GetData(int value);


        [OperationContract]

        double add(double a, double b);

    [OperationContract]

    double sub(double a, double b);

    [OperationContract]

    double multiply(double a, double b);

    [OperationContract]

    double divide(double a, double b);


    [OperationContract]
```

```
    CompositeType GetDataUsingDataContract(CompositeType composite);


        // TODO: Add your service operations here
}

// Use a data contract as illustrated in the sample below to add composite types to service operations.
[DataContract]
public class CompositeType
{
        bool boolValue = true;
        string stringValue = "Hello ";

        [DataMember]
        public bool BoolValue
        {
                get { return boolValue; }
                set { boolValue = value; }
        }

        [DataMember]
        public string StringValue
        {
                get { return stringValue; }
                set { stringValue = value; }
        }
}
```

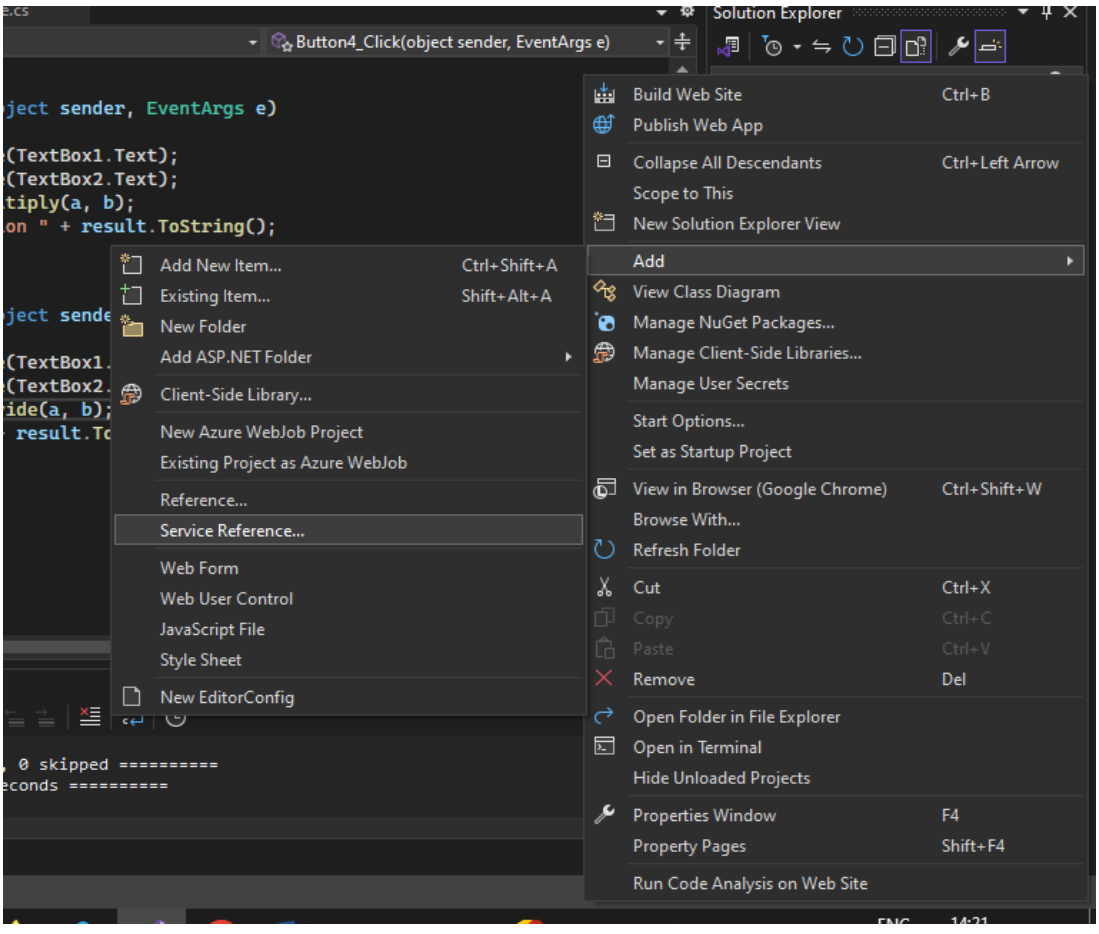
Service.cs

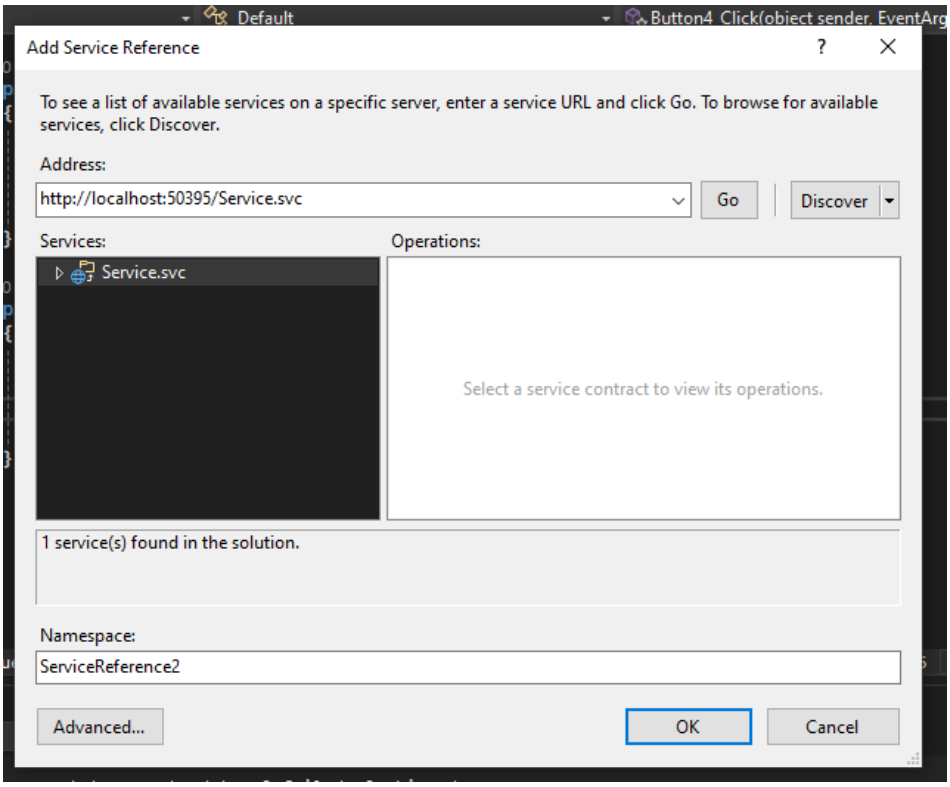
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.Serialization;
```

```
using System.ServiceModel;
using System.ServiceModel.Web;
using System.Text;

// NOTE: You can use the "Rename" command on the "Refactor" menu to change the class name "Service" in code, svc and config file together.
public class Service : IService
{
        public string GetData(int value)
        {
                return string.Format("You entered: {0}", value);
        }
        public double add(double a,double b)
        {
                return a + b;
        }
   public double sub(double a, double b)
   {
      return a - b;
   }
   public double multiply(double a, double b)
   {
      return a * b;
   }
   public double divide(double a, double b)
   {
      return a / b;
   }
   public CompositeType GetDataUsingDataContract(CompositeType composite)
        {
                if (composite == null)
```

```
        {
            throw new ArgumentNullException("composite");
        }
        if (composite.BoolValue)
        {
            composite.StringValue += "Suffix";
        }
        return composite;
    }
}
```

