

# C# Contacts System Project to connect to MySQL Server in Visual Studio Community Edition 2022

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First of all download mysql server from [www.wampserver.com](http://www.wampserver.com)

create database contacts

Following commands can be used to create database contacts and table contacts in it

create database contacts;

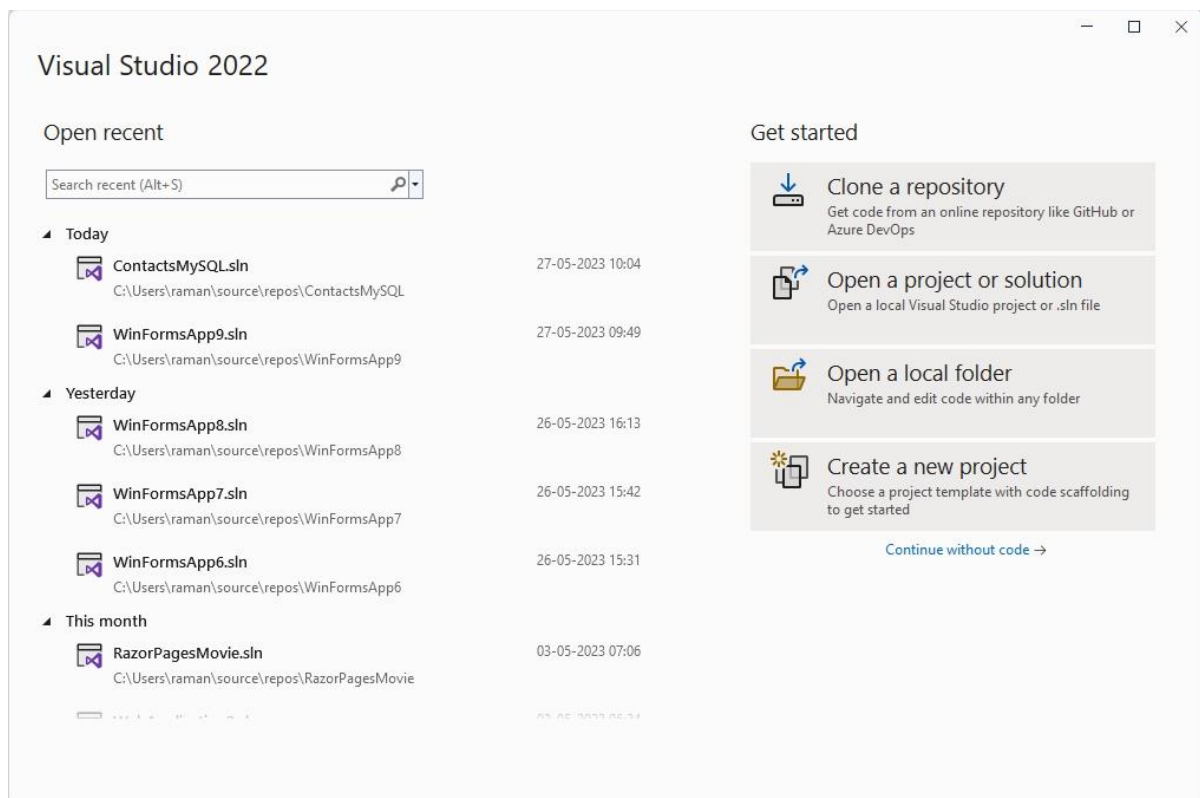
use contacts;

create table contacts(cname varchar(20),caddress varchar(20), cmobileno varchar(20),cemail  
varchar(20));

Next Install Microsoft Visual Studio 2022 Community Edition.

