

WINDOWS FORM APPLICATION

A. Design a calculator UI based application using basic window forms controls.

Code:-

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace calcu
{
    public partial class C22093 : Form
    {
        public C22093()
        {
            InitializeComponent();

            float num1;
            double ans;
            int count;

            private void button1_Click(object sender, EventArgs e)
            {
                label1.Text = null;
                textBox1.Text = textBox1.Text + 1;
            }

            private void button2_Click(object sender, EventArgs e)
            {
                label1.Text = null;
                textBox1.Text = textBox1.Text + 2;
            }

            private void button3_Click(object sender, EventArgs e)
            {
                label1.Text = null;
                textBox1.Text = textBox1.Text + 3;
            }

            private void button4_Click(object sender, EventArgs e)
            {
                label1.Text = null;
                textBox1.Text = textBox1.Text + 4;
            }

            private void button5_Click(object sender, EventArgs e)
            {
                label1.Text = null;
                textBox1.Text = textBox1.Text + 5;
            }
        }
    }
}
```

```
    }

    private void button6_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + 6;
    }

    private void button7_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + 7;
    }

    private void button8_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + 8;
    }

    private void button9_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + 9;
    }

    private void button10_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + 0;
    }

    private void button11_Click(object sender, EventArgs e)
    {
        label1.Text = null;
        textBox1.Text = textBox1.Text + ".";
    }

    private void button12_Click(object sender, EventArgs e)
    {
        label1.Text = "Enter Your Value";
        textBox1.Text = null;
    }

    private void button17_Click(object sender, EventArgs e)
    {
        ans = float.Parse(textBox1.Text);
        ans = ans*ans;
        textBox1.Text = ans.ToString();
    }

    private void button20_Click(object sender, EventArgs e)
    {
        ans = float.Parse(textBox1.Text);
        ans = 1/ans;
        textBox1.Text = ans.ToString();
    }

    private void button18_Click(object sender, EventArgs e)
    {
        ans = float.Parse(textBox1.Text);
```

```
        ans = ans/100;
        textBox1.Text = ans.ToString();
    }

    private void button13_Click(object sender, EventArgs e)
    {
        num1 = float.Parse(textBox1.Text);
        textBox1.Clear();
        textBox1.Focus();
        count = 1;
    }

    private void button14_Click(object sender, EventArgs e)
    {
        num1 = float.Parse(textBox1.Text);
        textBox1.Clear();
        textBox1.Focus();
        count = 2;
    }

    private void button15_Click(object sender, EventArgs e)
    {
        num1 = float.Parse(textBox1.Text);
        textBox1.Clear();
        textBox1.Focus();
        count = 3;
    }

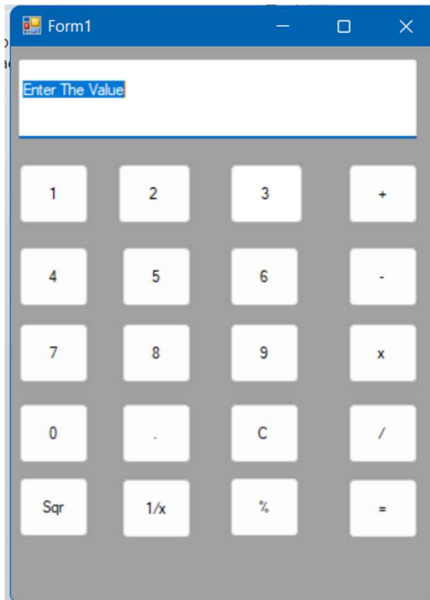
    private void button16_Click(object sender, EventArgs e)
    {
        num1 = float.Parse(textBox1.Text);
        textBox1.Text = "0";
        textBox1.Clear();
        textBox1.Focus();
        count = 4;
    }

    private void button19_Click(object sender, EventArgs e)
    {
        compute(count);
    }

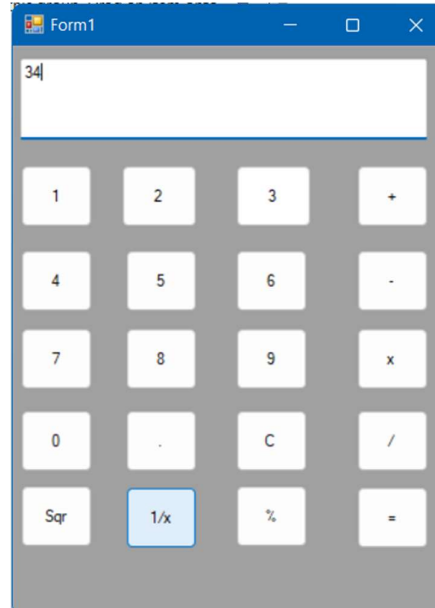
    public void compute (int count)
    {
        float num2 =float.Parse(textBox1.Text);
        switch (count)
        {
            case 1:
                ans = num1+num2;
                textBox1.Text = ans.ToString();
                break;
            case 2:
                ans = num1 - num2;
                textBox1.Text = ans.ToString();
                break;
            case 3:
                ans = num1 * num2;
                textBox1.Text = ans.ToString();
                break;
```

```
        case 4:  
            ans = num1 / num2;  
            textBox1.Text = ans.ToString();  
            break;  
        }  
    }  
}
```

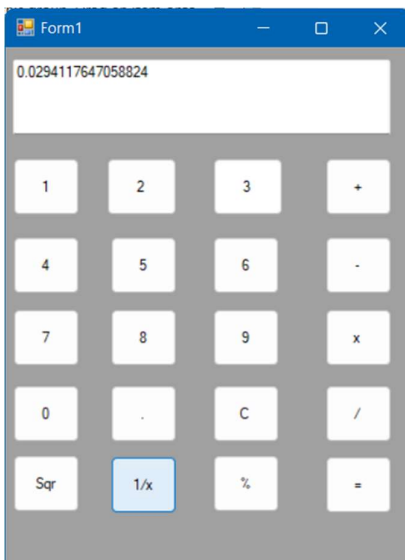
OUTPUT:-



A screenshot of a Windows application window titled 'Form1'. It features a text box at the top with the placeholder text 'Enter The Value'. Below the text box is a calculator keypad with buttons for digits 0-9, '+', '-', 'x', '/', 'Sqr', '1/x', '%', and '='.



A screenshot of the same Windows application window titled 'Form1'. The text box now contains the value '34'. The calculator keypad is visible below, with the '1/x' button highlighted in blue.



A screenshot of the same Windows application window titled 'Form1'. The text box now displays the result '0.0294117647058824'. The calculator keypad is visible below, with the '1/x' button highlighted in blue.

C# CONSOLE

A. Design Application using class and objects.

CODE:-

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

namespace ConsoleApp
{
    // Define a class called Person
    class Person
    {
        // Properties
        public string Name { get; set; }
        public int Age { get; set; }
        public string Degree { get; set; }
        public string Clg { get; set; }

        // Method to introduce the person
        public void Introduce()
        {
            Console.WriteLine("Hello, my name is " + Name + " and I am " + Age + "
years old.");
            Console.WriteLine("I am Pursuing in " + Degree + " From " + Clg + ".");
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            // Create a new instance of the Person class
            Person person = new Person();

            // Set the properties of the person object
            person.Name = "Diksha Pathak";
            person.Age = 20;
            person.Degree = " MCA ";
            person.Clg = " NMITD ";

            // Call the Introduce method of the person object
            person.Introduce();

            // Create another instance of the Person class
            Person anotherPerson = new Person();

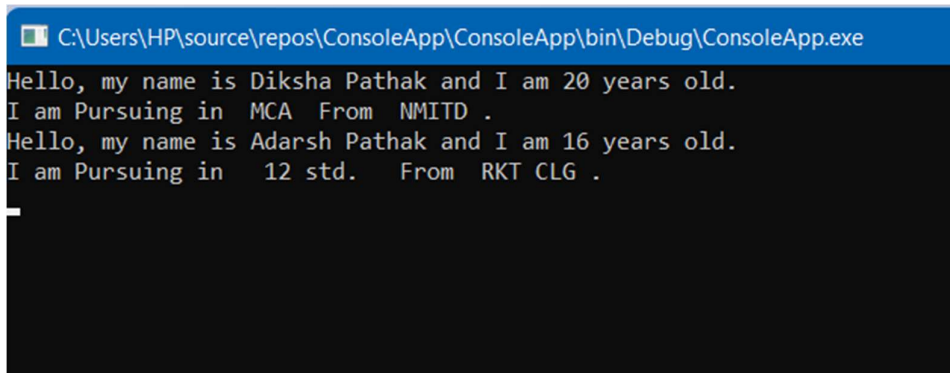
            // Set the properties of the anotherPerson object
            anotherPerson.Name = "Adarsh Pathak";
            anotherPerson.Age = 16;

            anotherPerson.Degree = " 12 std. ";
            anotherPerson.Clg = " RKT CLG ";
        }
    }
}
```

```
        // Call the Introduce method of the anotherPerson object
        anotherPerson.Introduce();

        // Wait for user input before closing the console window
        Console.ReadLine();
    }
}
```

OUTPUT:-

A screenshot of a Windows command prompt window. The title bar shows the file path: C:\Users\HP\source\repos\ConsoleApp\ConsoleApp\bin\Debug\ConsoleApp.exe. The console output displays two lines of text: "Hello, my name is Diksha Pathak and I am 20 years old. I am Pursuing in MCA From NMITD ." followed by "Hello, my name is Adarsh Pathak and I am 16 years old. I am Pursuing in 12 std. From RKT CLG .".

```
C:\Users\HP\source\repos\ConsoleApp\ConsoleApp\bin\Debug\ConsoleApp.exe
Hello, my name is Diksha Pathak and I am 20 years old.
I am Pursuing in MCA From NMITD .
Hello, my name is Adarsh Pathak and I am 16 years old.
I am Pursuing in 12 std. From RKT CLG .
```

