UNIVERSAL COLLEGE

Maitidevi, Kathmandu

Lab Report of Dotnet Technology

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BCA 5th

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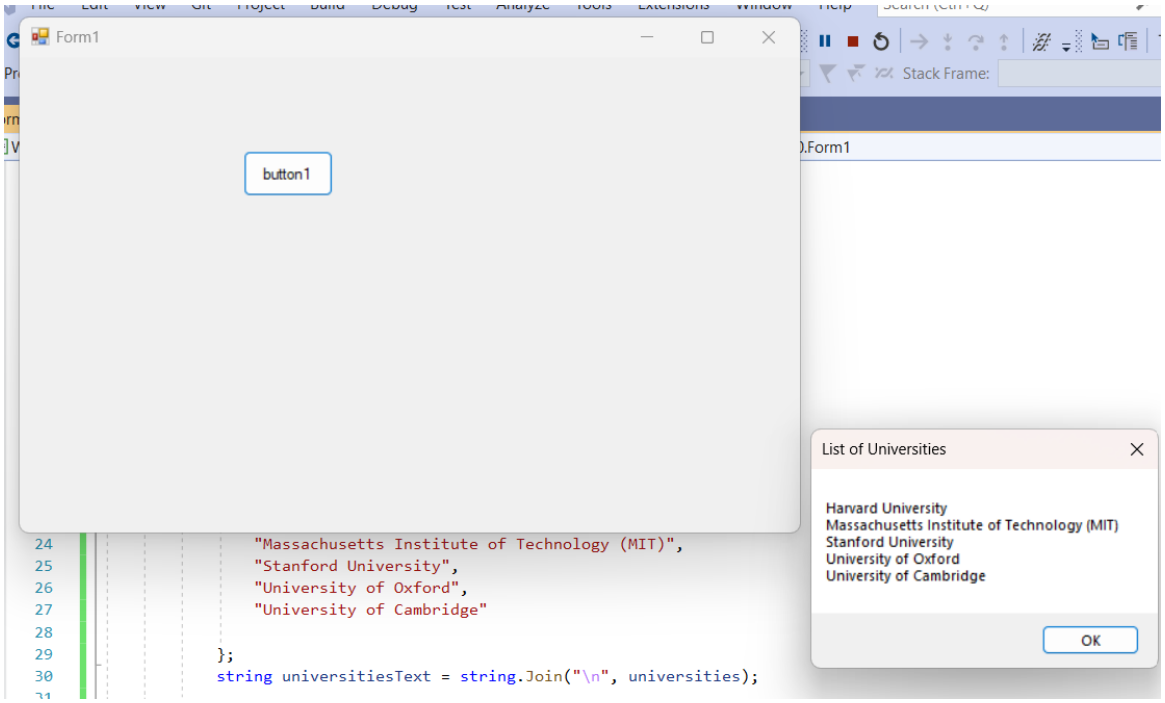
LAB 1-Write a win form application to show name of 5 different university maintained on list to a message box.

```
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 WindowsFormsApp10
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         string[] universities = {
            "Harvard University",
            "Massachusetts Institute of Technology (MIT)",
            "Stanford University",
            "University of Oxford",
            "University of Cambridge"
```

```
        };
        string universitiesText = string.Join("\n", universities);

        // Display the list of universities in a message box
        MessageBox.Show(universitiesText, "List of Universities");
    }

}
}
```

