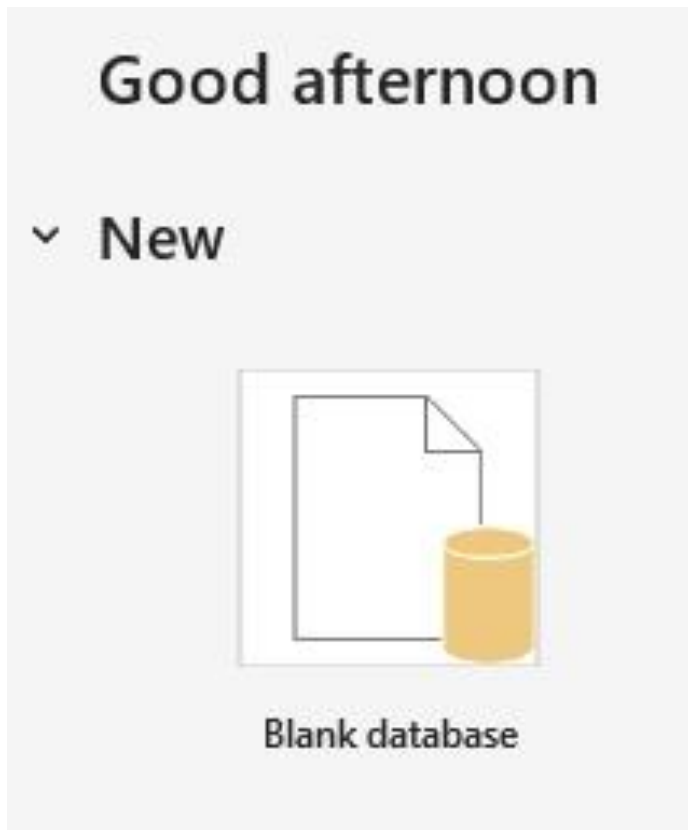


How to create a contacts management system application using C# and Microsoft Access 2019