B. Design an application using inheritance and abstract class.

Code:-

```
using System;

namespace ConsoleApp
{
    // Define an abstract class called Shape
    abstract class Shape
    {
        // Abstract method to calculate area
        public abstract double CalculateArea();

        // Method to display shape information
        public void display()
        {
            Console.WriteLine("This is a shape.");
        }

        //public void Display()
        //{
        //    Console.WriteLine("This is a shape.",+);
        //}

    }

    // Define a derived class called Circle
    class Circle : Shape
    {
        // Properties
        public double Radius { get; set; }

        // Implementation of CalculateArea method for Circle
        public override double CalculateArea()
        {
            return Math.PI * Radius * Radius;
        }
    }
}
```

```
// Override Display method to provide specific information for Circle
/* public override void display()
{
    Console.WriteLine("This is a circle with radius " + Radius);
}*/
}

// Define another derived class called Rectangle
class Rectangle : Shape
{
    // Properties
    public double Width { get; set; }
    public double Height { get; set; }

    // Implementation of CalculateArea method for Rectangle
    public override double CalculateArea()
    {
        return Width * Height;
    }

    // Override Display method to provide specific information for Rectangle
    /* public override void display()
    {
        Console.WriteLine("This is a rectangle with width " + Width + " and
height " + Height);
    }*/
}

class Program
{
    static void Main(string[] args)
    {
        // Create an instance of Circle
        Circle = new Circle();
        circle.Radius = 5;

        // Call CalculateArea method on the circle object
        double circleArea = circle.CalculateArea();

        // Call Display method on the circle object
        circle.display();
        Console.WriteLine("Area of the circle: " + circleArea);

        // Create an instance of Rectangle
        Rectangle rectangle = new Rectangle();
        rectangle.Width = 6;
        rectangle.Height = 8;

        // Call CalculateArea method on the rectangle object
        double rectangleArea = rectangle.CalculateArea();

        // Call Display method on the rectangle object
        rectangle.display();
        Console.WriteLine("Area of the rectangle: " + rectangleArea);

        // Wait for user input before closing the console window
        Console.ReadLine();
    }
}
}
```

Output:-

```
C:\Users\HP\source\repos\ConsoleApp3\ConsoleApp3\bin\
This is a shape.
Area of the circle: 78.5398163397448
This is a shape.
Area of the rectangle: 48
```

ASP.NET

A. Design a web application for an organisation with registration form and advanced controls(validation).

Code:-

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<h3>REGISTRATION FORM</h3><hr />
<table border="0">
<tr>
<td>Employee Name</td>
<td>
<asp:TextBox runat="server" ID="txtempname" ></asp:TextBox>
<asp:RequiredFieldValidator ID="rvf1" ErrorMessage="*"
ControlToValidate="txtempname" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<td>Employee ID</td>
<td>
<asp:TextBox runat="server" ID="txtempid" ></asp:TextBox>
<asp:RequiredFieldValidator ID="rvf2" ErrorMessage="*"
ControlToValidate="txtempid" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>
<asp:TextBox runat="server" ID="txtdob" TextMode="Date"
Style="padding: 1px 28px"></asp:TextBox>
<asp:RequiredFieldValidator ID="rvf3" ErrorMessage="*"
ControlToValidate="txtdob" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<td>Employee Photograph</td>
<td>
```



```

        <asp:FileUpload runat="server" ID="fileupload"
accept=".png,.jpg,.jpeg"/>
        <br />
        (only .png, .jpeg, .jpg)
        <asp:RequiredFieldValidator ID="rvf4" ErrorMessage="*"
ControlToValidate="fileupload" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
    </td>
</tr>
<tr>
    <td>Password</td>
    <td>
        <asp:TextBox runat="server" ID="txtpass"
TextMode="Password"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rvf5" ErrorMessage="*"
ControlToValidate="txtpass" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
    </td>
</tr>
<tr>
    <td>Confirm Password</td>
    <td>
        <asp:TextBox runat="server" ID="txtconpass"
TextMode="Password"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rvf6" ErrorMessage="*"
ControlToValidate="txtconpass" runat="server"
ForeColor="Red"></asp:RequiredFieldValidator>
        <asp:CompareValidator ID="cv1" ErrorMessage="password not
match" ControlToCompare="txtpass" ControlToValidate="txtconpass" runat="server"
ForeColor="Red"></asp:CompareValidator>
    </td>
</tr>
</table>
<br />
    <asp:Button runat="server" ID="btnsubmit" Text="SUBMIT"
OnClick="btnsubmit_Click" />
    <asp:Label ID="lbl1" runat="server" Text=""></asp:Label>
</div>
</form>
</body>
</html>

```

DESIGN:-

RegistrationForm.aspx

REGISTRATION FORM

Employee Name	<input type="text"/>	*
Employee ID	<input type="text"/>	*
Date of Birth	<input type="text"/>	*
Employee Photograph	<input type="button" value="Browse..."/> <small>(only .png,.jpeg,.jpg)</small>	*
Password	<input type="password"/>	*
Confirm Password	<input type="password"/>	*password not match

SUBMIT [lbl1]

Output:-

REGISTRATION FORM

Employee Name	<input type="text" value="Diksha Pathak"/>
Employee ID	<input type="text" value="C22093"/>
Date of Birth	<input type="text" value="10-07-2003"/>
Employee Photograph	<input type="button" value="Choose File"/> dikSP.jpg (only .png,.jpeg,.jpg)
Password	<input type="password" value="****"/>
Confirm Password	<input type="password" value="****"/> password not match

localhost:44327/RegistrationForm.aspx

REGISTRATION FORM

Employee Name	<input type="text" value="Diksha Pathak"/>
Employee ID	<input type="text" value="C22093"/>
Date of Birth	<input type="text" value="10-07-2003"/>
Employee Photograph	<input type="button" value="Choose File"/> No file chosen (only .png,.jpeg,.jpg) *
Password	<input type="password" value="****"/>
Confirm Password	<input type="password" value="****"/>

localhost:44327/RegistrationForm x +

localhost:44327/RegistrationForm.aspx

REGISTRATION FORM

Employee Name	<input type="text" value="Diksha Pathak"/>
Employee ID	<input type="text" value="C22093"/>
Date of Birth	<input type="text" value="10-07-2003"/>
Employee Photograph	<input type="button" value="Choose File"/> No file chosen (only .png,.jpeg,.jpg)
Password	<input type="password"/>
Confirm Password	<input type="password"/>

 Registration Done Successfully!!!

B. Create website using master page and theme concept.

Code:- master pg

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="WebApplication2.Site1" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

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

```
<title>Tourist App</title>
```

```
<linkrel="stylesheet" type="text/css" href="style.css">
```

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

```

    </asp:ContentPlaceholder>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:ContentPlaceholder ID="ContentPlaceholder1" runat="server">
                </asp:ContentPlaceholder>

<!-- Master Page Content -->
<header>
    <nav>

        <a href="index.html">Home </a>&nbsp;
        <a href="destination.html">Destinations </a>&nbsp;
        <a href="activities.html">Activities </a>&nbsp;
        <a href="contact.html">Contact </a>&nbsp;

    </nav>
</header>

<div class="hero-image">
    <div class="hero-content">
        <h1>Welcome to the Tourist App</h1>
        <p>Explore new destinations, discover exciting activities, and plan your
next adventure!</p>
        <a class="cta-button" href="destination.html">Get Started</a>
    </div>
</div>

<section>
    <h2>About Us</h2>
    <p>Tourism is a social, cultural and economic phenomenon which entails the
movement of people to countries or places outside their usual environment for personal
or business/professional purposes.
</p>

</section>

<footer>
    <p>&copy; 2023 Tourist App. All rights reserved.</p>
</footer>

    </div>
</form>
</body>
</html>
index.html

<!DOCTYPE html>
<html>
<head>
    <title>Tourist App</title>
    <link rel="stylesheet" type="text/css" href="style.css">

</head>
<body>
    <!-- Master Page Content -->
    <header>
        <nav>

            <a href="index.html">Home </a>&nbsp;
            <a href="destinations.html">Destinations </a>&nbsp;
            <a href="activities.html">Activities </a>&nbsp;
            <a href="contact.html">Contact </a>&nbsp;

```

```

    </nav>
  </header>

  <div class="hero-image">
    <div class="hero-content">
      <h1>Welcome to the Tourist App</h1>
      <p>Explore new destinations, discover exciting activities, and plan your
next adventure!</p>
      <a class="cta-button" href="destination.html">Get Started</a>
    </div>
  </div>

  <section>
    <h2>About Us</h2>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc at turpis vel
ligula congue tincidunt. Curabitur mollis diam in ligula commodo, ac aliquam dolor
fringilla.</p>
    <p>Mauris ac nisi in est semper gravida. Sed scelerisque mi sit amet libero
euismod finibus. Sed malesuada tortor ac sem euismod vestibulum.</p>
  </section>

  <footer>
    <p>&copy; 2023 Tourist App. All rights reserved.</p>
  </footer>
</body>
</html>

```

destinations.html

```

<!DOCTYPE html>
<html>
<head>
  <title>Tourist App - Destinations</title>
  <link rel="stylesheet" type="text/css" href="Style.css">
</head>
<body>
  <!-- Master Page Content -->
  <header>
    <nav>
      <a href="index.html">Home </a>&nbsp;&nbsp;&nbsp;
      <a href="destination.html">Destinations </a>&nbsp;&nbsp;&nbsp;
      <a href="activities.html">Activities </a>&nbsp;&nbsp;&nbsp;
      <a href="contact.html">Contact </a>&nbsp;&nbsp;&nbsp;
    </nav>
  </header>

  <h1>Explore Exciting Destinations</h1>

  <div class="destination-card">
    
    <h3>Mahabaleshwar</h3>
    <p>Mahabaleshwar is a hill station in India's forested Western Ghats range,
south of Mumbai. It features several elevated viewing points, such as Arthur's Seat.
West of here is centuries-old Pratapgad Fort, perched atop a mountain spur. East,
Lingmala Waterfall tumbles off a sheer cliff.</p>
    <a href="destination1.html">Learn More</a>
  </div>

  <div class="destination-card">
    
    <h3>Manali</h3>
    <p>Manali is a high-altitude Himalayan resort town in India's northern
Himachal Pradesh state. It has a reputation as a backpacking center and honeymoon

```


`<p>Jammu and Kashmir is a region administered by India as a union territory and consists of the southern portion of the larger Kashmir region, which has been the subject of a dispute between India and Pakistan since 1947 and between India and China since 1959.</p>`

```
<a href="activity3.html">Learn More</a>
</div>

<footer>
<p>&copy; 2023 Tourist App. All rights reserved.</p>
</footer>
</body>
</html>
```

Contact.html

```
<!DOCTYPE html>
<html>
<head>
<title>Tourist App - Contact</title>
<link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
<!-- Master Page Content -->
<header>
<nav>
<a href="index.html">Home </a>&nbsp;
<a href="destination.html">Destinations </a>&nbsp;
<a href="activities.html">Activities </a>&nbsp;
<a href="contact.html">Contact </a>&nbsp;
</nav>
</header>

<h1>Contact Us</h1>

<div class="contact-form">
<form>
<label for="name">Name:</label>
<input type="text" id="name" name="name" required>

<label for="email">Email:</label>
<input type="text" id="email" name="email" required>

<label for="message">Message:</label>
<textarea id="message" name="message" rows="4" required></textarea>

<button type="submit">Send Message</button>
</form>
</div>

<footer>
<p>&copy; 2023 Tourist App. All rights reserved.</p>
</footer>
</body>
</html>
```

Style.css

```
/* Additional styles specific to the home page */
```

```
header nav {
  display: inline;
}

header nav {
  padding-right: 20px; /* Adds 20 pixels of space within each item */
}

.hero-image {
  background-image: url("background.jpg");
  background-size: cover;
  background-position: center;
  height: 600px;
  display: flex;
  align-items: center;
  justify-content: center;
  color: white;
  font-size: 24px;
}