Output



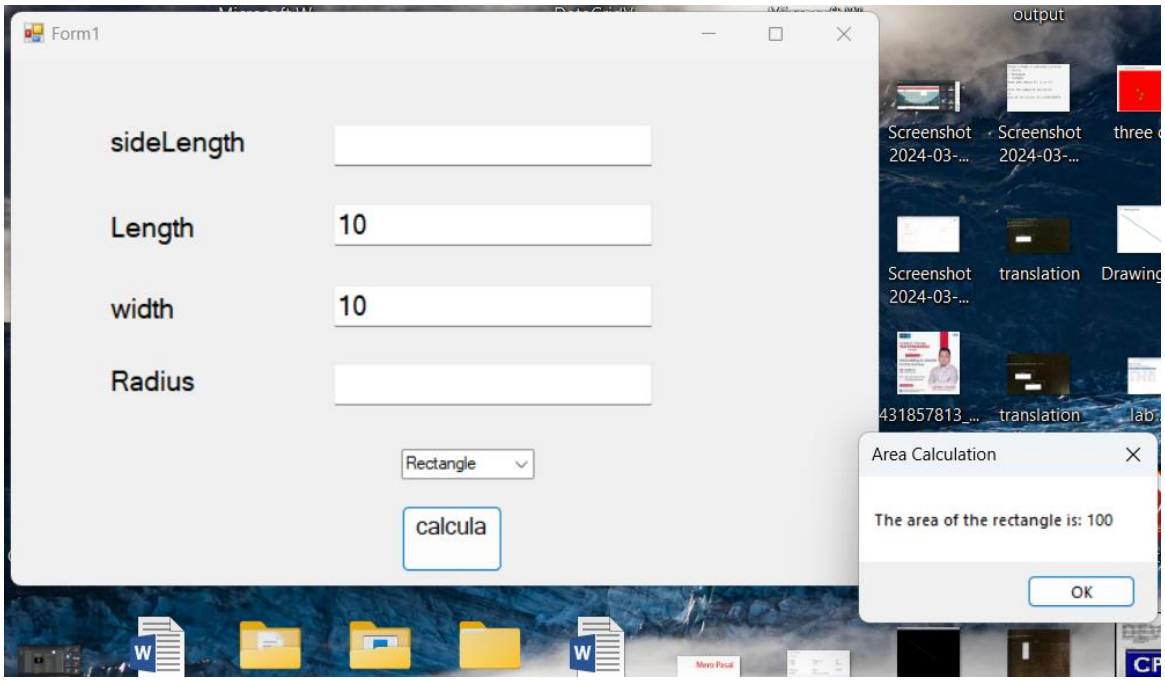
LAB 2- Write a program to display the use of case when statement to display area of different types of shape

```
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 WindowsFormsApp16
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {
         // Populate the dropdown list with shapes
         shapeComboBox.Items.Add("Square");
         shapeComboBox.Items.Add("Rectangle");
         shapeComboBox.Items.Add("Circle");
         shapeComboBox.SelectedIndex = 0; // Select the first item by default
```

```
    }

    private void calculateButton_Click(object sender, EventArgs e)
    {
        // Get the selected shape from the dropdown list
        string selectedShape = shapeComboBox.SelectedItem.ToString();

        // Calculate area based on the selected shape
        double area = 0;

        switch (selectedShape)
        {
            case "Square":
                double sideLength = Convert.ToDouble(sideLengthTextBox.Text);
                area = sideLength * sideLength;
                break;
            case "Rectangle":
                double length = Convert.ToDouble(lengthTextBox.Text);
                double width = Convert.ToDouble(widthTextBox.Text);
                area = length * width;
                break;
            case "Circle":
                double radius = Convert.ToDouble(radiusTextBox.Text);
                area = Math.PI * radius * radius;
                break;
        }

        // Display the calculated area
        MessageBox.Show($"The area of the {selectedShape.ToLower()} is: {area}",
"Area Calculation");
    }
```

```
}
}
```