Add service reference by clicking on ADD

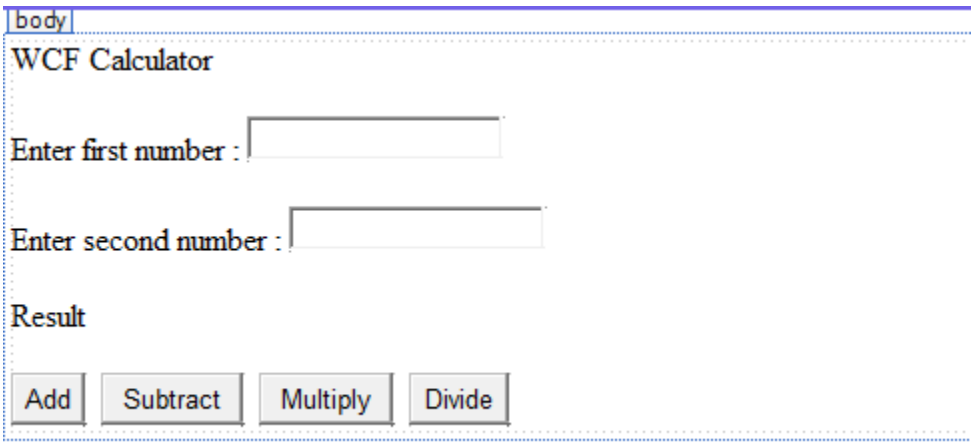




Webform.aspx

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            WCF Calculator<br />
            <br />
            Enter first number :
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
```

```
        <br />
        Enter second number :
        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
        <br />
        <br />
        <asp:Label ID="Label1" runat="server" Text="Result"></asp:Label>
        <br />
        <br />
        <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Add" />
 
        <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="Subtract" />
 
        <asp:Button ID="Button3" runat="server" OnClick="Button3_Click" Text="Multiply" />
 
        <asp:Button ID="Button4" runat="server" OnClick="Button4_Click" Text="Divide" />
      </div>
   </form>
</body>
</html>
```

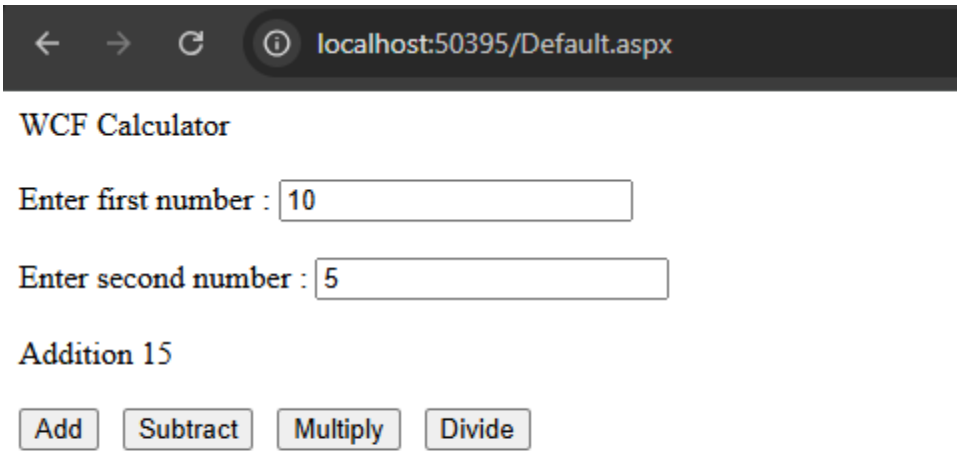


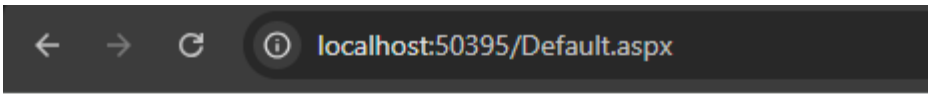
Webform.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
```