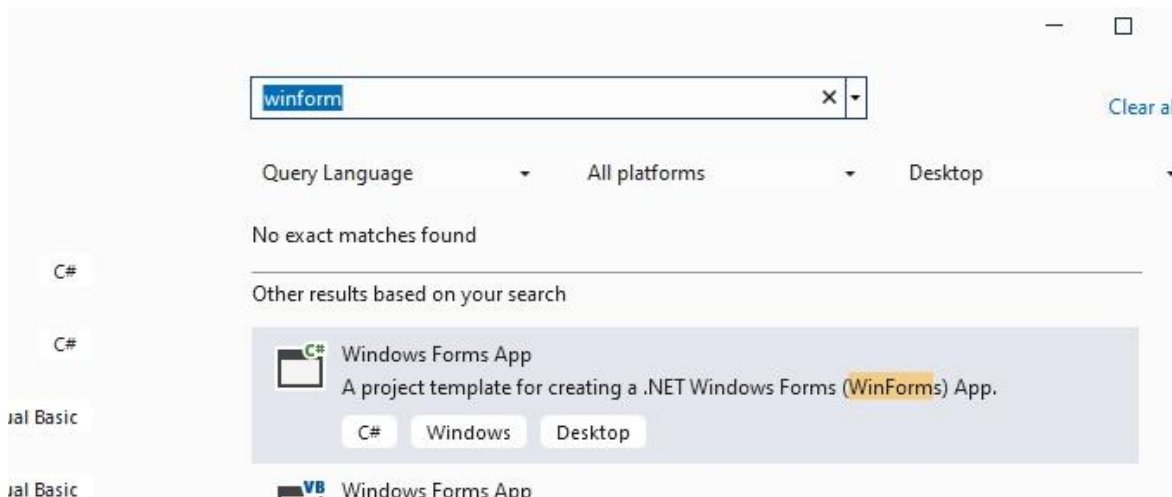
Start Visual Studio

Following Screen will appear



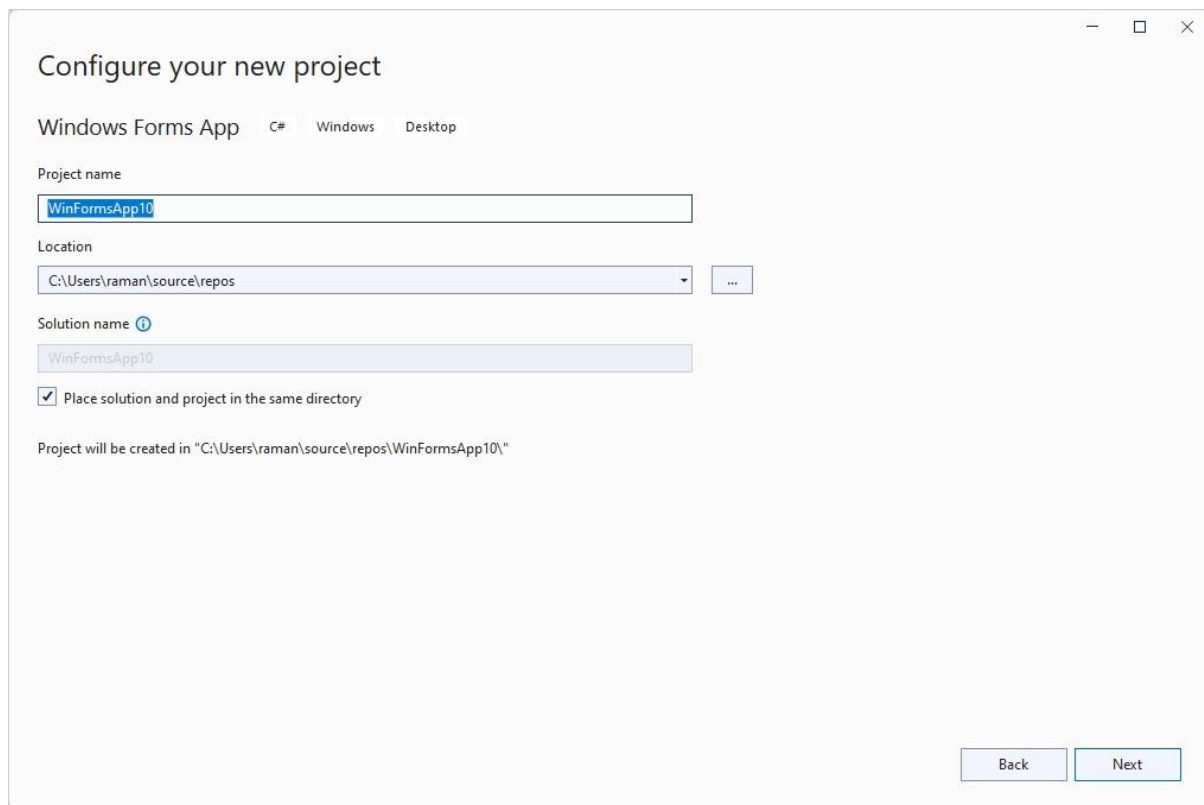
Click on Create New Project

Following window will appear



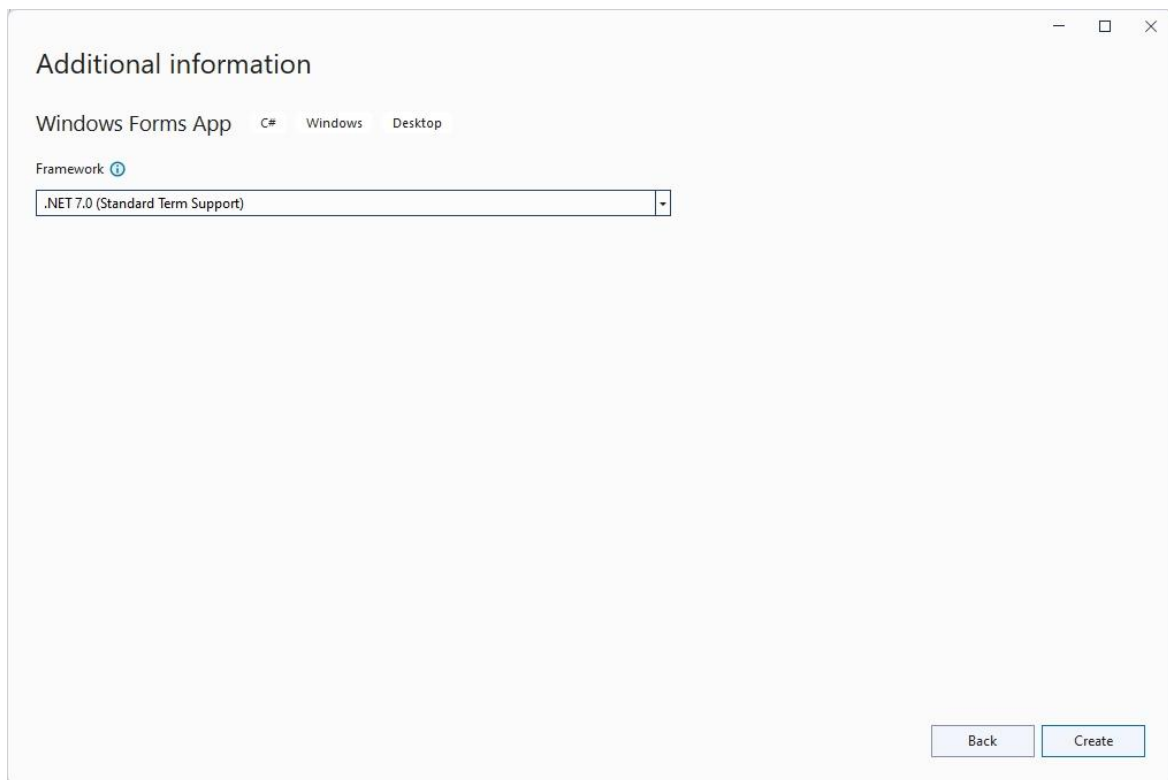
Type winform in search box and select Windows Forms App and Click Next

