Exercise 01

Step 01: Create a new database

Step 02: Install Required Package (NuGet)
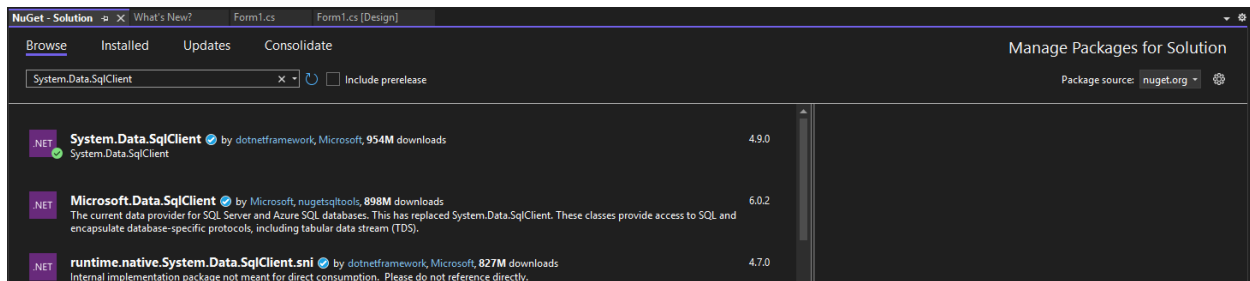
Step 03: Create the Windows Forms App

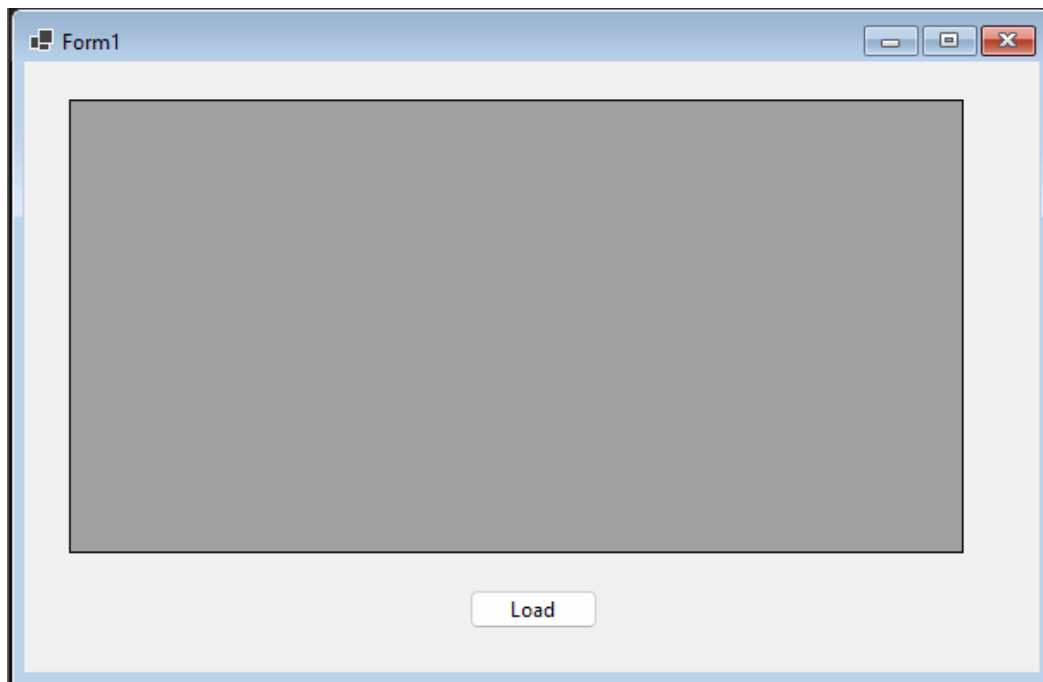## Step 04: Add These Using Directives at the Top of the Code File

```
using System.Data.SqlClient;
using System.Data;
```

Step 05: Add Controls to the Form

```csharp
using System.Data.SqlClient;
using System.Data;

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

        private void Form1_Load(object sender, EventArgs e)
        {

        }

        private void button1_Click(object sender, EventArgs e)
        {
            string connectionString = "Data Source=GAMIKA\\SQLEXPRESS;Initial
Catalog=StudentDB;Integrated Security=True";

            string sql = "SELECT * FROM Students";

            SqlConnection connection = new SqlConnection(connectionString);

            SqlDataAdapter adapter = new SqlDataAdapter(sql, connection);

            DataSet ds = new DataSet();

            try
            {
                connection.Open();
                adapter.Fill(ds);
```

```
        }
        catch (SqlException ex)
        {
            MessageBox.Show("SQL Error: " + ex.Message);
        }
        finally
        {
            connection.Close();
        }

        dataGridView1.DataSource = ds.Tables[0];
    }
  }
}
```
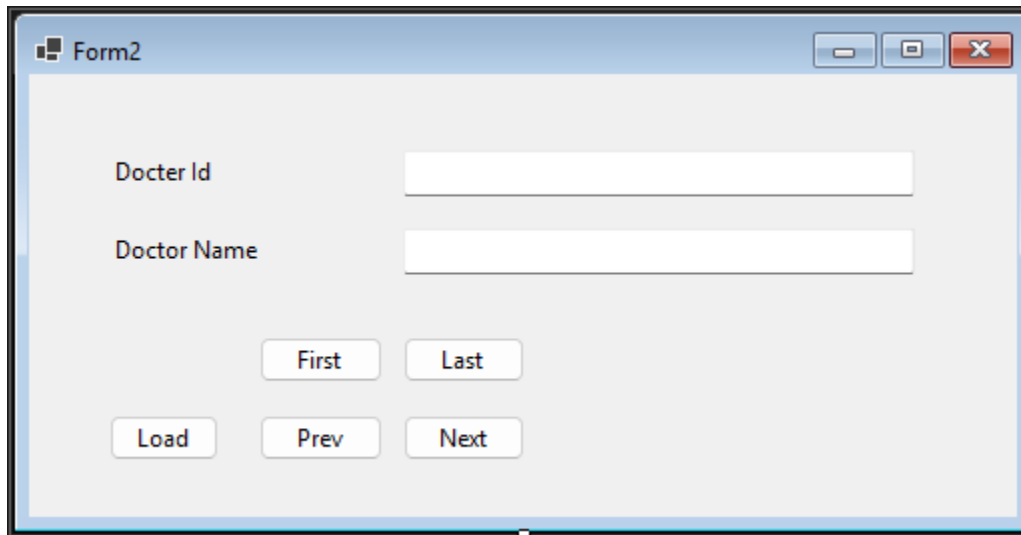