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

public partial class _Default : System.Web.UI.Page
{
   ServiceReference1.ServiceClient service=new ServiceReference1.ServiceClient();
   protected void Page_Load(object sender, EventArgs e)
   {

   }

   protected void Button1_Click(object sender, EventArgs e)
   {
      double a=Convert.ToDouble(TextBox1.Text);
      double b=Convert.ToDouble(TextBox2.Text);
      double result = service.add(a, b);
      Label1.Text="Addition "+result.ToString();
   }

   protected void Button2_Click(object sender, EventArgs e)
   {
      double a = Convert.ToDouble(TextBox1.Text);
      double b = Convert.ToDouble(TextBox2.Text);
      double result = service.sub(a, b);
      Label1.Text = "Subtraction " + result.ToString();
   }

   protected void Button3_Click(object sender, EventArgs e)
   {
      double a = Convert.ToDouble(TextBox1.Text);
```

```
        double b = Convert.ToDouble(TextBox2.Text);
        double result = service.multiply(a, b);
        Label1.Text = "Multiplication " + result.ToString();
    }

    protected void Button4_Click(object sender, EventArgs e)
    {
        double a = Convert.ToDouble(TextBox1.Text);
        double b = Convert.ToDouble(TextBox2.Text);
        double result = service.divide(a, b);