Following window will appear



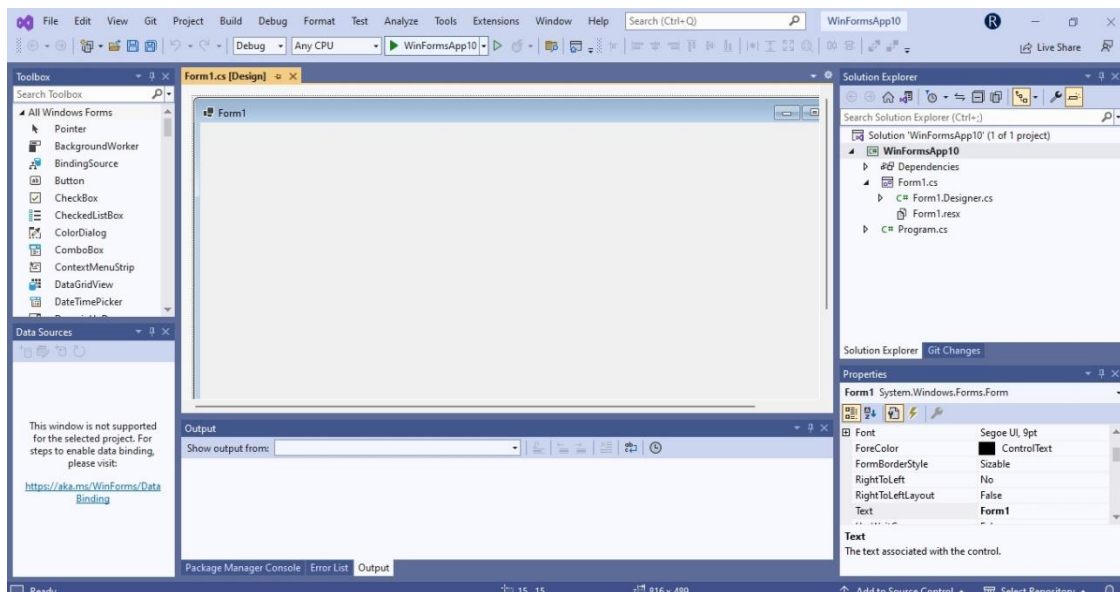
Click Next

Following window will appear



Click Create

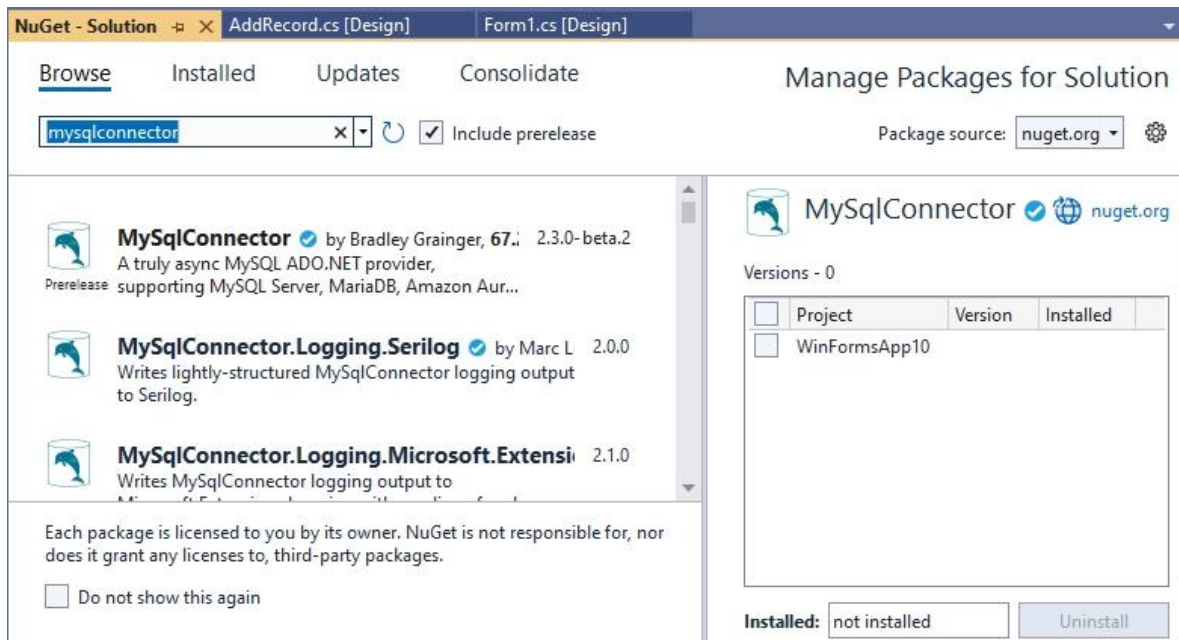
Now Project with Name WinFormsApp10 will be created and you will see the following window.



Now we will place controls on Form1 but first we have to include MySQL Connector Dependency in our project, we do this by using NuGet Package Manager.