.hero-image h1 {
  font-size: 48px;
  margin-bottom: 20px;
}

.cta-button {
  background-color: #ff9800;
  color: white;
  padding: 12px 24px;
  border-radius: 4px;
  font-size: 20px;
  text-decoration: none;
}

.cta-button:hover {
  background-color: #ffac33;
}

.destination-card {
  border: 1px solid #ccc;
  border-radius: 4px;
  padding: 20px;
  margin-bottom: 20px;
}

.destination-card img {
  width: 20%;
  border-radius: 4px;
  margin-bottom: 10px;
}

.destination-card h3 {
  margin: 0;
  font-size: 24px;
}

.destination-card p {
  margin: 10px 0;
}

/* Additional styles specific to the activities page */
.activity-card {
  border: 1px solid #ccc;
  border-radius: 4px;
  padding: 20px;
  margin-bottom: 20px;
}
```

```
}

.activity-card img {
  width: 20%;
  border-radius: 4px;
  margin-bottom: 10px;
}

.activity-card h3 {
  margin: 0;
  font-size: 24px;
}

.activity-card p {
  margin: 10px 0;
}
.contact-form {
  max-width: 500px;
  margin: 0 auto;
  padding: 20px;
  border: 1px solid #ccc;
  border-radius: 4px;
}

.contact-form label {
  display: block;
  margin-bottom: 10px;
  font-weight: bold;
}

.contact-form input[type="text"],
.contact-form textarea {
  width: 100%;
  padding: 10px;
  border-radius: 4px;
  border: 1px solid #ccc;
  margin-bottom: 20px;
}

.contact-form button {
  background-color: #ff9800;
  color: white;
  padding: 10px 20px;
  border-radius: 4px;
  font-size: 16px;
  border: none;
  cursor: pointer;
}

.contact-form button:hover {
  background-color: #ffac33;
}
.hero-image {
  background-image: url("background.jpg");
  background-size: cover;
  background-position: center;
  height: 600px;
  display: flex;
  align-items: center;
  justify-content: center;
  color: black;
  font-size: 24px;
}

.hero-image h1 {
```

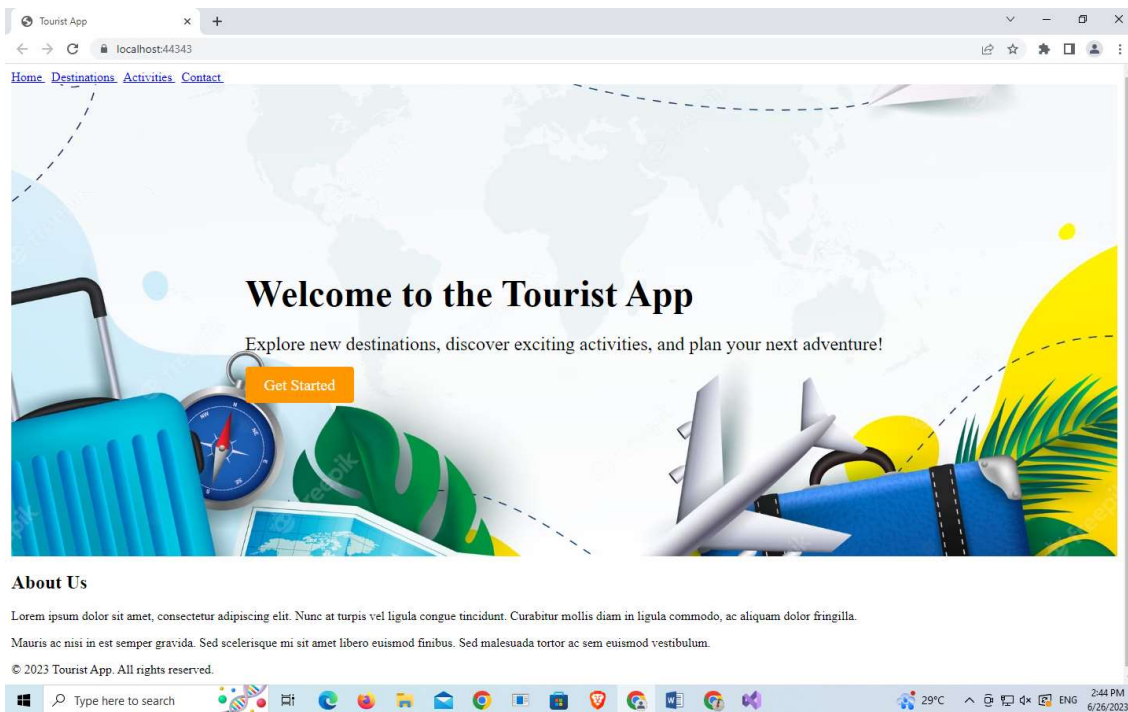


```
        font-size: 48px;
        margin-bottom: 20px;
    }

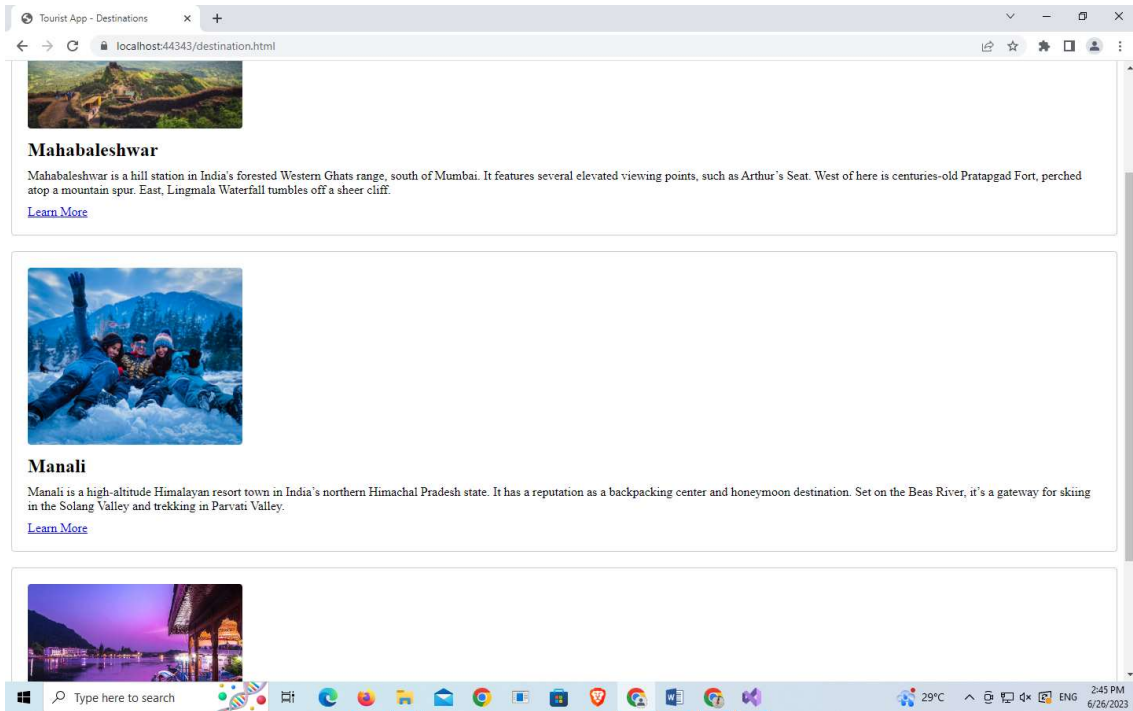
    .cta-button {
        background-color: #ff9800;
        color: white;
        padding: 12px 24px;
        border-radius: 4px;
        font-size: 20px;
        text-decoration: none;
    }