        Label1.Text = "Division " + result.ToString();
    }
}
```





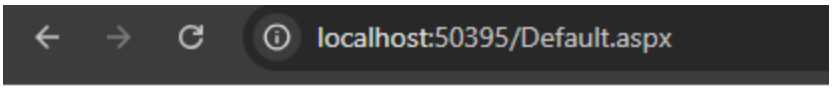
WCF Calculator

Enter first number : 10

Enter second number : 5

Subtraction 5

Add Subtract Multiply Divide



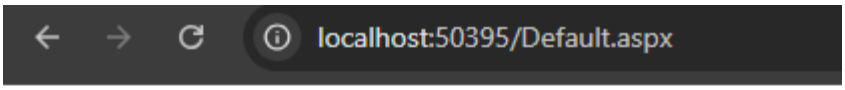
WCF Calculator

Enter first number : 10

Enter second number : 5

Multiplication 50

Add Subtract Multiply Divide



WCF Calculator

Enter first number : 10

Enter second number : 5

Division 2

Add Subtract Multiply Divide

PRACTICAL NO. 16

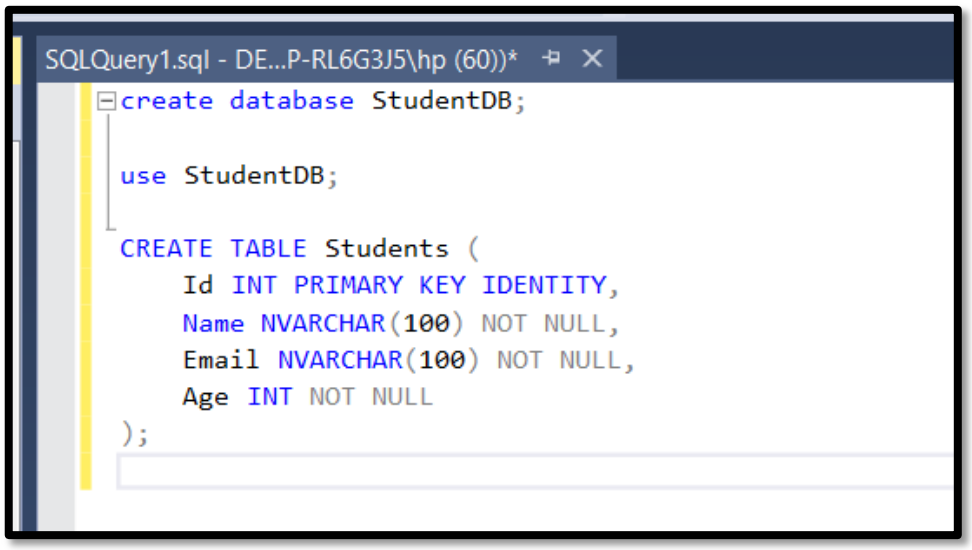
Design a web application using MVC framework

Step 1: Create a Database in SQL Server

Open SQL Server Management Studio (SSMS) or Visual Studio SQL Server Object Explorer.

Create a Database named StudentDB.

Create a Table using the following SQL: Create Database StudentDB



Step 2: Create a New ASP.NET MVC Project

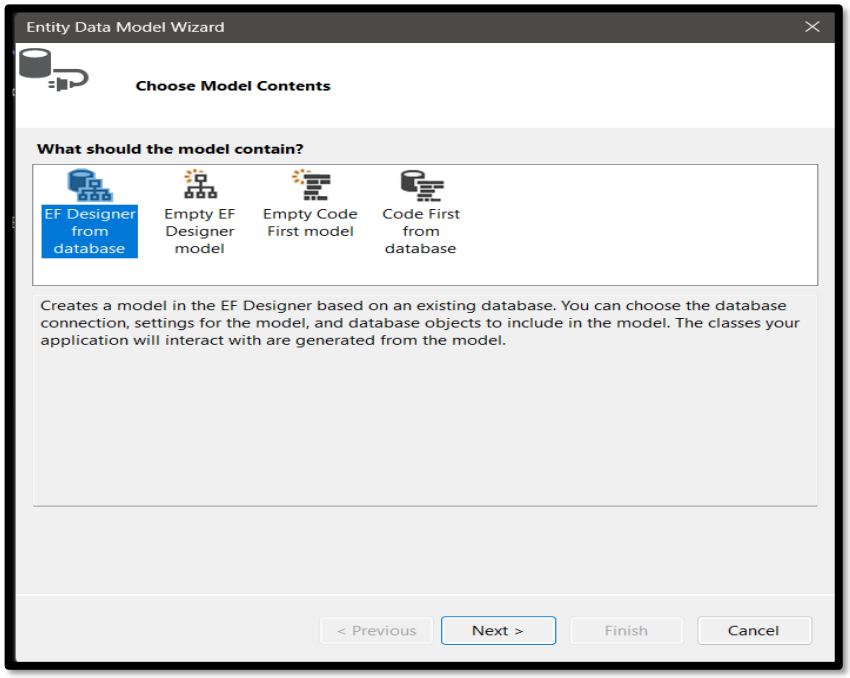
1. Open **Visual Studio**
2. Select **Create a new project**
3. Choose: **ASP.NET Web Application (.NET Framework)**
4. Choose **MVC** as the template
5. Click **Create**

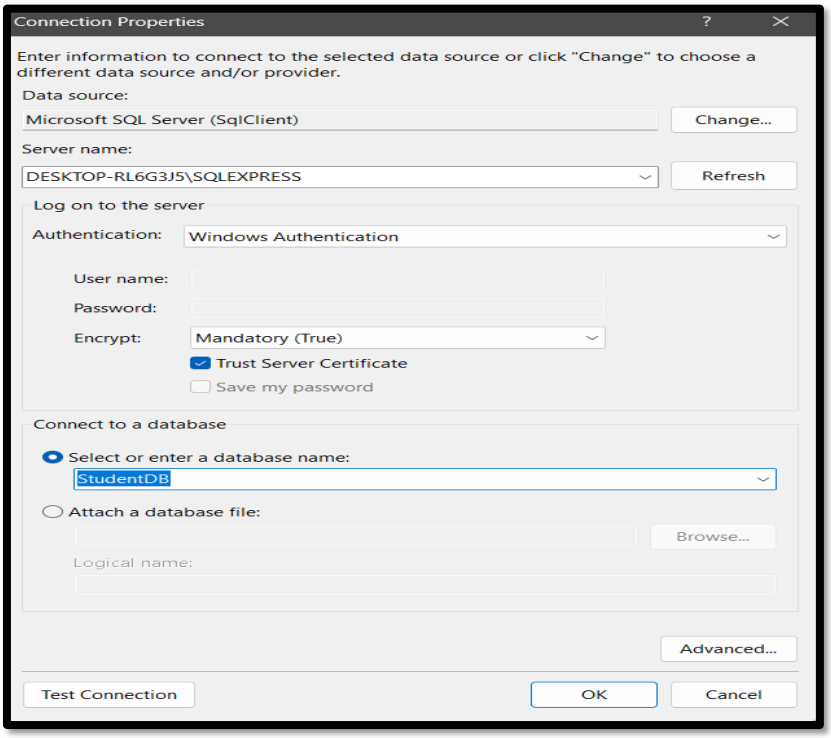
Entity Framework Model Setup

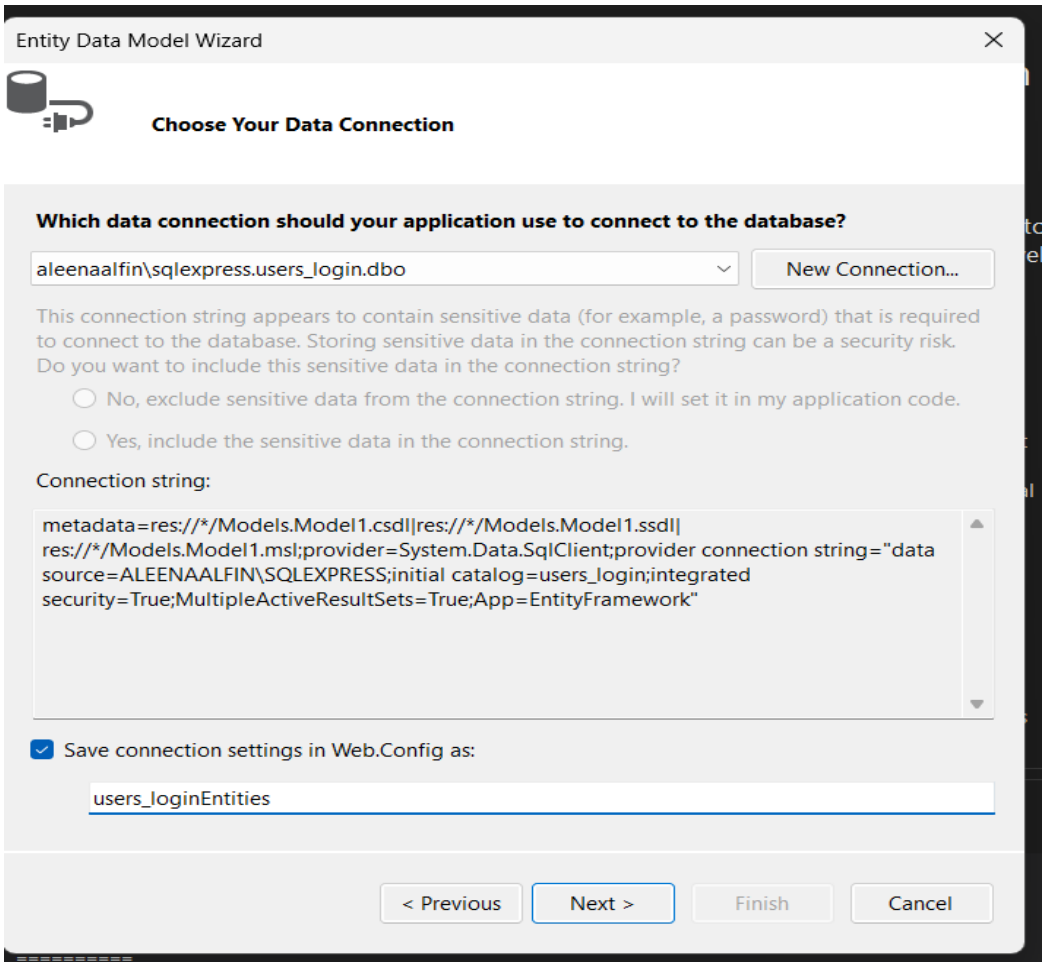
Step 3: Add Entity Framework Model

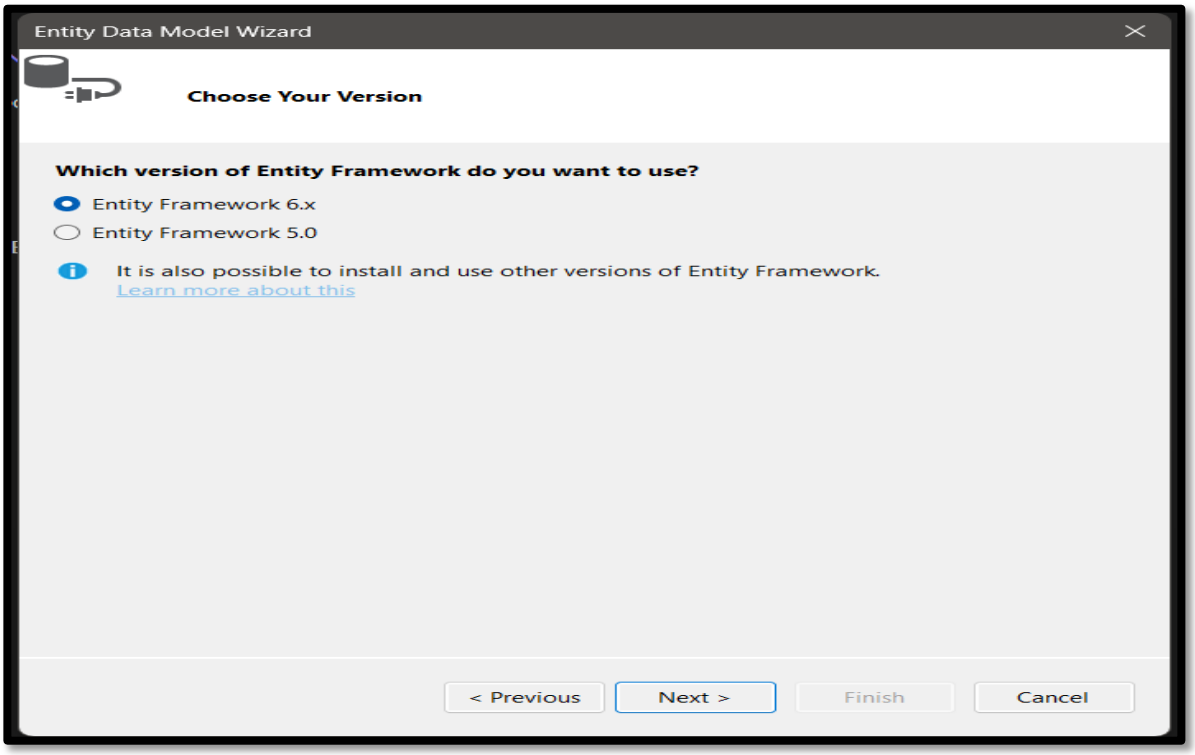
1. Right-click the **Models** folder → Add → New Item