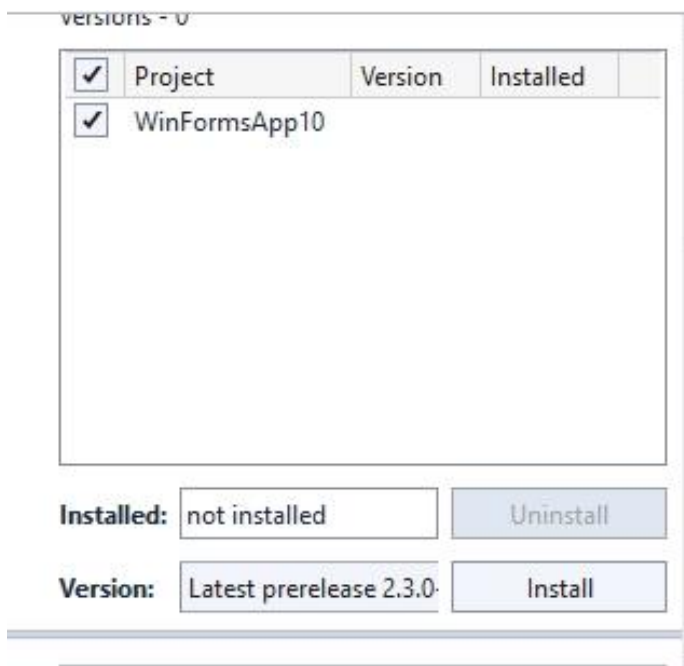
Go to Tools -> NuGet Package Manager -> Manage NuGet Packages for Solution.

You will see following output



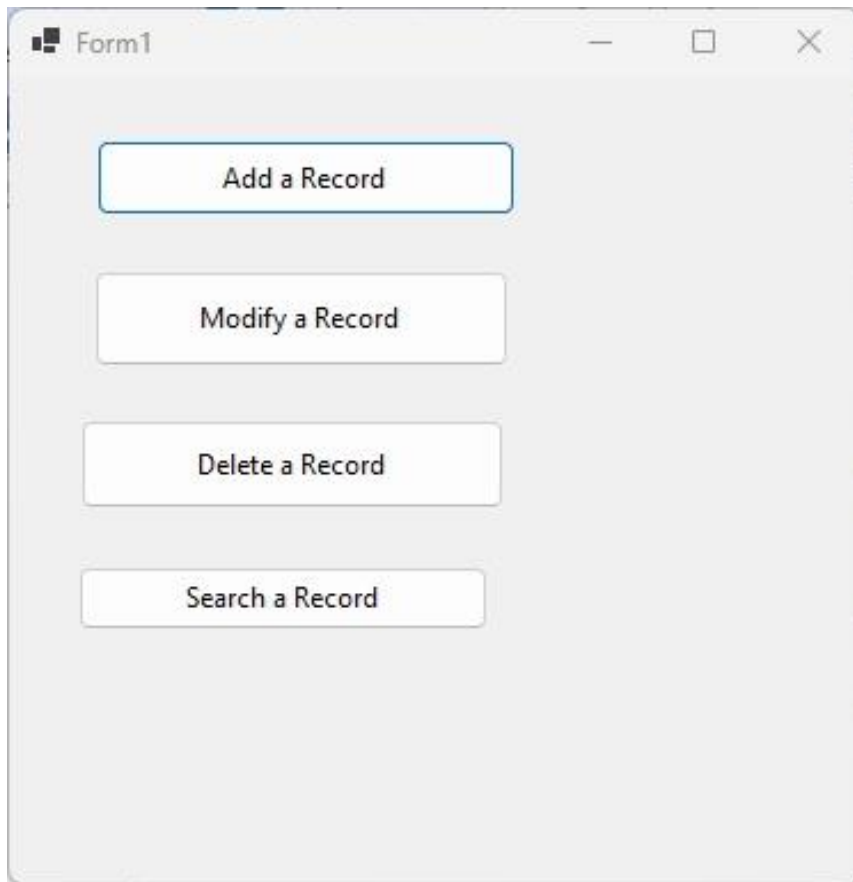
Now Select first option that is MySQLConnector.

and click on install



After clicking on install MySQL Connector for dot net will be installed in the project.

Now place controls on Form1 as shown in the following window



Code for Form1 is

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

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

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

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

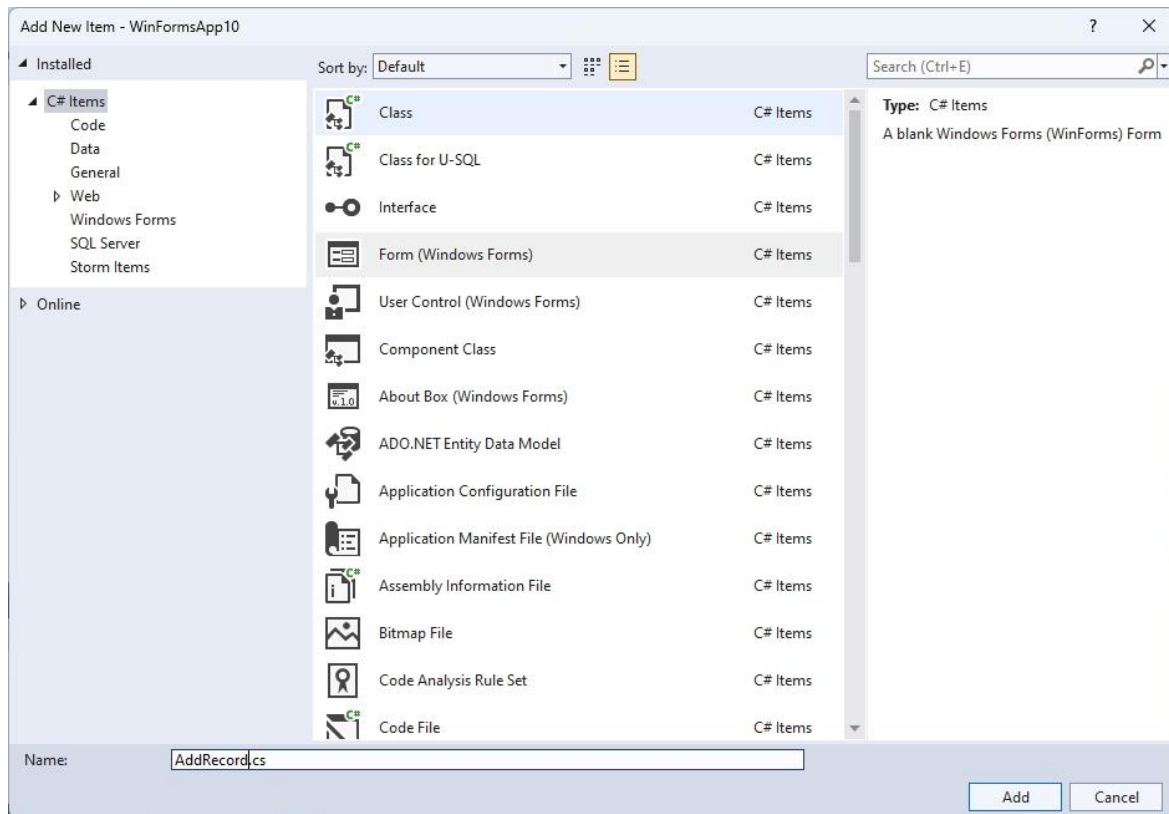
These are the code for four buttons placed on the form