Start Access

Following window will appear



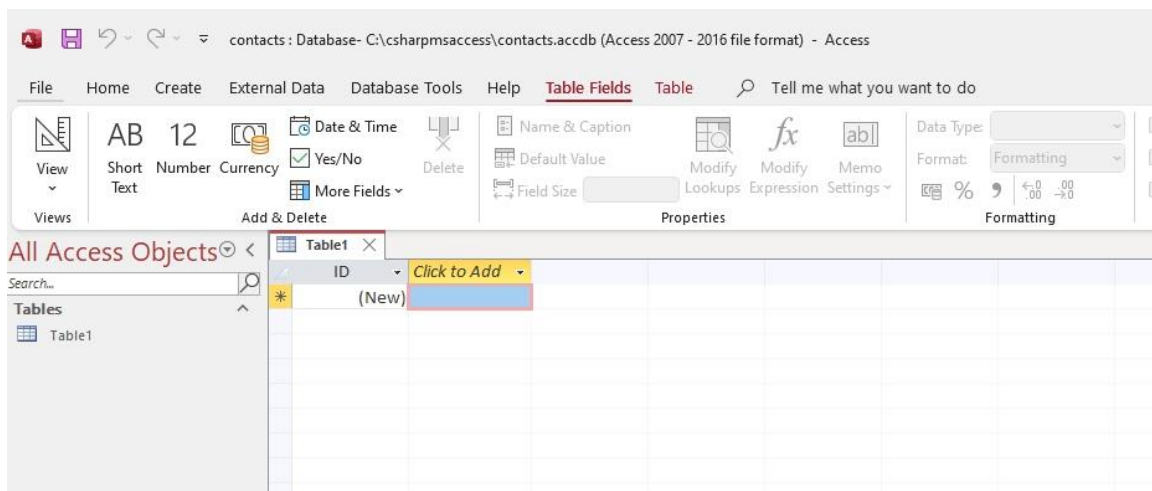
Double click on Blank Database

Following window will appear



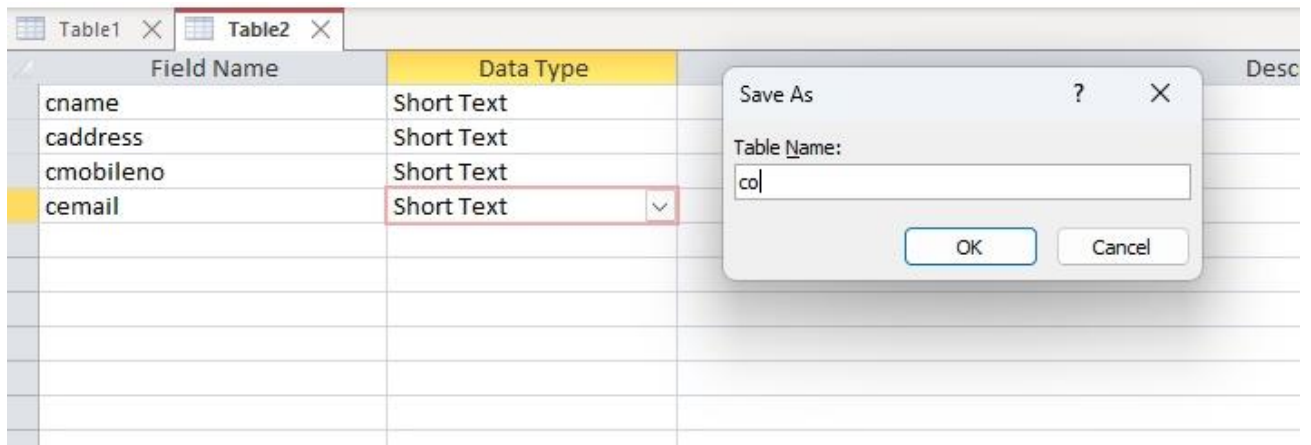
Click on Create

Following window will appear



Go to Create -> Table Design

Following window will appear

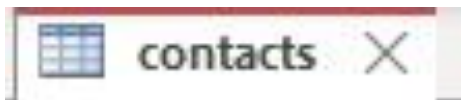


Give Table Name as contacts and click ok

Following window will appear

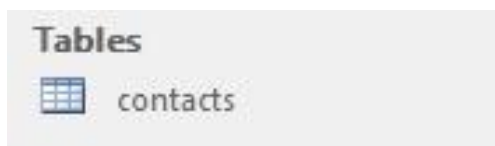


Click Yes and a primary key with name as ID and datatype as AutoNumber will be created in the contacts database.

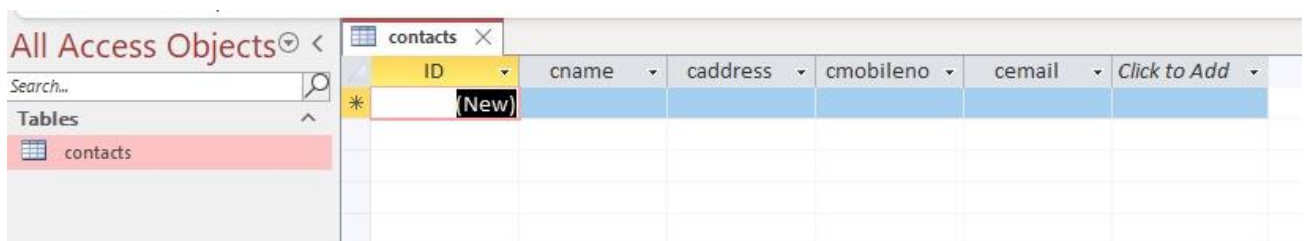


Now Click on Cross Button and then

double click on contacts Table



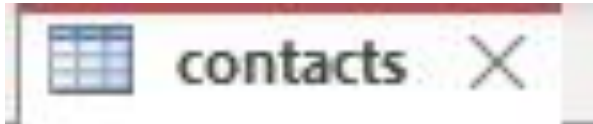
You will see the following output



Add two Records in table contacts like shown below

ID	cname	caddress	cmobileno	cemail	Click to Add
1	raman	raman address	1234	raman@r.com	
2	aman	aman address	43215	aman@a.com	
(New)					

Now Close the Table contacts by clicking on



Now we have created a table contacts in ms access file contacts.accdb now we will create a Windows Form Application in C# to add a record, modify a record, delete a record and search for a record in contacts.accdb access file.

Start Visual Studio 2022 Community Edition.