    .cta-button:hover {
        background-color: #ffac33;
    }
```

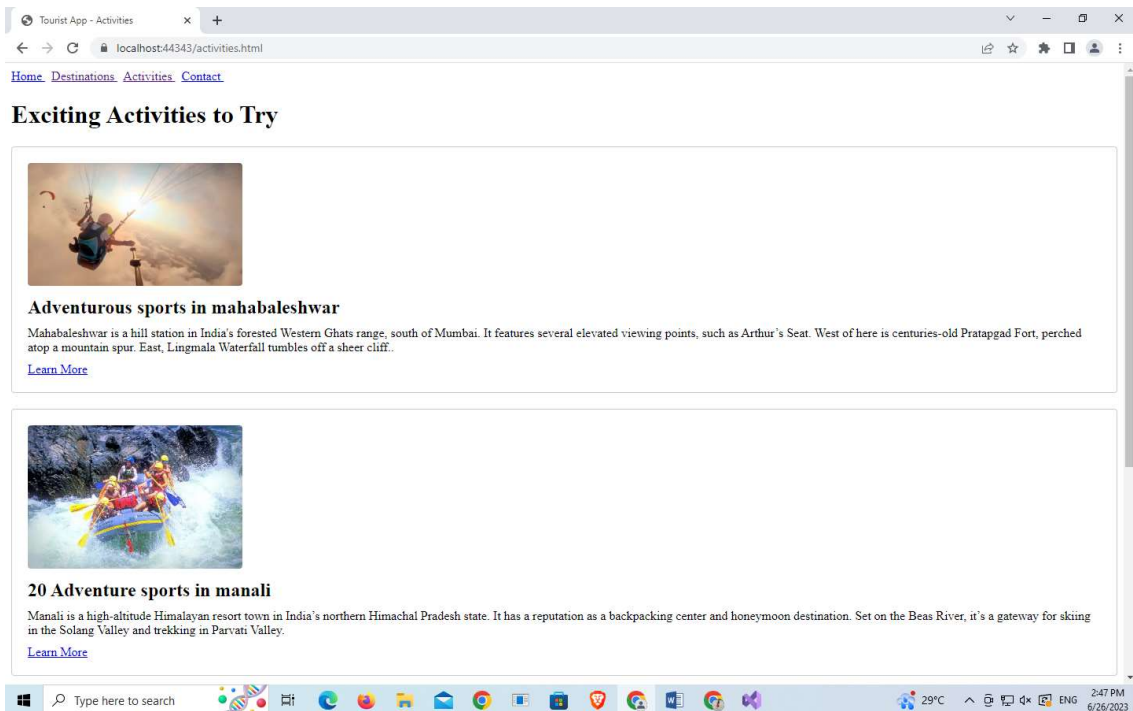
Output:-



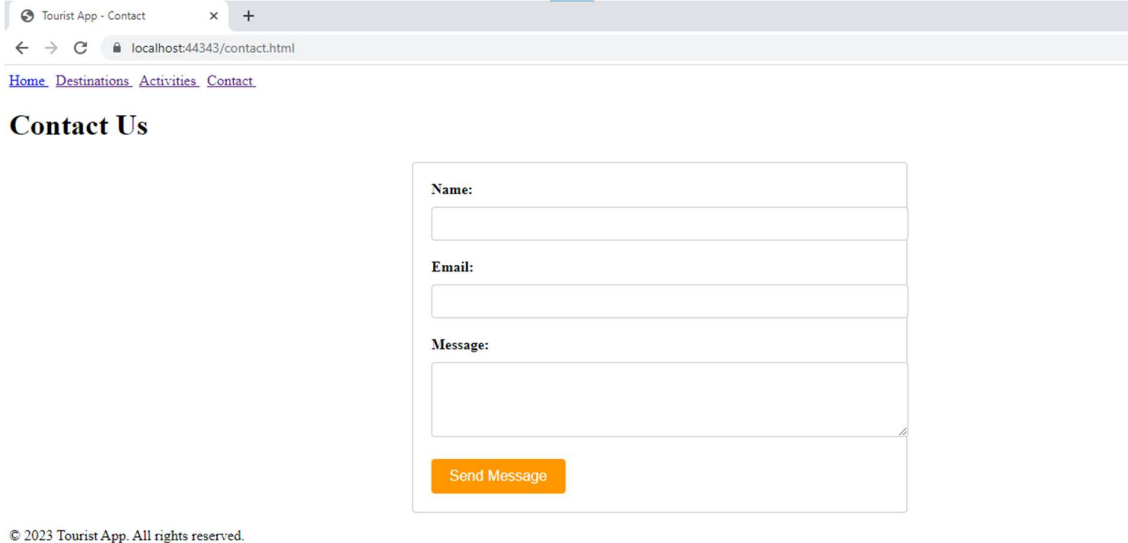
Destination



Activities



Contact



Tourist App - Contact

localhost:44343/contact.html

[Home](#) [Destinations](#) [Activities](#) [Contact](#)

Contact Us

Name:

Email:

Message:

Send Message

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ADO.NET PRACTICAL

4(A) AIM: Create a webpage that demonstrates the use of data bound controls of ASP.NET

Code:-

WebForm1.aspx

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

<!DOCTYPE html>

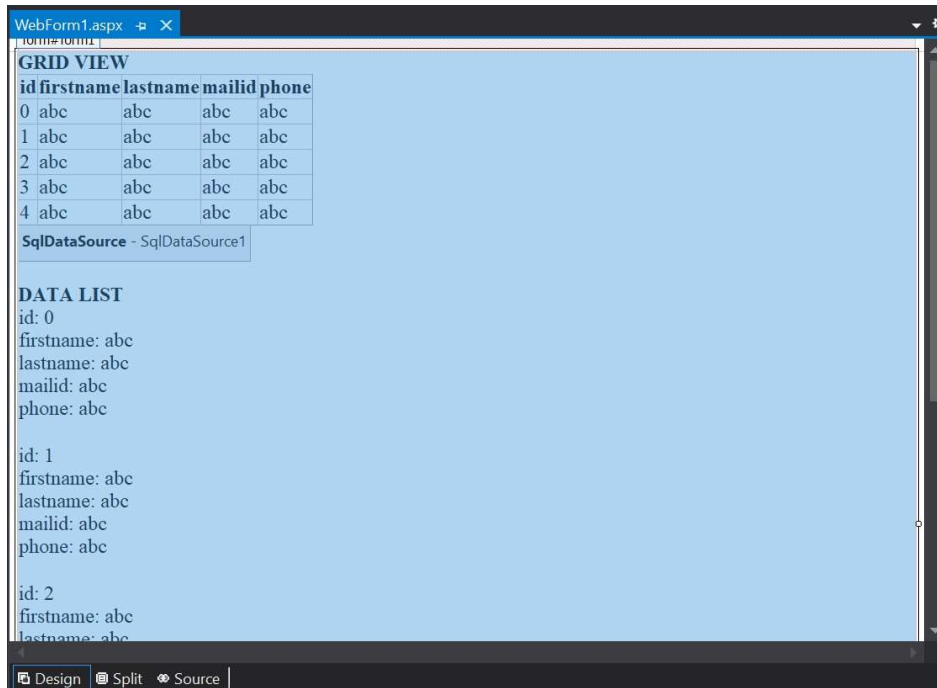
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <strong>GRID VIEW</strong>
            <asp:GridView ID="GridView1" runat="server" DataSourceID="SqlDataSource1"
AutoGenerateColumns="False" DataKeyNames="id">
                <Columns>
                    <asp:BoundField DataField="id" HeaderText="id" InsertVisible="False"
ReadOnly="True" SortExpression="id" />
                    <asp:BoundField DataField="firstname" HeaderText="firstname"
SortExpression="firstname" />
                    <asp:BoundField DataField="lastname" HeaderText="lastname"
SortExpression="lastname" />
                    <asp:BoundField DataField="mailid" HeaderText="mailid"
SortExpression="mailid" />
                </Columns>
            </asp:GridView>
        </div>
    </form>
</body>
</html>
```

```

        <asp:BoundField DataField="phone" HeaderText="phone"
SortExpression="phone" />
    </Columns>
</asp:GridView>
    <asp:SqlDataSource ID="SqlDataSource1"
runat="server" ConnectionString="<#$
ConnectionString:TestConnectionString %>" SelectCommand="SELECT * FROM
[tbllogin]"></asp:SqlDataSource>
    <strong>
    <br />
    DATA LIST</strong><br />
    <asp:DataList ID="DataList1" runat="server" DataKeyField="id"
DataSourceID="SqlDataSource1">
    <ItemTemplate>
id:
        <asp:Label ID="idLabel" runat="server" Text='<## Eval("id") %>' />
        <br />
firstname:
        <asp:Label ID="firstnameLabel" runat="server" Text='<##
Eval("firstname") %>' />
        <br />
lastname:
        <asp:Label ID="lastnameLabel" runat="server" Text='<##
Eval("lastname") %>' />
        <br />
mailid:
        <asp:Label ID="mailidLabel" runat="server" Text='<## Eval("mailid")
%>' />
        <br />
phone:
        <asp:Label ID="phoneLabel" runat="server" Text='<## Eval("phone") %>'
/>
        <br />
    <br />
    </ItemTemplate>
</asp:DataList>
</div>
</form>
</body>
</html>

```

OUTPUT

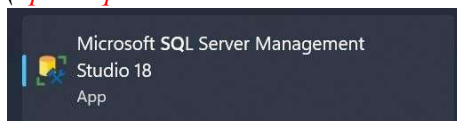


OUTPUT

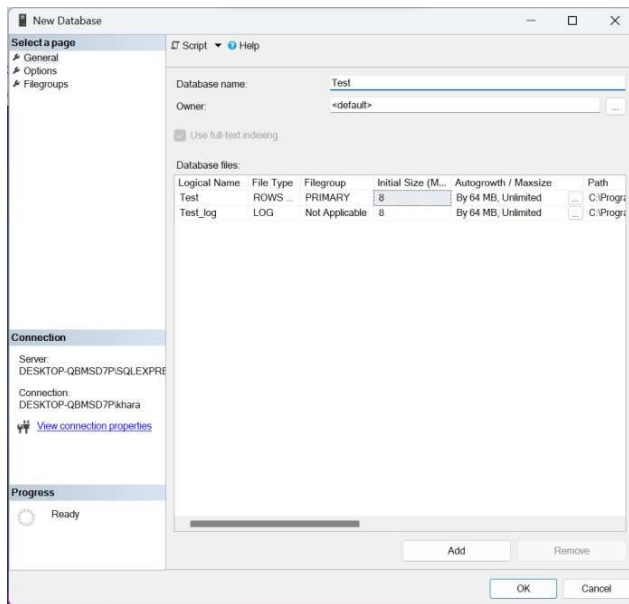


B. AIM: Design a webpage to demonstrate a connection-oriented architecture.

(open Sql Server >> then connect to server)



(create a new database – right click on database >> new database(name a database “Test”))



(In Database (Test) expand options ---right click on tables >> new >> table(create a table "tbllogin"))

(Insert records into tbllogin)

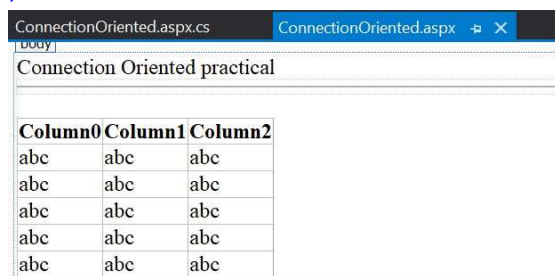
(create a new asp.net framework project with empty forms >> then add a new webform)

(then in visual Studio click on tools from menubar >> connect to database)

1. *Provide server name*
2. *Then select your database and test connection*
3. *Now you will have connection string to connect through*

Form.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ConnectionOriented.aspx.cs"
Inherits="DataBound_Controls.ConnectionOriented" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <div>
      Connection Oriented practical<hr /><br />
<asp:GridView ID="gvdtls" runat="server"></asp:GridView>
    </div>
  </form>
</body>
</html>
```



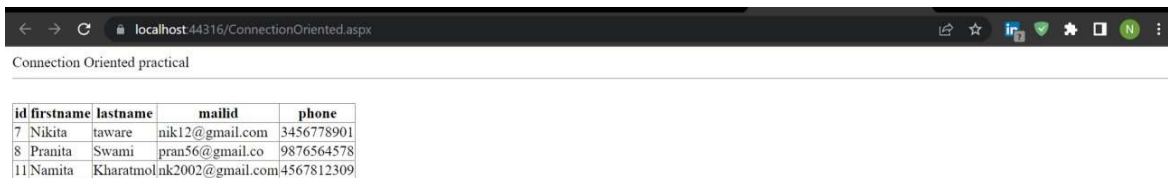
C# Code

```

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

namespace DataBound_Controls
{
    public partial class ConnectionOriented : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            SqlConnection conn = new SqlConnection(@"Data
Source=DESKTOPQBMSD7P\SQLEXPRESS;Initial Catalog=Test;Integrated
Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("select * from tbllogin", conn);
            SqlDataAdapter sda = new SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
            sda.Fill(ds);
            gvdtls.DataSource
            = ds;
            gvdtls.DataBind();
        }
    }
}

```

OUTPUT


id	firstname	lastname	mailid	phone
7	Nikita	taware	nik12@gmail.com	3456778901
8	Pranita	Swami	pran56@gmail.co	9876564578
11	Namita	Kharatmol	nk2002@gmail.com	4567812309

C. AIM: Design a webpage to demonstrate a disconnected architecture.**Form.aspx**