Add Button is button1, modify button is button 2, delete button is button3 and search button is button4.

Now Add a Form AddRecord to Project.

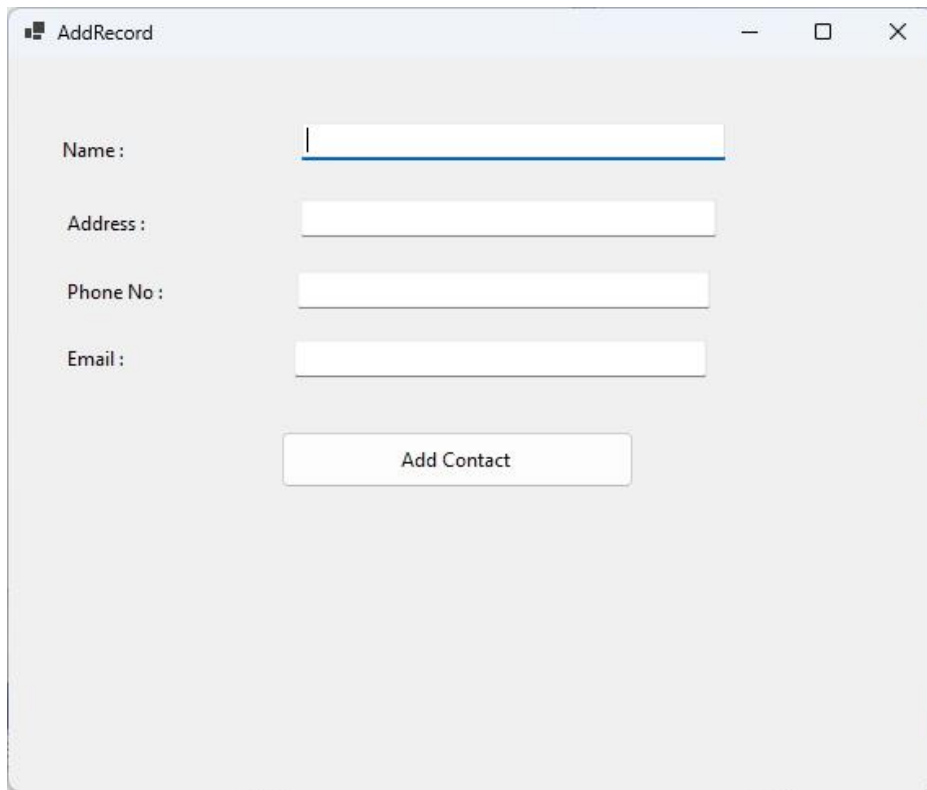
Right click on Project (WinFormsApp10) and Select Add -> Form (Windows Form)

Following window will appear



Click on Add

A new Windows Form will be created in the Project with name AddRecord. Now Place Controls on AddRecord Form as shown in the following window.

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 content area is light gray and contains four text input fields stacked vertically. The first field is labeled "Name:" and has a blue border. The second field is labeled "Address:" and has a gray border. The third field is labeled "Phone No:" and has a gray border. The fourth field is labeled "Email:" and has a gray border. Below these fields is a button labeled "Add Contact" with a gray border and a light gray background.

Code for Add Contact Button is

Following are the using statement

using MySQLConnector;

Following is the code that should be written in Add Contact Button Click

```
string namestr = textBox1.Text;

    string addressstr = textBox2.Text;
    string mobilenostr=textBox3.Text;
    string emailstr=textBox4.Text;

    int rs = 0;

    string constr = "Server=localhost;User ID=root;Password=;Database=contacts";
    using var connection = new MySqlConnection(constr);

    connection.Open();

    using var mysqlcmd = new MySqlCommand("insert into
contacts(cname,caddress,cmobilen,cemail) values('" + namestr + "','" + addressstr + "','" +
mobilenostr + "','" + emailstr + "')", connection);

    rs = mysqlcmd.ExecuteNonQuery();

    if (rs > 0)
    {
```



```

        MessageBox.Show("Record Inserted");
    }
    else
    {
        MessageBox.Show("Record Not Inserted");
    }
}

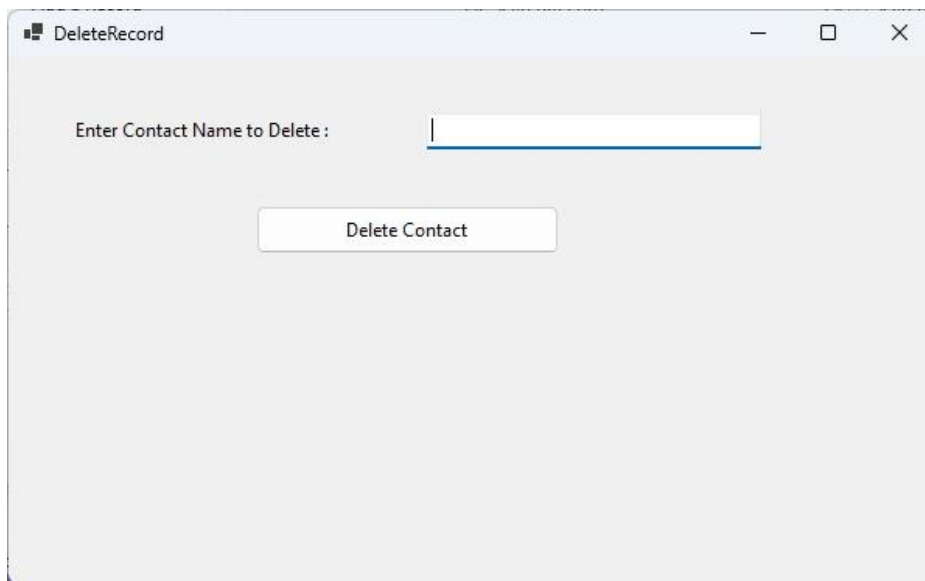
```