Create a new Windows Form Project in C#

If You are new to this procedure you can take help from

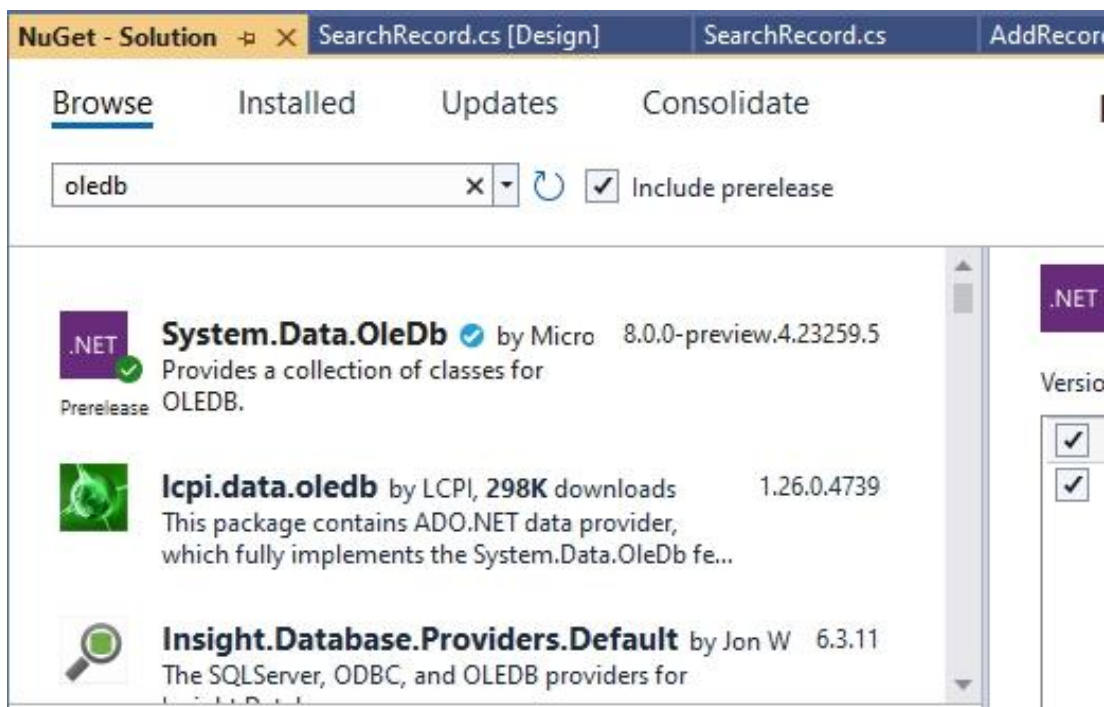
<http://www.cppcourses.com/csharpmysql.pdf>

Now you have created the project and database now add dependency which is required to connect C# with Microsoft Access