```

<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="DisconnectedArchitecture.aspx.cs"
Inherits="DataBound_Controls.DisconnectedArchitecture" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <style>
        .gridview1 th{
            padding: 5px 9px 5px 9px;
background-color: cornsilk;
        }
        .gridview1 td{
            padding: 4px 100px 4px 7px;

```

[illegible]

Disconnected Architecture Practical

User ID:

Password:

INSERT

UPDATE

DELETE

Column0	Column1	Column2
abc	abc	abc
abc	abc	abc
abc	abc	abc
abc	abc	abc
abc	abc	abc

C# Code

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

namespace DataBound_Controls
{
    public partial class DisconnectedArchitecture : System.Web.UI.Page
    {
        SqlConnection conn = new SqlConnection(@"Data
Source=DESKTOPQBMSD7P\SQLEXPRESS;Initial Catalog=Test;Integrated
Security=True");        protected void Page_Load(object sender, EventArgs e)
        {
            conn.Open();
            SqlCommand cmd = new SqlCommand("select * from tblCRUD1", conn);
            SqlDataAdapter sda = new SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
            sda.Fill(ds);                gvdtls.DataSource
= ds;                gvdtls.DataBind();
        }
        protected void btnInsert_Click(object sender, EventArgs e)
        {
```



```
        DataTable dt = new DataTable();
        SqlCommand cmd = new SqlCommand("insert into tblCRUD1(userid,password)
values('" + txtid.Text + "',' + txtpass.Text + "','",conn);
SqlDataAdapter sda = new SqlDataAdapter(cmd);          sda.Fill(dt);
        Response.Write("<script> alert('Data Inserted successfully!!') </script>");

    }
    protected void btnUpdate_Click(object sender, EventArgs e)
    {
        SqlCommand cmd = new SqlCommand("update tblCRUD1 set
password='"+txtpass.Text+"' where userid='"+txtid.Text+"'", conn);
        cmd.ExecuteNonQuery();
        Response.Write("<script> alert('Data Updated successfully!!') </script>");
    }
    protected void btnDelete_Click(object sender, EventArgs e)
    {
        SqlCommand cmd = new SqlCommand("delete from tblCRUD1 where userid='" +
txtid.Text + "'", conn);
        cmd.ExecuteNonQuery();
        Response.Write("<script> alert('Data Deletion done successfully!!')
</script>");
    }
} }
```

OUTPUT

To insert record

Disconnected Architecture Practical

User ID: Password:

userid	password
Namita06	1234
Prani16	prani2001
niki18	1111
jayD	@jD123

localhost:44316 says
Data Inserted successfully!!

To Update Record

Disconnected Architecture Practical

User ID: Password:

userid	password
Namita06	1234
Prani16	prani2001
niki18	1111
jayD	@jD123
tester1	123

localhost:44316 says
Data Updated successfully!!

To Delete record

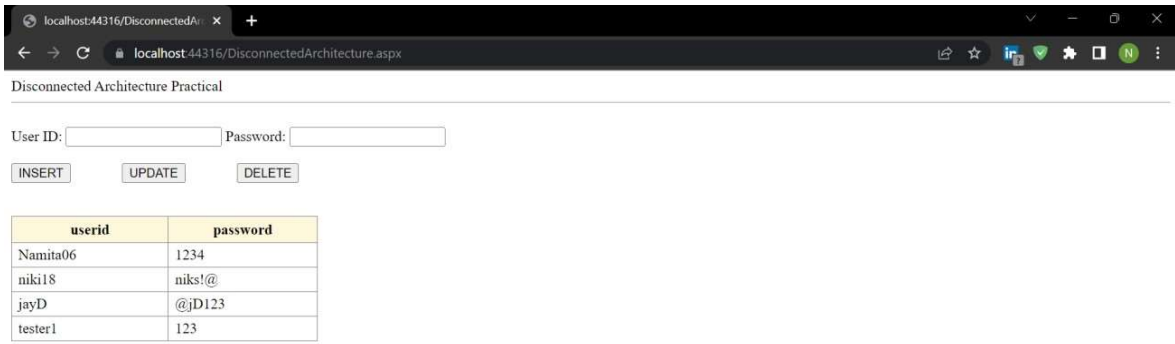
Disconnected Architecture Practical

User ID: Password:

userid	password
Namita06	1234
Prani16	prani2001
niki18	niks!@
jayD	@jD123
tester1	123

localhost:44316 says
Data Deletion done successfully!!

Records after insertion, deletion & update



Disconnected Architecture Practical

User ID: Password:

userid	password
Namita06	1234
niki18	niks!@
jayD	@jD123
tester1	123

D.AIM: *Design a webpage to demonstrate use of stored procedure.*

Stored Procedure

(steps to create stored procedure)

1. Create database and table (table_name "tbllogin")
2. Expand databases option>>your_database(Test)>>Programmability>>stored procedures
3. Create a new stored procedure)

Table that we used for this practical

Results		Messages			
	id	firstname	lastname	mailid	phone
1	7	Nikita	taware	nik12@gmail.com	3456778901
2	8	Pranita	Swami	pran56@gmail.co	9876564578
3	11	Namita	Kharatmol	nk2002@gmail.com	4567812309

USE [Test]

GO

/***** Object: StoredProcedure [dbo].[USP_CRUDoperation] Script Date: 6/22/2023

1:34:53 PM *****/

SET ANSI_NULLS ON

GO

SET QUOTED_IDENTIFIER ON

GO

```
/* =====
-- Author:          <Author,,Namita K>
-- Create date: <Create Date,,>
-- Description:      <Description,,>
select * from tbllogin
EXEC USP_CRUDoperation 'update','','','',''
-- =====*/
```

ALTER PROCEDURE [dbo].[USP_CRUDoperation]

@action varchar(10),

@id int,

@fname varchar(15),

@lname varchar(15),

@mail varchar(max),

@phone varchar(10)

AS

BEGIN

```
    if(@action = 'insert')
    begin
        insert into tbllogin(firstname,lastname,mailid,phone)
values(@fname,@lname,@mail,@phone)
    end
```

```
    else if(@action = 'update')
```

```
    begin
        if exists(select * from tbllogin where id=@id)
        begin
```

```
            update tbllogin set
```

```
firstname=@fname,lastname=@lname,mailid=@mail,phone=@phone where id=@id
```

```
        end
```

```
    end
```

```
    else if(@action = 'delete')
```

```
    begin
```

```
        delete from tbllogin where id=@id
```

```

end
else if(@action = 'show')
begin
    select * from tbllogin
end
END

```

Home.aspx

```

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div style="text-align:center">
            <h2>CRUD OPERATION</h2>
            <hr />
            <asp:TextBox runat="server" ID="txtid" placeholder="User ID"
OnTextChanged="txtid_TextChanged" cssstyle="margin-left: 313px;"></asp:TextBox>
            <i style="color:red">*id can be only use to update and delete record! Can not use for to insert
record*</i>
            <br /><br />
            <asp:TextBox runat="server" ID="txtfname" placeholder="First
Name"></asp:TextBox>
            <br /><br />
            <asp:TextBox runat="server" ID="txtlname" placeholder="Last
Name"></asp:TextBox>
            <br /><br />
            <asp:TextBox runat="server" ID="txtmail" placeholder="E-mail
ID"></asp:TextBox>
            <br /><br />
            <asp:TextBox runat="server" ID="txtcontact" placeholder="Contact
No."></asp:TextBox>
            <br /><br />
            <span>
                <asp:Button Text="Insert" ID="btninsert" runat="server"
OnClick="btninsert_Click" />
                <asp:Button Text="Delete" ID="btndelete" runat="server"
OnClick="btndelete_Click" />
                <asp:Button Text="Update" ID="btnupdate" runat="server"
OnClick="btnupdate_Click" />
                <asp:Button Text="SHOW" ID="btnshow" runat="server"
OnClick="btnshow_Click" />
            </span>
        </div>
        <div>
            <asp:GridView ID="gvdtls" runat="server">

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

```

C# Code

```

using System;
using System.Collections.Generic;
using System.Configuration; using
System.Data; using
System.Data.SqlClient; using
System.Linq; using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace
CRUDoperation
{
    public partial class Home :
System.Web.UI.Page
    {
        SqlConnection conn = new
SqlConnection(ConfigurationManager.ConnectionStrings["ConnectionString"].ConnectionString
);

        protected void Page_Load(object sender, EventArgs e)
        {
            conn.Open();

        }

        protected void btninsert_Click(object sender, EventArgs e)
        {
            DataTable dt = new DataTable();
            SqlCommand cmd = new SqlCommand("USP_CRUDoperation", conn);
cmd.CommandType = CommandType.StoredProcedure;
cmd.Parameters.AddWithValue("@id", "");
cmd.Parameters.AddWithValue("@action", "insert");
cmd.Parameters.AddWithValue("@fname", txtfname.Text);
cmd.Parameters.AddWithValue("@lname", txtlname.Text);
cmd.Parameters.AddWithValue("@mail", txtmail.Text);
cmd.Parameters.AddWithValue("@phone", txtcontact.Text);
            SqlDataAdapter da = new SqlDataAdapter(cmd);
da.Fill(dt);
            Response.Write("<script> alert('Data Inserted successfully!!') </script>");
        }
        protected void btndelete_Click(object sender, EventArgs e)
        {
            DataTable dt = new DataTable();
            SqlCommand cmd = new SqlCommand("USP_CRUDoperation", conn);
cmd.CommandType = CommandType.StoredProcedure;
cmd.Parameters.AddWithValue("@id", txtid.Text);
cmd.Parameters.AddWithValue("@action", "delete");
cmd.Parameters.AddWithValue("@fname", "");
cmd.Parameters.AddWithValue("@lname", "");
cmd.Parameters.AddWithValue("@mail", "");
cmd.Parameters.AddWithValue("@phone", "");
            SqlDataAdapter
da = new SqlDataAdapter(cmd);
            da.Fill(dt);
            int rowsAffected = cmd.ExecuteNonQuery();
        }
        protected void btnupdate_Click(object sender, EventArgs e)
        {
            DataTable dt = new DataTable();
            SqlCommand cmd = new SqlCommand("USP_CRUDoperation", conn);
cmd.CommandType = CommandType.StoredProcedure;
cmd.Parameters.AddWithValue("@id", txtid.Text);
cmd.Parameters.AddWithValue("@action", "update");
cmd.Parameters.AddWithValue("@fname", txtfname.Text);
cmd.Parameters.AddWithValue("@lname", txtlname.Text);
cmd.Parameters.AddWithValue("@mail", txtmail.Text);
cmd.Parameters.AddWithValue("@phone", txtcontact.Text);

```

```

        SqlDataAdapter da = new SqlDataAdapter(cmd);
        da.Fill(dt);
        int rowsAffected = cmd.ExecuteNonQuery();
    }

    protected void btnshow_Click(object sender, EventArgs e)
    {
        try
        {
            SqlCommand cmd = new SqlCommand("USP_CRUDOperation", conn);
            cmd.CommandType = CommandType.StoredProcedure;
            cmd.Parameters.AddWithValue("@action", "show");
            cmd.Parameters.AddWithValue("@id", "");
            cmd.Parameters.AddWithValue("@fname", "");
            cmd.Parameters.AddWithValue("@lname", "");
            cmd.Parameters.AddWithValue("@mail", "");
            cmd.Parameters.AddWithValue("@phone", "");
            SqlDataAdapter sda = new
            SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
            sda.Fill(ds);
            gvdtls.DataSource
            = ds;
            gvdtls.DataBind();
        }
        catch(Exception)
        {
            Response.Write("<Script>alert('No Record found!')</script>");
        }
    finally
    {
        {
            conn.Close();
        }
    }
    protected void txtid_TextChanged(object sender, EventArgs e)
    {
        {
            btninsert.Enabled = false;
        }
    }
} }

```

OUTPUT

Record inserted successfully

The screenshot shows a web browser window at localhost:44321/Home.aspx. The page title is "CRUD OPERATION". Below the title, there is a form with the following fields and values:

- User ID:
- *Id can be only use to update and delete record! Can not use for to insert record*
- Namita
- Kharatmol
- nk0603@gmail.com
- 4567812309

Below the form, there are four buttons: Insert, Delete, Update, and SHOW.