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Now add another form with name DeleteRecord

Right click on Project (WinFormsApp10) and Select Add -> Form (Windows Form)

Add Following controls to Delete Record Form.



Following is the code for DeleteRecord Form.

Following is the using statement

using MySqlConnection;

Code for Delete Contact Button

```

string namestr = textBox1.Text;

int rs = 0;

string constr = "Server=localhost;User ID=root;Password=;Database=contacts";

using var connection = new MySqlConnection(constr);

connection.Open();

using var mysqlcmd = new MySqlCommand("delete from contacts where cname = '" +
namestr + "'", connection);

rs = mysqlcmd.ExecuteNonQuery();

```

```

if (rs > 0)
{
    MessageBox.Show(rs + " Contacts Record Deleted");
}
else
{
    MessageBox.Show("Contact Record Not Deleted");
}

```

---

Now Add a Form ModifyRecord and place following controls on the form.

The screenshot shows a Windows application window titled "ModifyRecord". Inside the window, there are four text boxes arranged vertically, each preceded by a label: "Name :", "Address :", "Mobile No :", and "Email :". The "Name" text box contains the text "raman". To the right of the "Name" text box is a button labeled "Modify Contact".

Code for Modify Contact Button is

Following is the using statement

using MySqlConnection;

Following is the code for Modify Contact Button

```

string namestr = textBox1.Text;

    string addressstr = textBox2.Text;

    string mobilestr = textBox3.Text;

    string emailstr=textBox4.Text;

    int rs = 0;

    string constr = "Server=localhost;User ID=root;Password=;Database=contacts";

    using var connection = new MySqlConnection(constr);

```

```

connection.Open();

using var mysqlcmd = new MySqlCommand("update contacts set caddress='" + addressstr +
"',cmobilenono='" + mobilestr + "',cemail='" + emailstr + "' where cname='" + namestr + "'", connection);

rs = mysqlcmd.ExecuteNonQuery();

if (rs > 0)
{
    MessageBox.Show("Record Modified");
}
else
{
    MessageBox.Show("Record Not Modified");
}

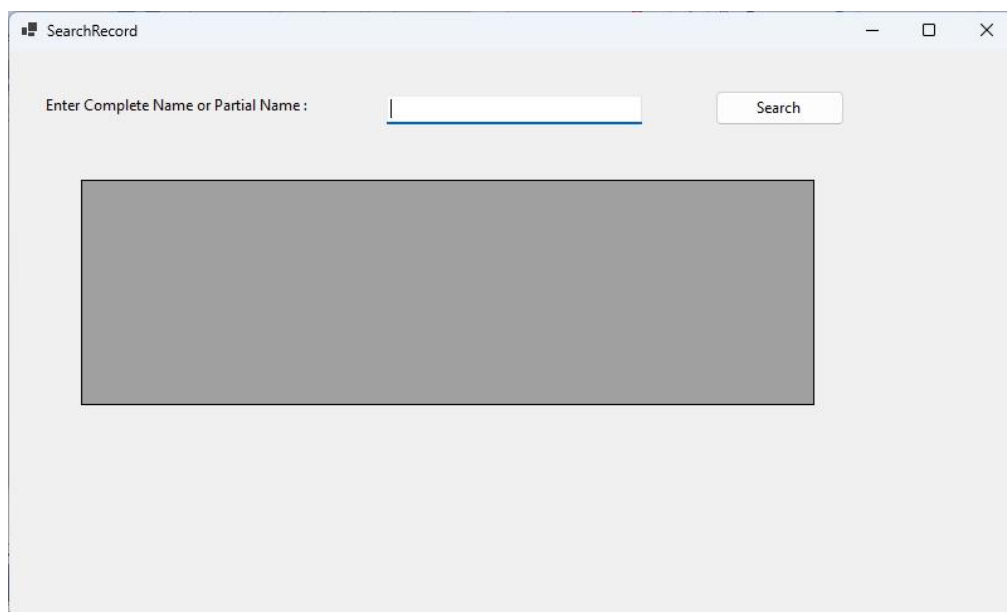
```

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Now Add a Form SearchRecord and place the controls on the form as shown below

There should be a DataGridView Control to be placed on the form which will display the records searched.

DataGridView control can be founded in Data Section in the ToolBox



Code for Search Form is as below

Following is the using statement

```
using MySqlConnection;
```

```
using System.Data;
```

Following is the code for Search Button

```

string namestr = textBox1.Text;

string constr = "Server=localhost;User ID=root;Password=;Database=contacts";

using var connection = new MySqlConnection(constr);

connection.Open();

using MySqlDataAdapter a = new MySqlDataAdapter("SELECT * FROM contacts where cname
like '%" + namestr + "%'", connection);

using DataTable t = new DataTable();

a.Fill(t);

dataGridView1.DataSource = t;

```

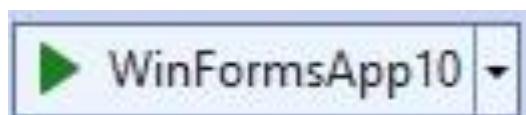
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Now to Build the project right click on project and select Build.