Go to Tools -> NuGet Package Manager -> Manage NuGet Packages for Solution

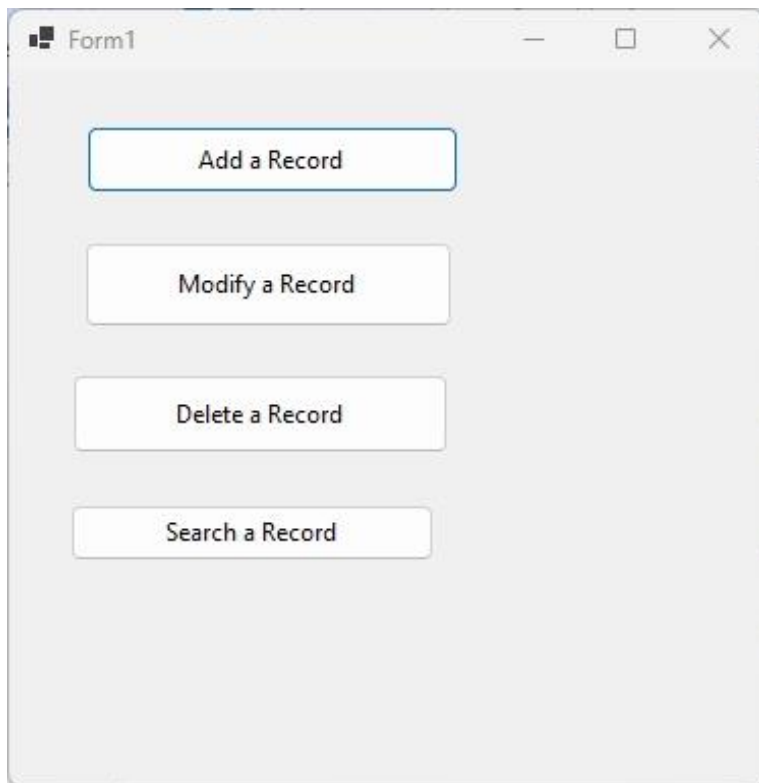
Following window will appear

Install System.Data.OleDb



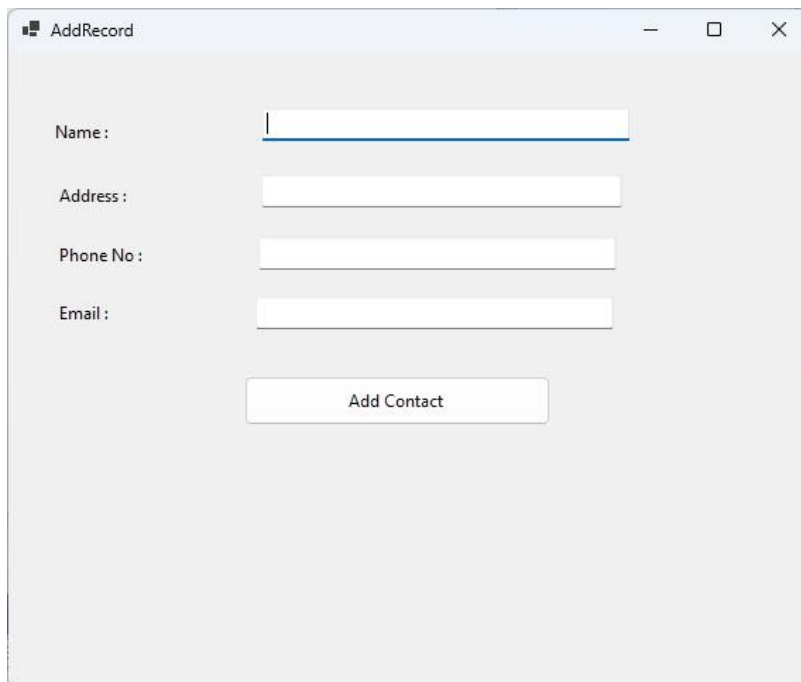
Create Following Forms in this ContactsMSAccess Application

Form1



A screenshot of a Windows application window titled "Form1". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main area of the window is light gray and contains four rectangular buttons stacked vertically. The buttons are labeled "Add a Record", "Modify a Record", "Delete a Record", and "Search a Record" from top to bottom. Each button has a thin blue border and a light gray fill.

AddRecord Form



A screenshot of a Windows application window titled "AddRecord". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main area is light gray and contains four text input fields stacked vertically, each preceded by a label: "Name:", "Address:", "Phone No:", and "Email:". Each input field is a white rectangle with a thin blue border. Below the input fields is a single rectangular button labeled "Add Contact".

ModifyRecord Form

The screenshot shows a window titled "ModifyRecord" with standard Windows window controls (minimize, maximize, close). The form contains four input fields: "Name" (containing "raman"), "Address", "Mobile No", and "Email". A "Modify Contact" button is positioned to the right of the Name field.

ModifyRecord

Name :

Address :

Mobile No :

Email :

Modify Contact

### DeleteRecord Form

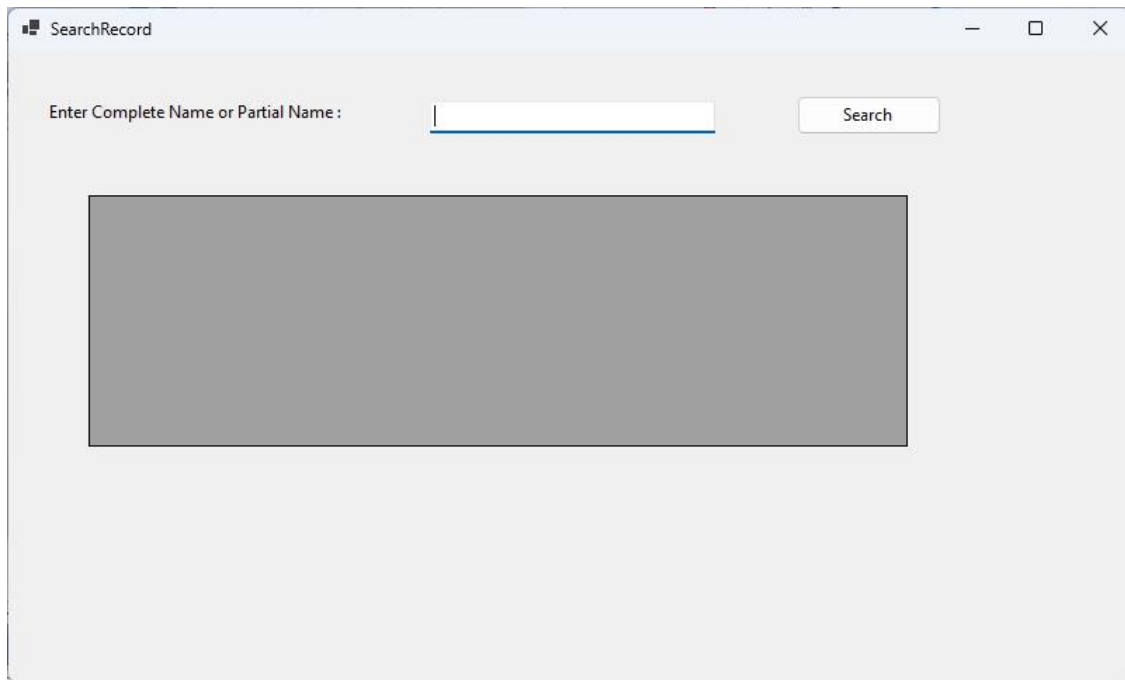
The screenshot shows a window titled "DeleteRecord" with standard Windows window controls (minimize, maximize, close). The form contains a single input field labeled "Enter Contact Name to Delete :". A "Delete Contact" button is centered below the input field.