2. Choose **ADO.NET Entity Data Model**
3. Name it: StudentModel.edmx
4. Choose: "EF Designer from database"
5. Select your SQL Server database (StudentDB)
6. Select the Students table

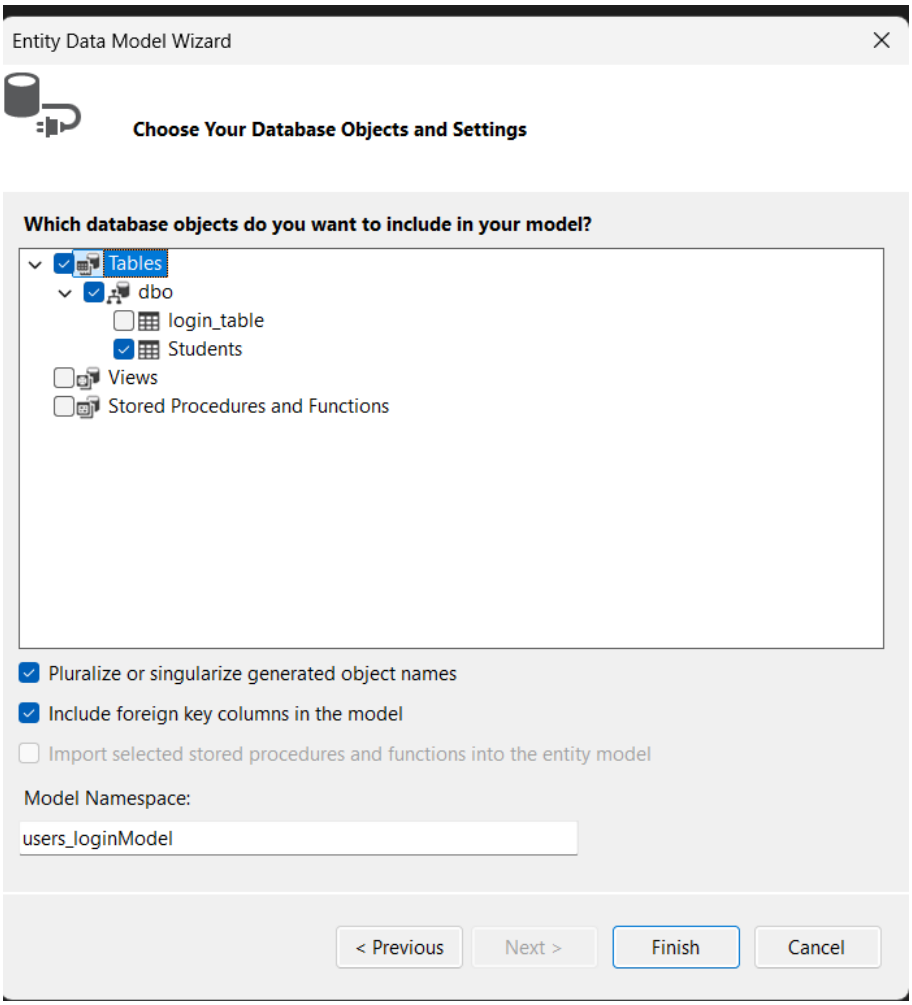
7. Finish to generate model classes

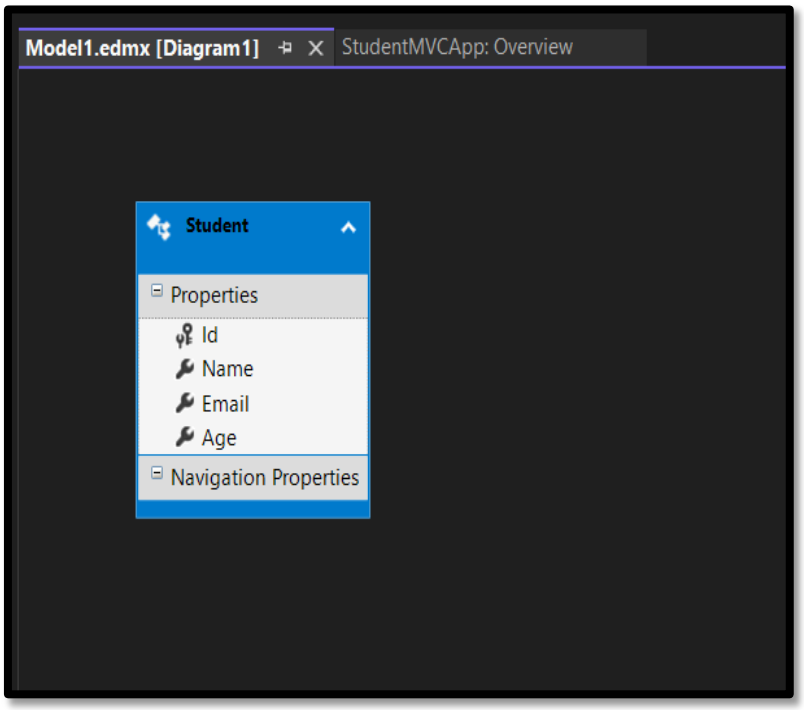





Entity Data Model Wizard
Choose Your Data Connection
Which data connection should your application use to connect to the database?
aleenaalfin\sqlexpress.users_login.dbo
New Connection...
This connection string appears to contain sensitive data (for example, a password) that is required to connect to the database. Storing sensitive data in the connection string can be a security risk. Do you want to include this sensitive data in the connection string?
No, exclude sensitive data from the connection string. I will set it in my application code.
Yes, include the sensitive data in the connection string.
Connection string:
metadata=res://*/Models.Model1.csdl|res://*/Models.Model1.ssdl|
res://*/Models.Model1.msl;provider=System.Data.SqlClient;provider connection string="data
source=ALEENAALFIN\SQLEXPRESS;initial catalog=users_login;integrated
security=True;MultipleActiveResultSets=True;App=EntityFramework"
Save connection settings in Web.Config as:
users_loginEntities
< Previous
Next >
Finish
Cancel