Output

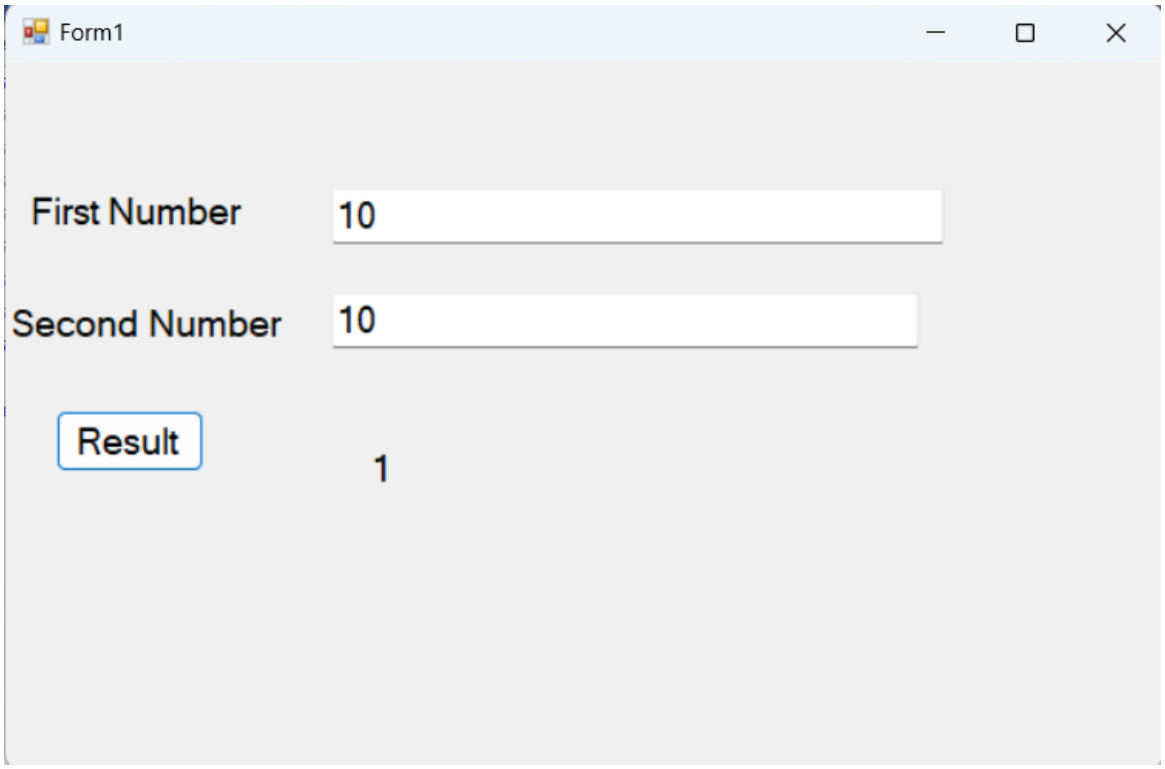

Form1
sideLength
Length
10
width
10
Radius
Rectangle
calcula
output
Screenshot 2024-03-...
Screenshot 2024-03-...
three
Screenshot 2024-03-...
translation
Drawing
431857813_...
translation
lab
Area Calculation
The area of the rectangle is: 100
OK

LAB 3- Write a program to create a custom exception class and handle it using different level of try catch statement.

```
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 WindowsFormsApp13
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         try
         {
            float num1 = float.Parse(textBox1.Text);
            float num2 = float.Parse(textBox2.Text);
```

```
            if (num1 == 0)
                throw new MyCustomException("Number cannot be zero");
            if (num2 == 0)
                throw new DivideByZeroException();
            float result = num1 / num2;
            label3.Text = result.ToString();
        }
        catch (DivideByZeroException)
        {
            label3.Text = "cannot divide by zero";
        }
    }
}
}
```

Output



LAB 4 - Write a program to insert, update and delete a record of student into a database in a Windows Form Based Application.