Following will be the output



To Run the project click on button as shown below



Now how can we run this c#.net application on some other computer or how can we create a setup file for this winform application for this purpose Publish option is used.

There are two ways to run this created application some other computer which are

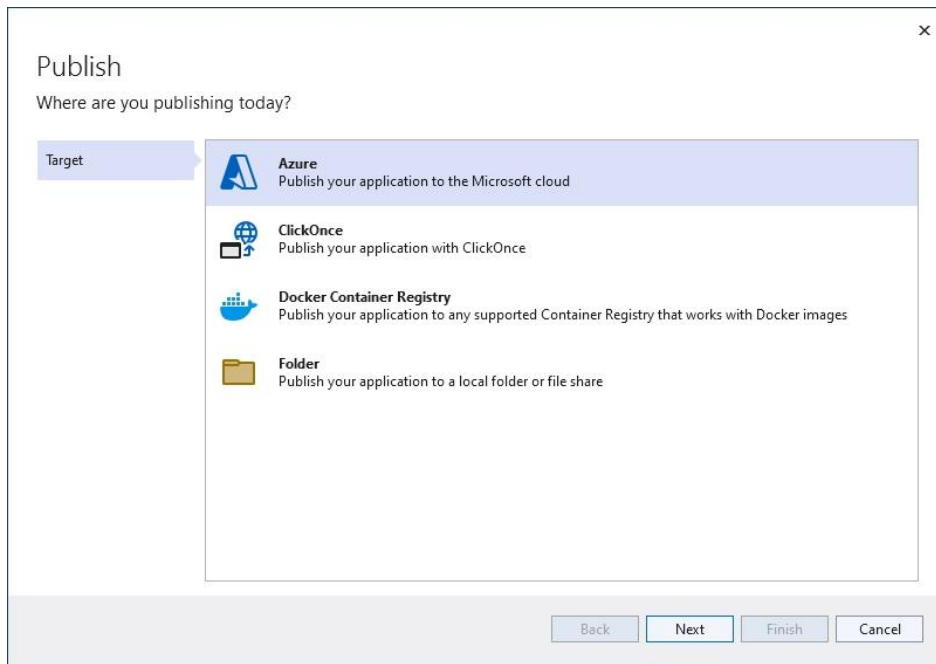
- create a setup file using ClickOnce
- create a executable and other required files on a windows folder

Following step will guide you through creating executable file for the application file in a windows folder.

You can also try ClickOnce option.

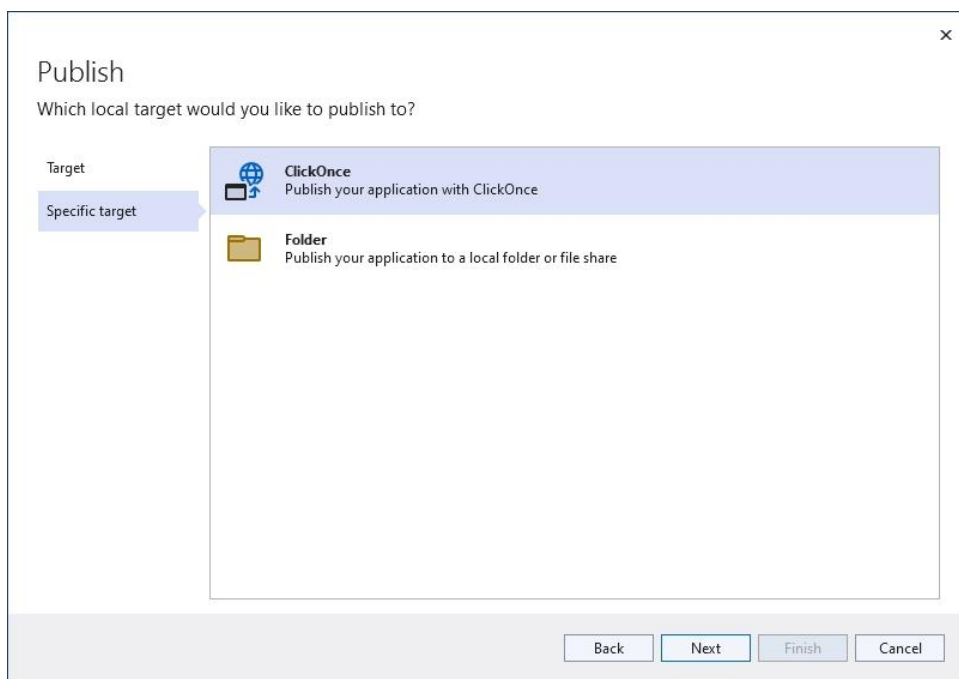
Right click on Project and select Publish.