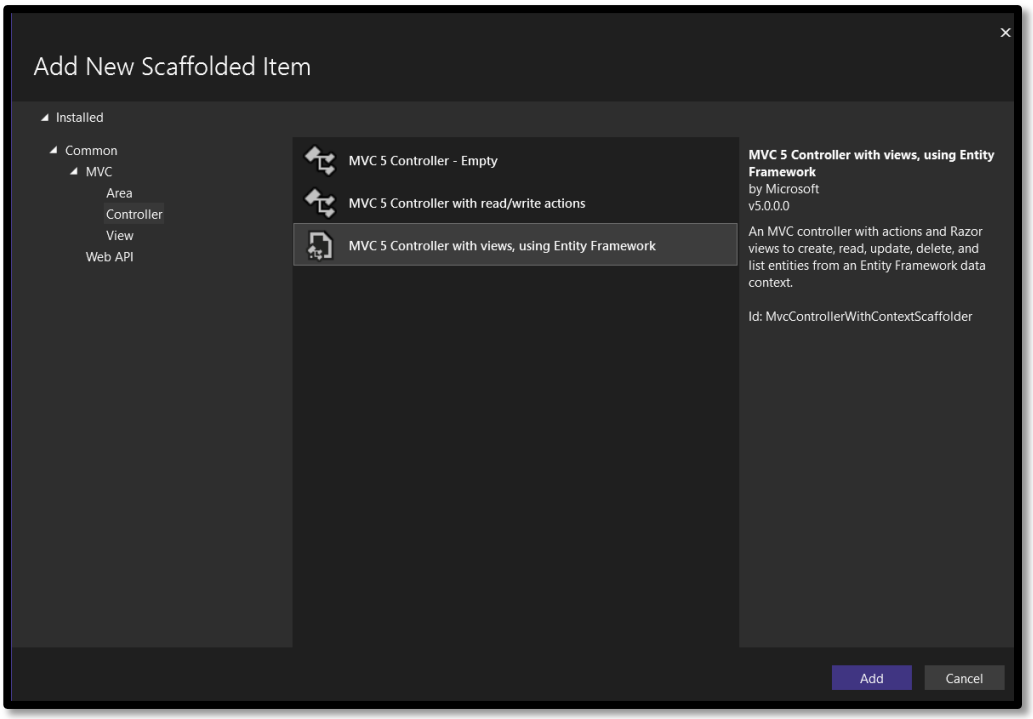

Entity Data Model Wizard
Choose Your Version
Which version of Entity Framework do you want to use?
Entity Framework 6.x
Entity Framework 5.0
It is also possible to install and use other versions of Entity Framework.
Learn more about this
< Previous
Next >
Finish
Cancel

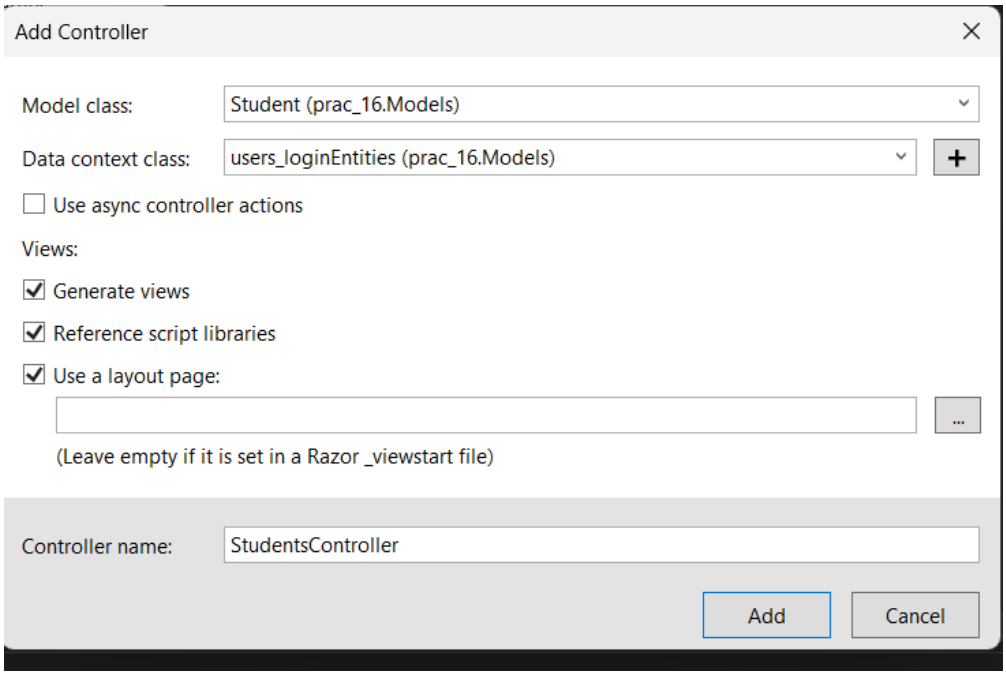

Entity Data Model Wizard
Choose Your Database Objects and Settings
Which database objects do you want to include in your model?
Tables
dbo
login_table
Students
Views
Stored Procedures and Functions
Pluralize or singularize generated object names
Include foreign key columns in the model
Import selected stored procedures and functions into the entity model
Model Namespace:
users_loginModel
< Previous
Next >
Finish
Cancel


Model1.edmx [Diagram1]
StudentMVCApp: Overview
Student
Properties
Id
Name
Email
Age
Navigation Properties

Step 4: Create Controller

1. Right-click **Controllers** → Add → Controller
2. Choose: **MVC 5 Controller with views, using Entity Framework**
3. Model class: Student
4. Data context: StudentDBEntities (if using .edmx) or StudentDBContext
5. Click **Add**





Step 5: Create Views

You can right-click on each controller action and choose **Add View**, or use the auto-generated ones.

Example: Views/Students/Index.cshtml