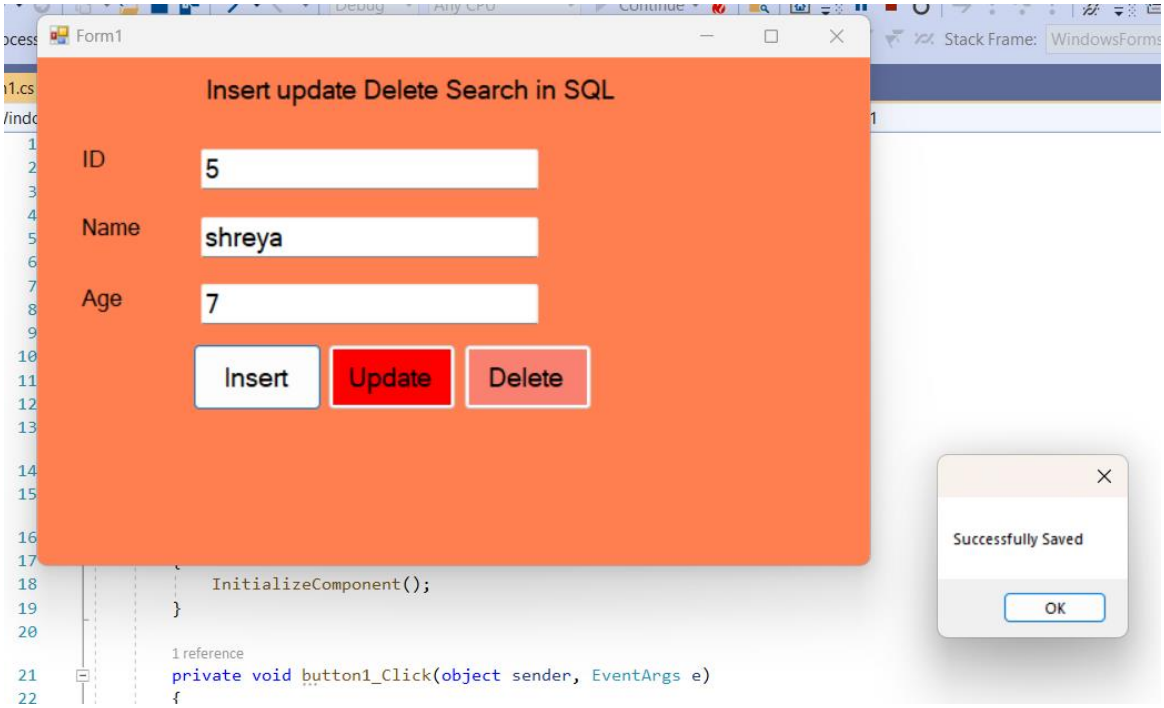
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp6
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         SqlConnection con = new SqlConnection("Data Source=LAPTOP-
I6P5P0C0;Initial Catalog=Student;Integrated Security=True;Connect
```

```
Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=
ReadWrite;MultiSubnetFailover=False");

        con.Open();

        SqlCommand cmd = new SqlCommand("insert into std  values
(@ID,@Name,@Age)", con);

        cmd.Parameters.AddWithValue("@ID", int.Parse(textBox1.Text));

        cmd.Parameters.AddWithValue("@Name", textBox2.Text);

        cmd.Parameters.AddWithValue("@Age",
double.Parse(textBox1.Text));

        cmd.ExecuteNonQuery();


        con.Close();

        MessageBox.Show("Successfully Saved");

    }


    private void button2_Click(object sender, EventArgs e)

    {

        SqlConnection con = new SqlConnection("Data Source=LAPTOP-
I6P5P0C0;Initial Catalog=Student;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=
ReadWrite;MultiSubnetFailover=False");

        con.Open();