Below the browser window, there is a message box that says "Data Inserted successfully!" with an OK button.

show records

localhost:44321/Home.aspx

CRUD OPERATION

User ID **id can be only use to update and delete record! Can not use for to insert record**

id	firstname	lastname	mailid	phone
7	Nikita	taware	nik12@gmail.com	3456778901
8	Pranita	Swami	pran56@gmail.co	9876564578
9	Adinath	Kharatmol	abc@gmail.com	0000000000
11	Namita	Kharatmol	nk0603@gmail.com	4567812309

after updating record

localhost:44321/Home.aspx

CRUD OPERATION

id can be only use to update and delete record! Can not use for to insert record

id	firstname	lastname	mailid	phone
7	Nikita	taware	nik12@gmail.com	3456778901
8	Pranita	Swami	pran56@gmail.co	9876564578
9	Adinath	Kharatmol	abc@gmail.com	0000000000
11	Namita	Kharatmol	nk2002@gmail.com	4567812309

To delete record

localhost:44321/Home.aspx

CRUD OPERATION

id can be only use to update and delete record! Can not use for to insert record

id	firstname	lastname	mailid	phone
7	Nikita	taware	nik12@gmail.com	3456778901
8	Pranita	Swami	pran56@gmail.co	9876564578
9	Adinath	Kharatmol	abc@gmail.com	0000000000
11	Namita	Kharatmol	nk2002@gmail.com	4567812309

Deleted record

localhost:44321/Home.aspx

CRUD OPERATION

id can be only use to update and delete record! Can not use for to insert record

id	firstname	lastname	mailid	phone
7	Nikita	taware	nik12@gmail.com	3456778901
8	Pranita	Swami	pran56@gmail.co	9876564578
11	Namita	Kharatmol	nk2002@gmail.com	4567812309

State Management Techniques

PRACTICAL 5(A)

AIM: Design Web Applications using Client Side Session Managements Techniques

ClientSide.aspx

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

<!DOCTYPE html>

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

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

<title></title>

</head>

<body>

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

COOKIES<hr />

```
<asp:TextBox runat="server" ID="txtusername" placeholder="username"></asp:TextBox>
```

```
<asp:TextBox runat="server" ID="txtpass" placeholder="Password"
TextMode="Password"></asp:TextBox>
<br />
<br />
<asp:Button runat="server" ID="btnCreate" Text="Create Cookie"
OnClick="btnCreate_Click" />
<br />
<asp:Button runat="server" ID="btnDelete" Text="Delete Cookie"
OnClick="btnDelete_Click" />
<br />
<asp:HyperLink runat="server" ID="btnShow" Text="Show Cookies"
NavigateUrl="~/StoredCookie.aspx"></asp:HyperLink>
</form>
</body>
</html>
```



C# code

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

namespace StateManagement
{
    public partial class ClientSide : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void btnCreate_Click(object sender, EventArgs e)
        {
            HttpCookie cookie1 = new HttpCookie("Info");
            cookie1["Username"] = txtusername.Text; cookie1["Password"]
            = txtpass.Text;
            Response.Cookies.Add(cookie1);
            Response.Write("<script>alert('Created a Cookie')</script>");

        }
        protected void btnDelete_Click(object sender, EventArgs e)
        {

            HttpContext.Current.Session.Abandon();
            Response.Write("<script>alert('Cookie Deleted!')</script>");

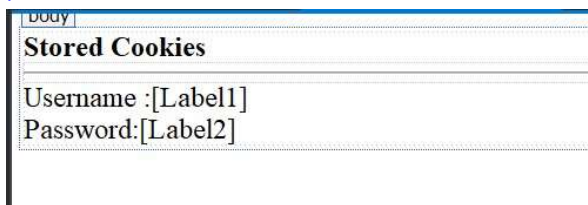
        }
    }
}
```

StoredCookie.aspx

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

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <b>Stored Cookies</b>
            <hr />
            Username :<asp:Label ID="Label1" runat="server"></asp:Label>
            <br />
            Password:<asp:Label ID="Label2" runat="server"></asp:Label>
        </div>
    </form>
</body>
</html>
```

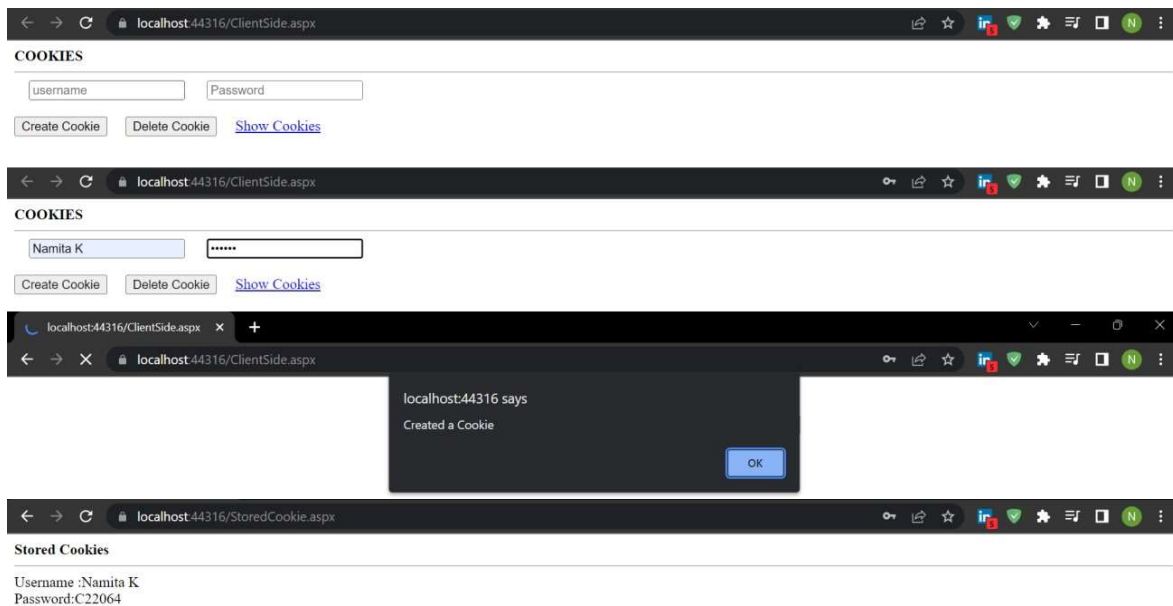


C# code

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

namespace StateManagement
{
    public partial class StoredCookie : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            HttpCookie cookie1 = Request.Cookies["Info"];
            if (cookie1 != null)
            {
                Label1.Text = cookie1["Username"];
                Label2.Text = cookie1["Password"];
            }
        }
    }
}
```

OUTPUT



B. Design Web Applications using Server Side Session Management Techniques

Source Code:

Home.aspx:

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

```
Inherits="sessionandapplication.Home" %>
```

```
<!DOCTYPE html>
```

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

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

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

```
</head>
```

```
<body>
```

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

```
<div>
```

```
<center>

    <asp:Label ID="Label1" runat="server" Text="Enter your Name:"></asp:Label>

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

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

</center>

</div>

</form>

</body>

</html>
```

Home.cs:

```
using System;

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

using System.Web.UI.WebControls;

namespace sessionandapplication
{
    public partial class Home : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            Session["User"] = TextBox1.Text;
        }

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

WebForm1.aspx:

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div><center>
            <asp:Label ID="Label3" runat="server" Text=""></asp:Label><br />
            <asp:Label ID="Label1" runat="server" Text="Visitors Count: "></asp:Label><asp:Label
ID="Label2" runat="server" Text=""></asp:Label>

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

WebForm1.cs:

```
using System;

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

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

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

{

    Label3.Text = "Welcome, "+Session["User"].ToString()+" !";

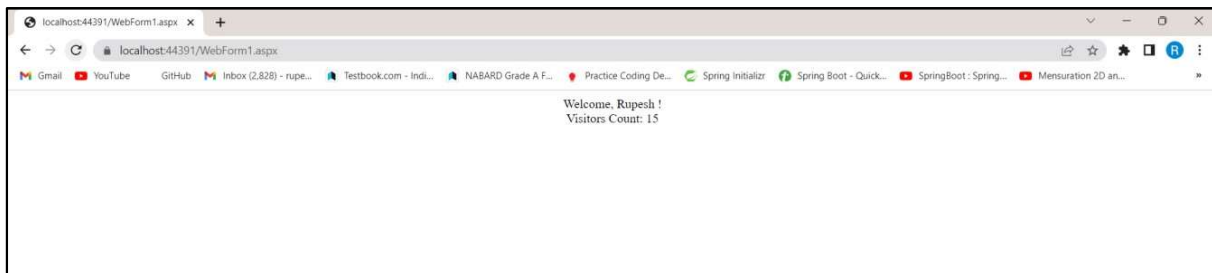
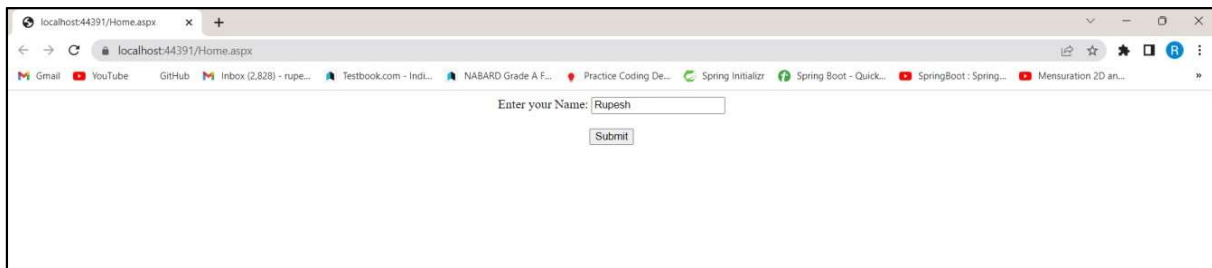
    Application["NoOfVisitors"] = (int)Application["NoOfVisitors"] + 1;    Label2.Text
=Application["NoOfVisitors"].ToString();


}

}

}
```