```
@model IEnumerable<StudentMVCApp.Models.Student>
@{
ViewBag.Title = "Student List";
}
<h2>Student List</h2>
<p>
@Html.ActionLink("Create New", "Create")
</p>
<table class="table">
<tr>
<th>
@Html.DisplayNameFor(model => model.Name)
</th>
<th>
@Html.DisplayNameFor(model => model.Email)
</th>
```

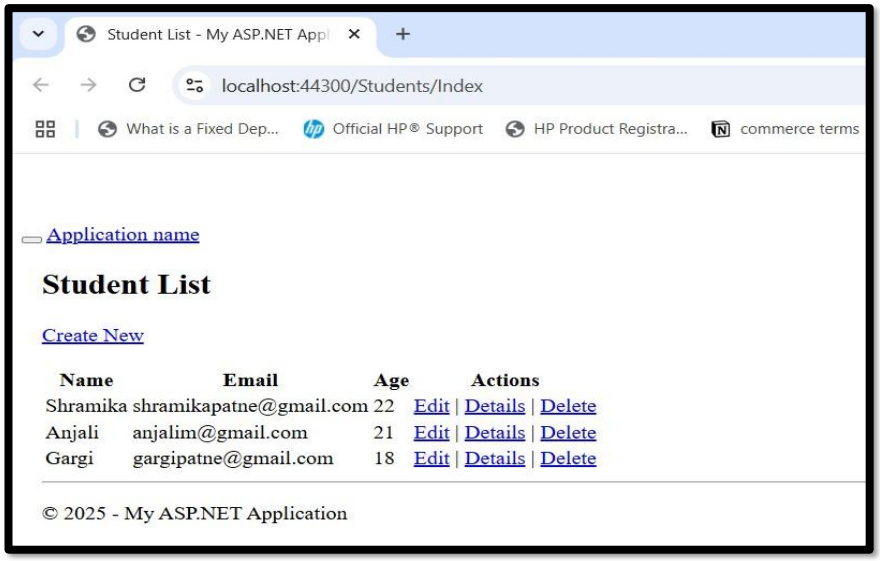
```
<th>
@Html.DisplayNameFor(model => model.Age)
</th>
<th>Actions</th>
</tr>