        SqlCommand cmd = new SqlCommand("Update std set
Name=@Name,Age=@Age where ID =@ID", con);

        cmd.Parameters.AddWithValue("@ID", int.Parse(textBox1.Text));

        cmd.Parameters.AddWithValue("@Name", textBox2.Text);

        cmd.Parameters.AddWithValue("@Age",
double.Parse(textBox1.Text));

        cmd.ExecuteNonQuery();
```

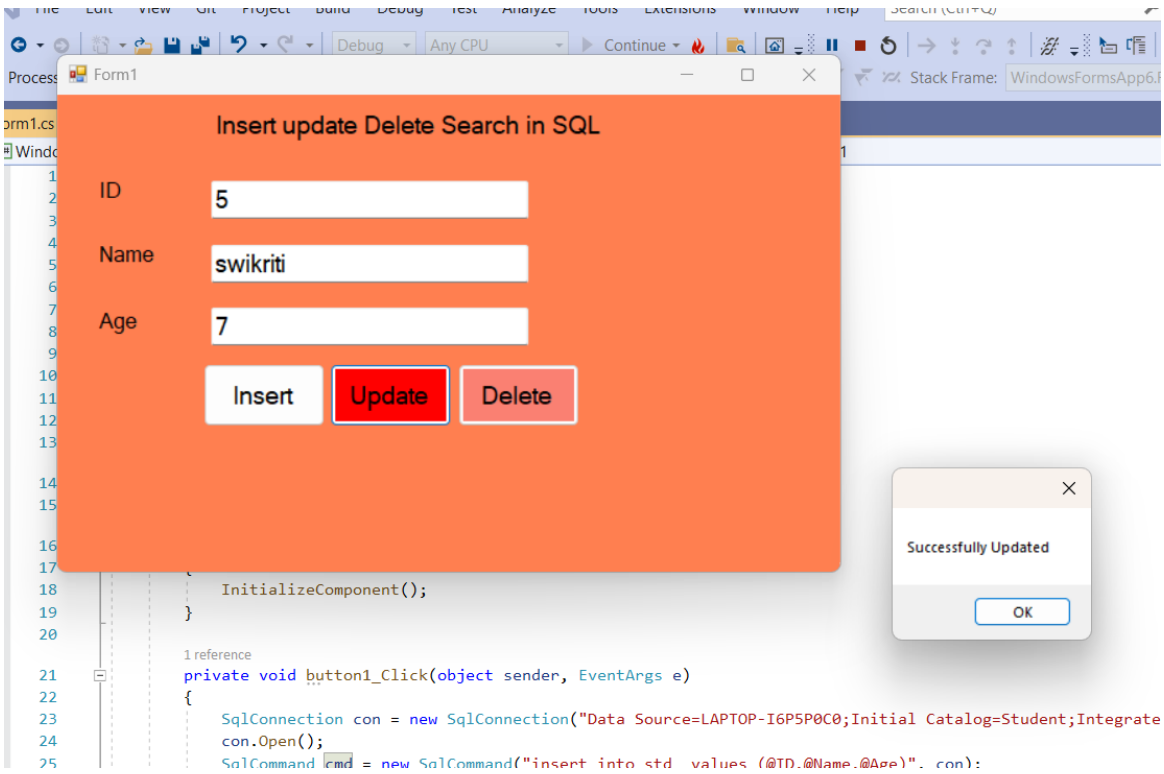
```
            con.Close();
            MessageBox.Show("Successfully Updated");
        }