Output:





Arithmetic Operation

Enter Number 1

Enter Number 2

Multiplication of 4 and 3 is: 12

Simple Interest

Principal Rate Time(in yrs)

For division and simple Interest



Arithmetic Operation

Enter Number 1

Enter Number 2

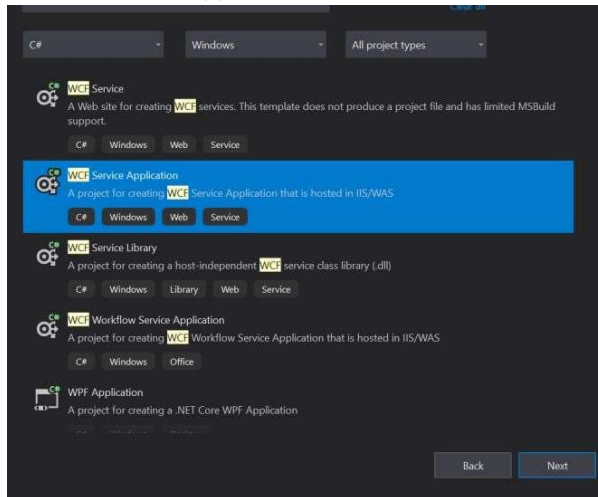
Division of 12 and 4 is: 3

Simple Interest

Principal Rate Time(in yrs)

Simple Interest is: 60

PRACTICAL 6(B)

AIM: Design Web Application to produce and Consume a WCF Service**1. Create a new WCF application****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;

namespace WcfService1
{
    // NOTE: You can use the "Rename" command on the "Refactor" menu to change the
    // interface name "IService1" in both code and config file together.
    [ServiceContract]
    public interface IService1
    {

        [OperationContract]
        string GetData(int value);

        [OperationContract]
        CompositeType GetDataUsingDataContract(CompositeType composite);
        // TODO: Add your service operations here

        [OperationContract]
        double Calculator(double rate, double time, double Principal);

    }
}
```

```
// 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; }
    }
}
```

Service1.svc.cs

```
using System;
using System.Collections.Generic; using
System.Linq;
using System.Runtime.Serialization;
using System.ServiceModel; using
System.ServiceModel.Web; using
System.Text;

namespace WcfService1
{
    // NOTE: You can use the "Rename" command on the "Refactor" menu to change the class
    name "Service1" in code, svc and config file together.
    // NOTE: In order to launch WCF Test Client for testing this service, please select
    Service1.svc or Service1.svc.cs at the Solution Explorer and start debugging.
    public class Service1 : IService1
    {
        public string GetData(int value)
        {
            return string.Format("You entered: {0}", value);
        }

        public double Calculator(double rate, double time, double Principal)
        {
            return (rate * time * Principal) / 100;
        }

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

$\left. \begin{array}{l} \} \\ \} \end{array} \right\}$

Then create a webForm

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="WcfService1.WebForm1" %>
```

<!DOCTYPE html>

[illegible]

body

SIMPLE INTEREST

Rate:

Time(in yrs):

Principal:

Calculated Simple Interest is [answer]

After this right click on project in solution explorer (add >> service references). Click on discover then go and ok

Add Service Reference ? X

To see a list of available services on a specific server, enter a service URL and click Go. To browse for available services, click Discover.

Address:

Go Discover

Services: Operations:

Service1.svc

Select a service contract to view its operations.

1 service(s) found in the solution.

Namespace:
ServiceReference1

Advanced... OK Cancel

Add Service Reference ? X

To see a list of available services on a specific server, enter a service URL and click Go. To browse for available services, click Discover.

Address:

Go Discover

Services: Operations:

Service1

Select a service contract to view its operations.

1 service(s) found at address 'http://localhost:54750/Service1.svc'.

Namespace:
ServiceReference1

Advanced... OK Cancel

45

VII] ASP.NET MVC

A. Design MVC based Web applications.

Source Code:

HomeController.cs:

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

namespace mvcproject.Controllers
{
    public class HomeController : Controller
    {
        public ActionResult Index()
        {
            return View();
        }

        public ActionResult About()
        {
            ViewBag.Message = "Your application description page.";

            return View();
        }

        public ActionResult Contact()
        {
            ViewBag.Message = "Your contact page.";

            return View();
        }

        public ActionResult StoryBooks()
        {
            ViewBag.Message = "Your contact page.";

            return View();
        }

        public ActionResult FantasyNovels()
        {
            ViewBag.Message = "Your contact page.";
```

```
        return View();  
    }  
    public ActionResult MarathiBooks()  
    {  
        ViewBag.Message = "Your contact page.";
```

```

        return View();
    }
}
}

```

_Layout.cshtml:

```

<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>@ViewBag.Title - My ASP.NET Application</title>
    @Styles.Render("~/Content/css")
    @Scripts.Render("~/bundles/modernizr")
    @RenderSection("Styles", required: true)
</head>
<body>
    <div class="navbar navbar-inverse navbar-fixed-top">
        <div class="container">
            <div class="navbar-header">
                <button type="button" class="navbar-toggle" data-toggle="collapse" datatarget=".navbar-collapse">
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                </button>
                @Html.ActionLink("Books", "Index", "Home", new { area = "" }, new { @class = "navbarbrand" })
            </div>
            <div class="navbar-collapse collapse">
                <ul class="nav navbar-nav">
                    <li>@Html.ActionLink("Home", "Index", "Home")</li>
                    <li>@Html.ActionLink("About", "About", "Home")</li>
                    <li>@Html.ActionLink("Contact", "Contact", "Home")</li>
                </ul>
            </div>
        </div>
    </div>
    <div class="container body-content">
        @RenderBody()
        <hr />
        <footer>
            <p>&copy; @DateTime.Now.Year - Vinu Book Store Sanglikar.</p>
        </footer>
    </div>

    @Scripts.Render("~/bundles/jquery")
    @Scripts.Render("~/bundles/bootstrap")
    @RenderSection("scripts", required: false) </body>

```


Roll No: C22095

AWT

Rupesh Nana Patil

</html>

Index.cshtml:

@{

ViewBag.Title = "Home Page";

}

@section Styles

{

<style type="text/css">

.maindiv {

background-image:url('../img/wallhavenBook.jpg');

height: 200px; width: 100%; color:azure;

align-content:center;

}

.lala {

text-align: center; font-

size: 50px; text-shadow:

inherit;

text-shadow: 2px 2px #FF0000;

}

</style>

}

<div class="maindiv">

<h1 class="lead lala">

The right book in the right hands at the right time can
change the world.

</h1>

</div>

<div class="row">

<div class="col-md-4">

<h2>Story Books</h2>

<div>

</div>

</div>

<div class="col-md-4">

<h2>Fantasy Novels</h2>

<div>


```
</a>

</div>
</div>
<div class="col-md-4">
  <h2>Marathi Books</h2>
  <div>
    <a href="~/Home/MarathiBooks">
      
    </a>

  </div>

</div>
</div>
</div>
</div>

StoryBooks.cshtml:

@{
  ViewBag.Title = "StoryBooks";
}
@section Styles
{

}

<h1>StoryBooks</h1>

<div class="row">
  <div class="col-md-4">

    <div>

      <a href="https://www.goodreads.com/en/book/show/13510813"></a>

    </div>
    <h3>Grandma's bag of stories.</h3>

  </div>
  <div class="col-md-4">
    <div>

      <a
```

href="https://www.goodreads.com/book/show/523663.Disney_365_Bedtime_Stories?ref=nav_sb_ss_2_11">

```

    </div>
    <h3>365 Bedtime Stories</h3>
  </div>
  <div class="col-md-4">
    <div>

      <a href="https://www.goodreads.com/book/show/27558257-the-magic-of-the-
losttemple?ref=nav_sb_ss_1_23"> </a>

```

```

    </div>
    <h3>The Magic of the Lost Temple</h3>

  </div>
</div>

```

FantasyNovels.cshtml:

```

@{
    ViewBag.Title = "FantasyNovels";
}
@section Styles
{

}

<h2>FantasyNovels</h2>

<div class="row">
  <div class="col-md-4">

    <div>

      <a href="https://www.goodreads.com/book/show/7235533-the-way-of-kings"></a>

    </div>
    <h3>The Way of Kings.</h3>

  </div>
  <div class="col-md-4">
    <div>

      <a href="https://www.goodreads.com/book/show/186074.The_Name_of_the_Wind">
</a>

```

```
</div>
<h3>The Name of The Wind.</h3>
</div>
<div class="col-md-4">
<div>

    <a href="https://www.goodreads.com/book/show/50358143-the-silver-
arrow?ref=nav_sb_ss_2_13"> </a>

</div>
<h3>The Silver Arrow.</h3>

</div>
</div>

MarathiBooks.cshtml:

@{
    ViewBag.Title = "MarathiBooks";
}

<h2>MarathiBooks</h2>

<div class="row">
    <div class="col-md-4">

        <div>
            <a href="https://www.goodreads.com/book/show/6369447">
                
            </a>
        </div>

        <h3>मर्ुुंजय</h3>

    </div>
    <div class="col-md-4">

        <div>
            <a href="https://www.goodreads.com/book/show/6727757">
                
            </a>

            <h3>श्रीमान ोगी</h3>

        </div>
    </div>
</div>

<div class="col-md-4">

    <div>
        <a href="https://www.goodreads.com/en/book/show/10370459">
```