DeleteRecord

Enter Contact Name to Delete :

Delete Contact

### SearchRecord Form



Add a DataGridView to Form SearchRecord.

Following are Code for the above forms.

Code for Form1

```
private void button1_Click(object sender, EventArgs e)
{
    AddRecord a = new AddRecord();
    a.Show();
}

private void button2_Click(object sender, EventArgs e)
{
    ModifyRecord a = new ModifyRecord();
    a.Show();
}

private void button3_Click(object sender, EventArgs e)
{
    DeleteRecord a = new DeleteRecord();
    a.Show();
}

private void button4_Click(object sender, EventArgs e)
{
    SearchRecord a = new SearchRecord();
    a.Show();
}
```

---

Following is the code for AddRecord Form

Following is the using statement for AddRecord Form

```
using System.Data.OleDb;
```

Following is the code for AddRecord Button

```
private void button1_Click(object sender, EventArgs e)
{
```

```

        string cname = textBox1.Text;
        string caddress = textBox2.Text;
        string cmobileneno = textBox3.Text;
        string cemail = textBox4.Text;
        OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\\csharpmsaccess\\contacts.accdb");
        OleDbCommand cmd = con.CreateCommand();
        con.Open();
        cmd.CommandText = "Insert into
contacts(cname,caddress,cmobileneno,ceail) Values(' + cname + ',' + caddress +
',' + cmobileneno + ',' + cemail + ')"';
        cmd.Connection = con;
        cmd.ExecuteNonQuery();
        MessageBox.Show("Contact Record Added");
        con.Close();
    }

```

---

Following is the code for ModifyRecord Form

Following is the using statement

```
using System.Data.OleDb;
```

Following is the code for Modify Contact Button

```

private void button1_Click(object sender, EventArgs e)
{
    string namestr = textBox1.Text;
    string addressstr = textBox1.Text;
    string mobilenostr = textBox3.Text;
    string emailstr = textBox4.Text;
    int rs = 0;

    OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\\csharpmsaccess\\contacts.accdb");
    con.Open();
    using var cmd = new OleDbCommand("update contacts set caddress=' +
addressstr + ',' + cmobileneno=' + mobilenostr + ',' + cemail=' + emailstr + ' where
cname=' + namestr + '"", con);
    rs = cmd.ExecuteNonQuery();
    if (rs > 0)
    {
        MessageBox.Show(rs + " Contacts Record Updated");
    }
    else
    {
        MessageBox.Show("Contact Record can't be Updated");
    }
}

```

---

Following is the code for DeleteRecord Form

Following is the using statement

```
using System.Data.OleDb;
```

Following is the code for Delete Record Button

```

private void button1_Click(object sender, EventArgs e)
{
    string cname = textBox1.Text;

```



```

        OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\\csharpmsaccess\\contacts.accdb");
        OleDbCommand cmd = con.CreateCommand();
        con.Open();
        cmd.CommandText = "delete from contacts where cname='" + cname + "'";
        cmd.Connection = con;
        cmd.ExecuteNonQuery();
        MessageBox.Show("Contact Record Deleted");
        con.Close();
    }

```

---

Following is the code for SearchRecord Form

Following is the using statement

```

using System.Data;
using System.Data.OleDb;

```

Following is the code for Search Button

```

private void button1_Click(object sender, EventArgs e)
{
    string cnamestr = textBox1.Text;
    OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\\csharpmsaccess\\contacts.accdb");
    con.Open();
    string q = "SELECT * FROM contacts WHERE cname LIKE '%" + cnamestr +
"%';

    using OleDbDataAdapter a = new OleDbDataAdapter(q, con);
    using DataTable t = new DataTable();
    a.Fill(t);
    dataGridView1.DataSource = t;
}

```

---