        private void button3_Click(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("Data Source=LAPTOP-
I6P5P0C0;Initial Catalog=Student;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=
ReadWrite;MultiSubnetFailover=False");
            con.Open();
            SqlCommand cmd = new SqlCommand("Delete std  where ID
=@ID", con);
            cmd.Parameters.AddWithValue("@ID", int.Parse(textBox1.Text));
            cmd.ExecuteNonQuery();
            con.Close();
            MessageBox.Show("Successfully Deleted");
        }
    }
}
```

OUTPUT

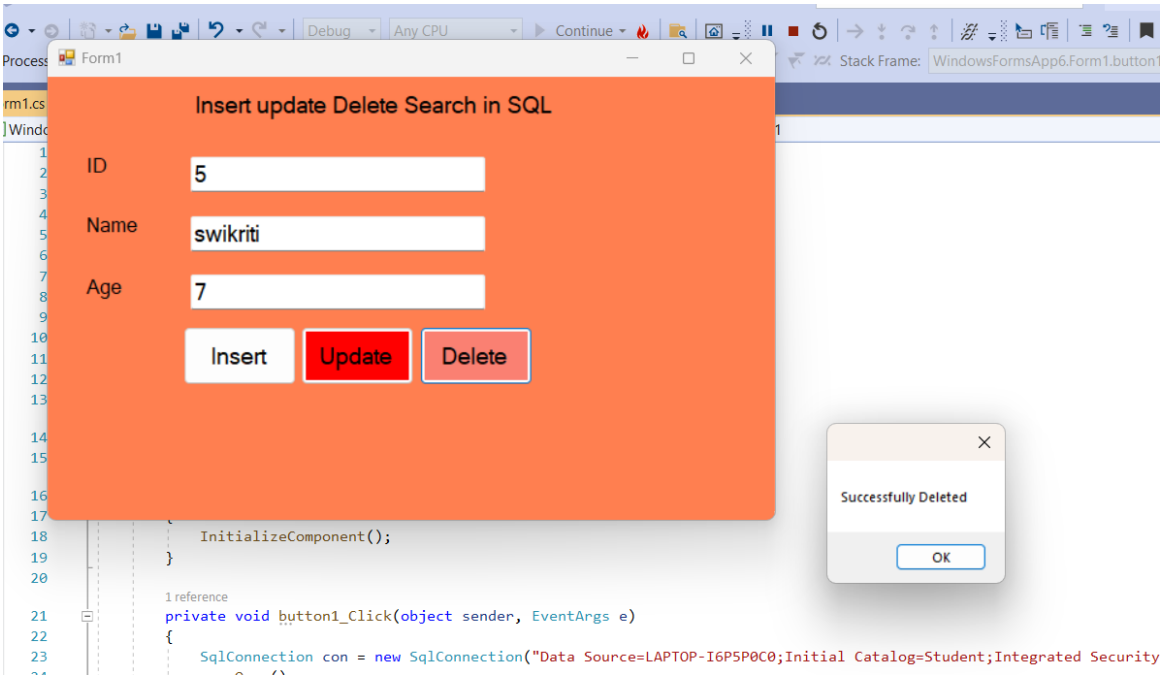
Insert



Update



Delete


Form1
Insert update Delete Search in SQL
ID
5
Name
swikriti
Age
7
Insert
Update
Delete
Successfully Deleted
OK
InitializeComponent();
}
1 reference
private void button1_Click(object sender, EventArgs e)
{
SqlConnection con = new SqlConnection("Data Source=LAPTOP-I6P5P0C0;Initial Catalog=Student;Integrated Security

LAB 5- Write a program to show list of Employee in Web form application and filter it using employee name, contact no and email address

Index.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="index.aspx.cs" Inherits="WebApplication4.index" %>

 <!DOCTYPE html>

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

 <head runat="server">

 <title></title>

 </head>

 <body>

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

<div> <asp:GridView ID="gdEmpDetail" runat="server">

 </asp:GridView>

 </div>

</form>

 </body>

</html>
```