@foreach (var item in Model) {
<tr>
<td>@item.Name</td>
<td>@item.Email</td>
<td>@item.Age</td>
<td>
                @H
                @tml.ActionLink("Edit", "Edit", new { id = item.Id }) | tml.ActionLink("Details",
                @"Details", new { id = item.Id }) | tml.ActionLink("Delete", "Delete", new { id =
                item.Id })

</td>
</tr>
}
</table>
```

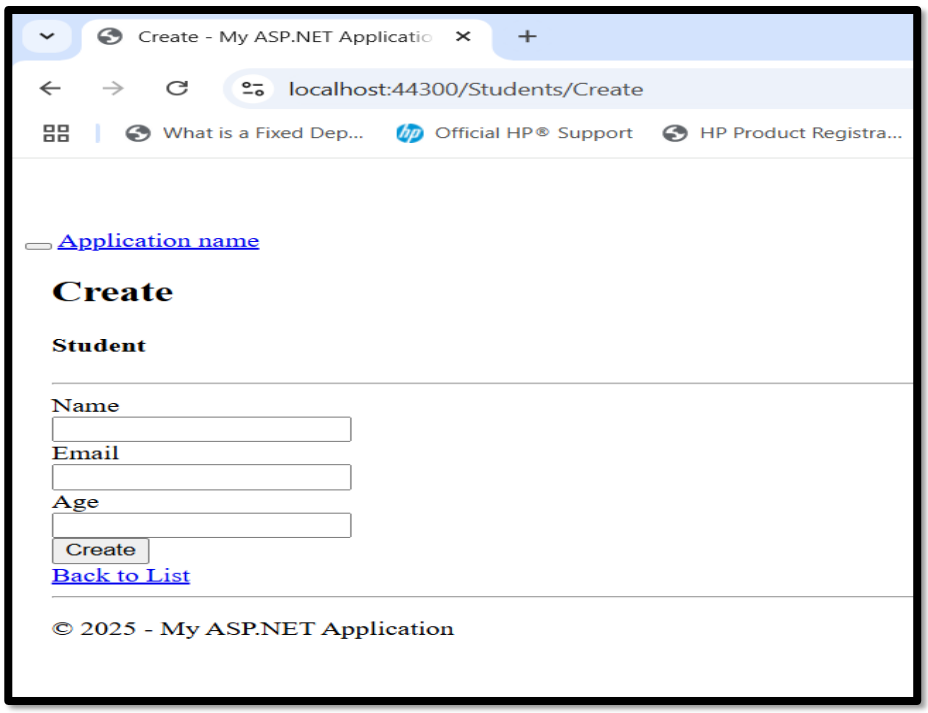
Step 6: Set Default Route

In App_Start/RouteConfig.cs, change default route to:

csharp CopyEdit

defaults: new { controller = "Students", action = "Index", id = UrlParameter.Optional }


Student List - My ASP.NET Appl
localhost:44300/Students/Index
What is a Fixed Dep...
Official HP® Support
HP Product Registra...
commerce terms
Application name
Student List
Create New
Name Email Age Actions
Shramika shramikapatne@gmail.com 22 Edit | Details | Delete
Anjali anjalim@gmail.com 21 Edit | Details | Delete
Gargi gargipatne@gmail.com 18 Edit | Details | Delete
© 2025 - My ASP.NET Application


Create - My ASP.NET Applicatio
localhost:44300/Students/Create
What is a Fixed Dep...
Official HP® Support
HP Product Registra...
Application name
Create
Student
Name
Email
Age
Create
Back to List
© 2025 - My ASP.NET Application