Following window will appear



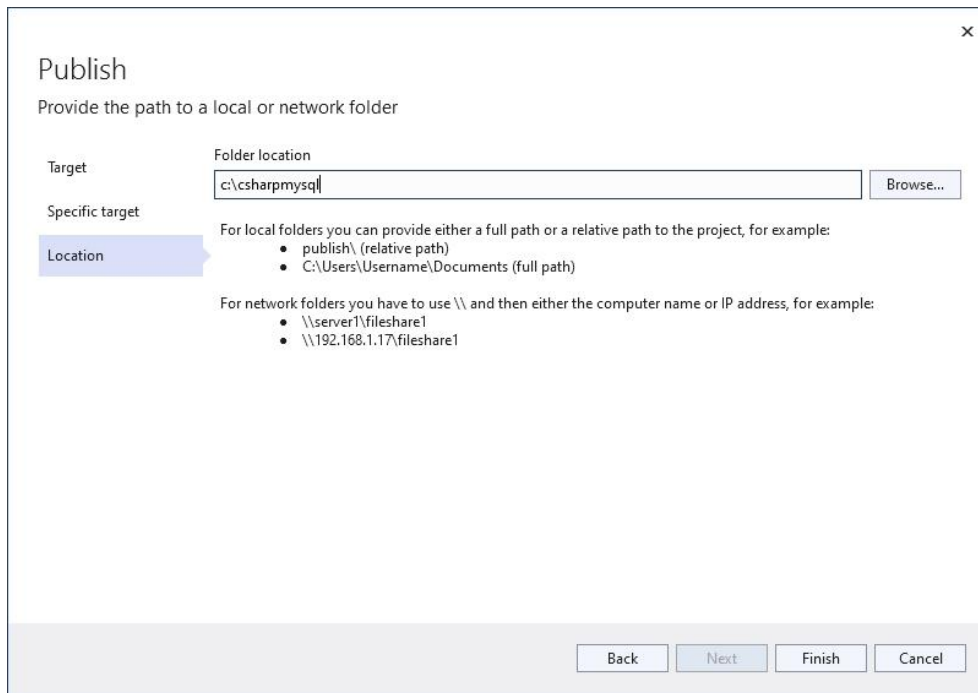
Select option Folder and click Next

Following window will appear



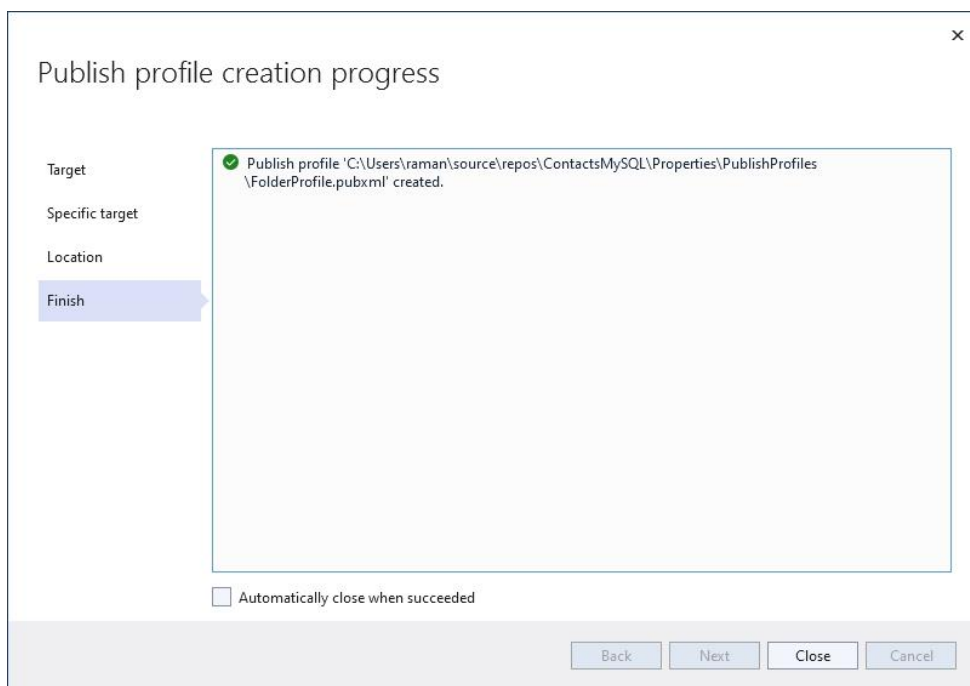
Select Folder and click Next

Following window will appear



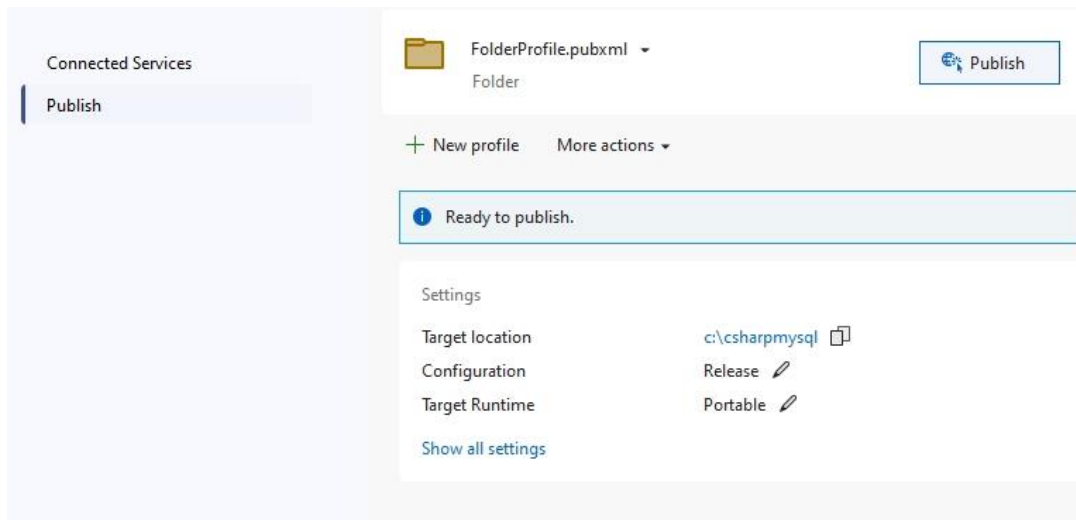
In the Folder location give the path of the directory where you want to place the setup file.

Click on Finish and setup file will be created and you will see the following window



Click Close button.

Following window will appear.



Now click on Publish Button