Exercise 02

Step 01: Design Your Form
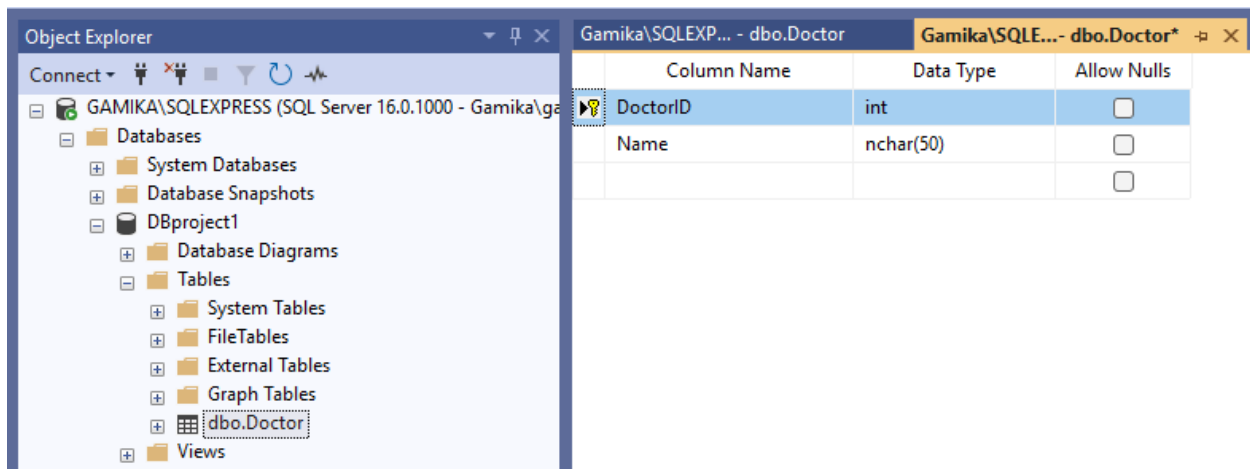
Step 02: Add Required Namespaces

```
using System.Data;

using System.Data.SqlClient;
```

Step 03: Create a new database

	DoctorID	Name	
	1	KUMARA N K	...
	2	SILVA Y K	...
	3	YAPA W K	...
	4	MALANI N H	...
►*	NULL	NULL	

Step 04:

```csharp
private void btnLoad_Click(object sender, EventArgs e)
{
    connection = new SqlConnection("Data Source=GAMIKA\\SQLEXPRESS;Initial
Catalog=StudentDB;Integrated Security=True");
    adapter = new SqlDataAdapter("SELECT * Doctor", connection);

    dataTable = new DataTable();
    adapter.Fill(dataTable);

    BindingSource.DataSource = dataTable;
    txtIndexNo.DataBindings.clear();
    txtName.DataBindings.Clear();

    txtIndexNo.DataBindings.Add("Text", BindingSource, "DoctorID");
    txtName.DataBindings.Add("Text", BindingSource, "Name");
}
```

Step 05: Add Navigation Button Functionalities

```csharp
private void btnFirst_Click(object sender, EventArgs e)
{
    BindingSource.MoveFirst();
}

 private void btnLast_Click(object sender, EventArgs e)
{
    BindingSource.MoveLast();
}

 private void btnPrev_Click(object sender, EventArgs e)
{
    BindingSource.MovePrevious();
}

 private void btnNext_Click(object sender, EventArgs e)
{
    BindingSource.MoveNext();
}
```

Step 05: Step Run the application by pressing F5

Form2

Docter Id   1

Doctor Name   KUMARA N K

First   Last

Load   Prev   Next

Form2

Docter Id   4

Doctor Name   MALANI N H

First   Last

Load   Prev   Next

Form2

Docter Id   3

Doctor Name   YAPA W K

First   Last

Load   Prev   Next

Form2

Docter Id   4

Doctor Name   MALANI N H

First   Last

Load   Prev   Next