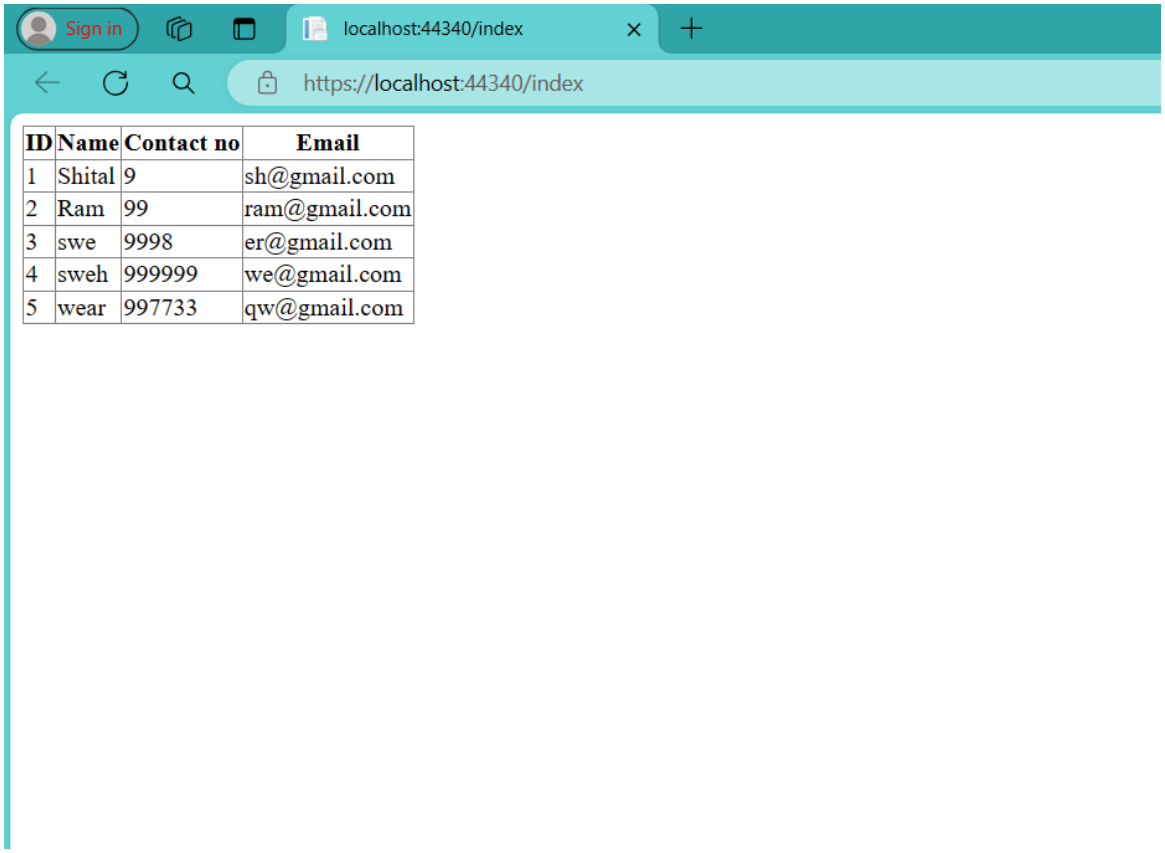
Index.aspx

```
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;

using System.Drawing;
```

```
namespace WebApplication4
{
   public partial class index : System.Web.UI.Page
   {
      private object adap;

      protected void Page_Load(object sender, EventArgs e)
      {
         WebApplication4();

      }
      private void WebApplication4()
      {
         //connection (ADO.NET) ASP and SQL
         //connection
         //By Query or By Procedures
         //Connection CLose
         try
         {
            SqlConnection con = new SqlConnection("Data Source=LAPTOP-I6P5P0C0;
Initial catalog=Employee; integrated security =true;");
            con.Open();
            SqlCommand cmd = new SqlCommand("select * from  emp",con);
            SqlDataAdapter adap = new SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
             adap.Fill (ds);
            con.Close();

            if (ds.Tables.Count>0)
            {
```

```
                if (ds.Tables[0].Rows.Count>0)
                {
                    gdEmpDetail.DataSource = ds.Tables[0];
                    gdEmpDetail.DataBind();
                }
            }



        }
        catch (Exception ex)
        {
            throw;
        }
    }
  }
}
```

Output



ID	Name	Contact no	Email
1	Shital	9	sh@gmail.com
2	Ram	99	ram@gmail.com
3	swe	9998	er@gmail.com
4	sweh	999999	we@gmail.com
5	wear	997733	qw@gmail.com