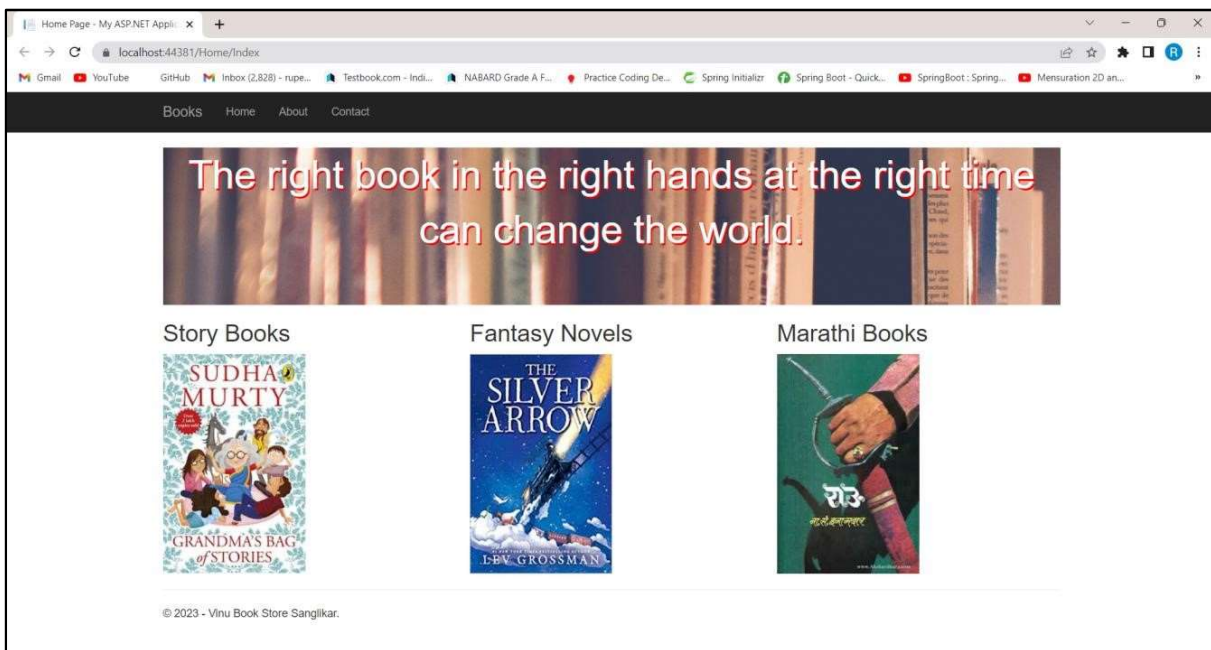
```

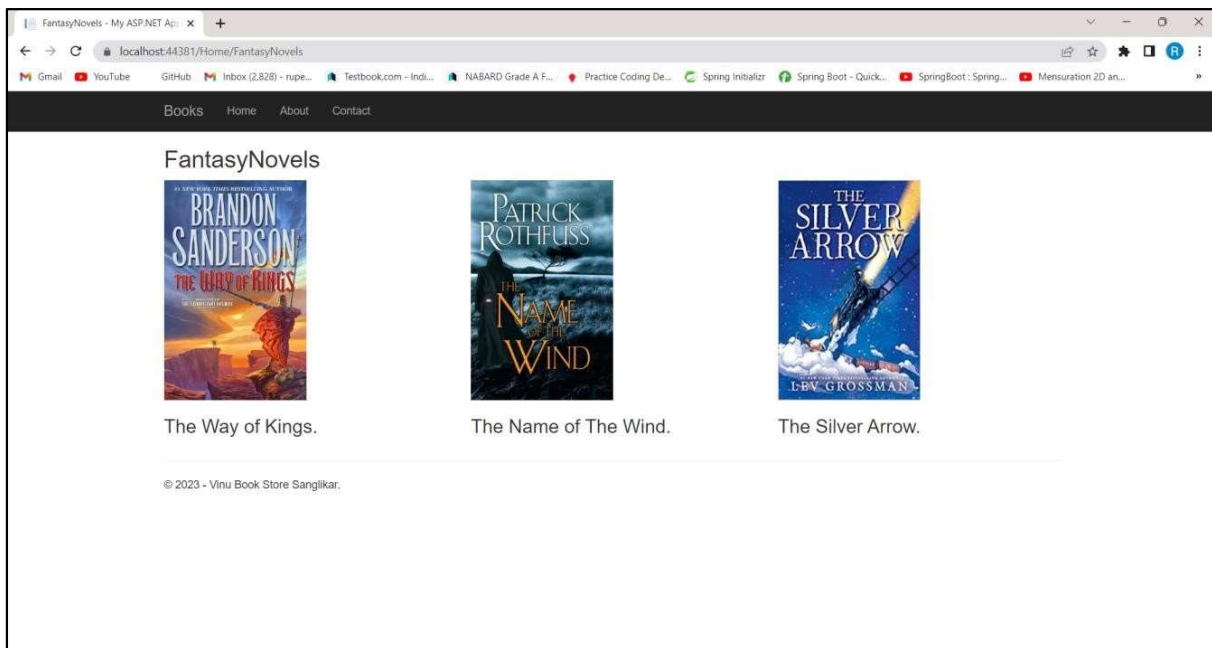
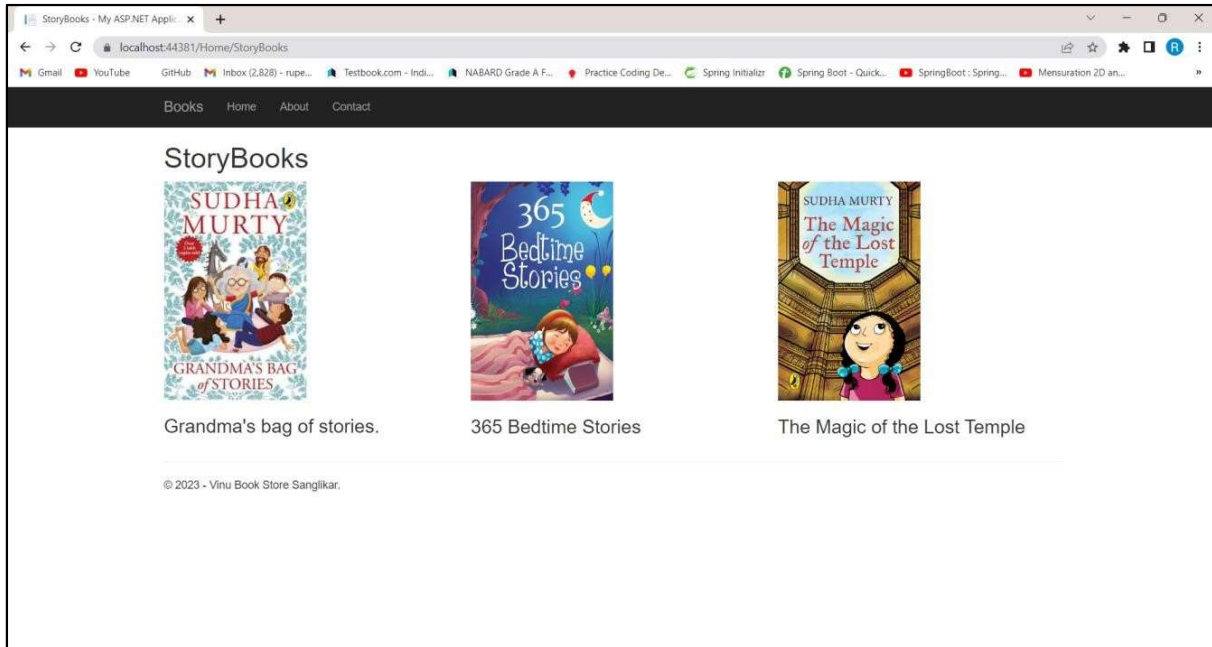
</a>
<h3>राऊ</h3>

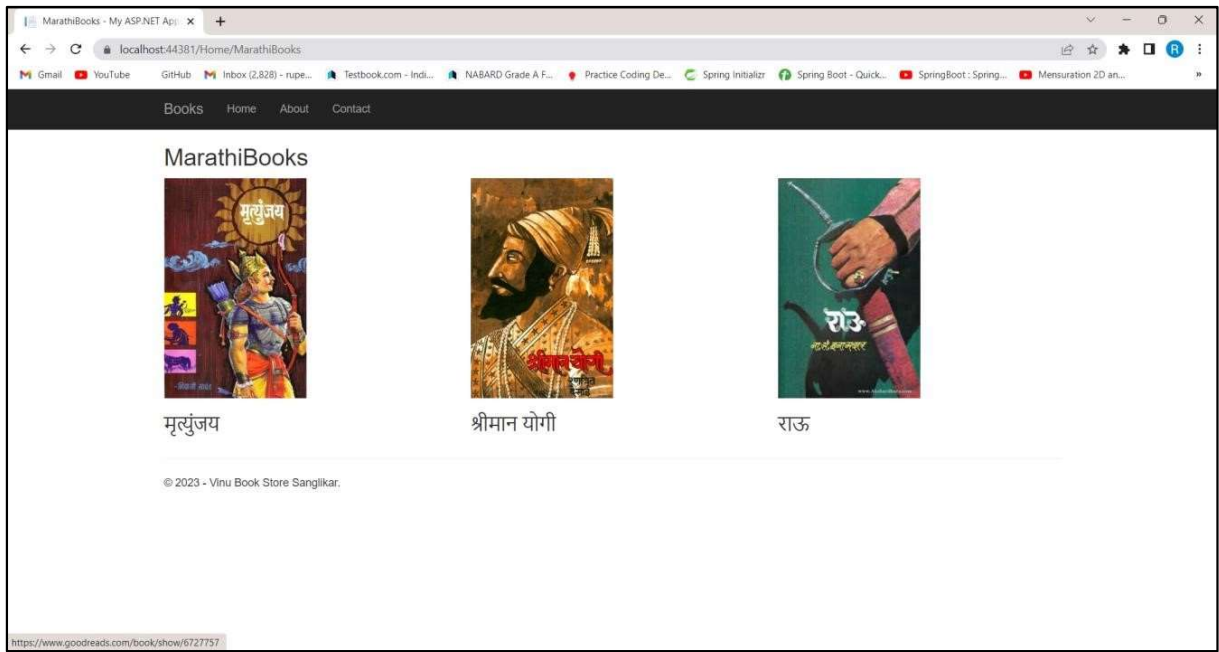
</div>

</div>
</div>
```

Output:







A. Design a webpage to display the use of LINQ.Source Code:

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

```
Inherits="linq.WebForm1" %>
```

```
<!DOCTYPE html>
```

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

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

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

```
</head>
```

```
<body>
```

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

```
<div>
```

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

```
</form>
```

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

WebForm1.cs:

```
using System;
```

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

```
using System.Linq; using
```

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

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

```
namespace linq
```

```
{
```

```
public partial class WebForm1 : System.Web.UI.Page
```

```
{
```

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

```
{
```

```
List<Class1> books = Class1.GetBooks(); var
```

```
booktitles = from b in books select b.title;
```

```
foreach(var title in booktitles)
```

```
{
```

```
        Label1.Text += String.Format("{0}<br/>", title);  
  
    }  
  
    }  
  
    }  
  
}
```


Class1.cs:

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

namespace linq
{
    public class Class1
    {
        public string id { get; set; }    public
string title { get; set; }    public decimal
price { get; set; }
        public DateTime dateOfRelease { get; set; }

        public static List<Class1> GetBooks()
        {
            List<Class1> list = new List<Class1>();    list.Add(new
Class1
            {
                id = "001",
                title = "Programming in C#",
price = 600.14m,
                dateOfRelease=Convert.ToDateTime("2018-05-07")
            });
            list.Add(new Class1
            {
                id = "002",
title = "Let us C",
price = 340.00m,
                dateOfRelease = Convert.ToDateTime("2010-01-20")
            });
            list.Add(new Class1
            {
                id = "003",
                title = "Machine Learning",
price = 1200m,
                dateOfRelease = Convert.ToDateTime("2018-12-14")
            });
            list.Add(new Class1
            {
                id = "004",
                title = "Operations Research",
price = 475m,
                dateOfRelease = Convert.ToDateTime("2013-05-30")
            });
        }
    }
}
```

```
    });  
    return list;  
  }  
}  
}
```

