

LINQ

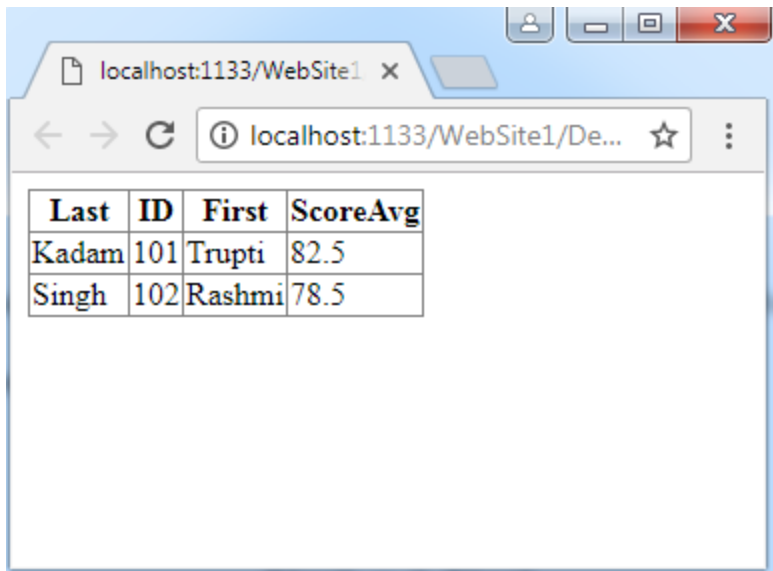
1. Write a C# program to show the data from database using LINQ(objectdatasource)

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
public class Student
{
    public string First
    {
        get;
        set;
    }
    public string Last
    {
        get;
        set;
    }
    public int ID
    {
        get;
        set;
    }
    public List<int> scores;
    public Student()
    {
    }
}
public class StudData
{
    public static List<Student> s = new List<Student>
    {
        new Student{First="Trupti",Last="Kadam",ID=101,
            scores=new List<int>{75,82,84,89}},
        new Student{First="Rashmi",Last="Singh",ID=102,
            scores=new List<int>{65,80,70,99}}
    };
}
public class StudAvg
{
    public int ID;
    public string First;
    public string Last;
    public double ScoreAvg;
```

```
public IEnumerable<int> getstudList=from Student in StudData.s select Student.ID;
```

```
public IEnumerable<StudAvg> results = from i in StudData.s
    where i.scores[1] > 70
    select new StudAvg
    {
        ID = i.ID,
        First = i.First,
        Last = i.Last,
        ScoreAvg = i.scores.Average()
    };
}
```

OUTPUT:

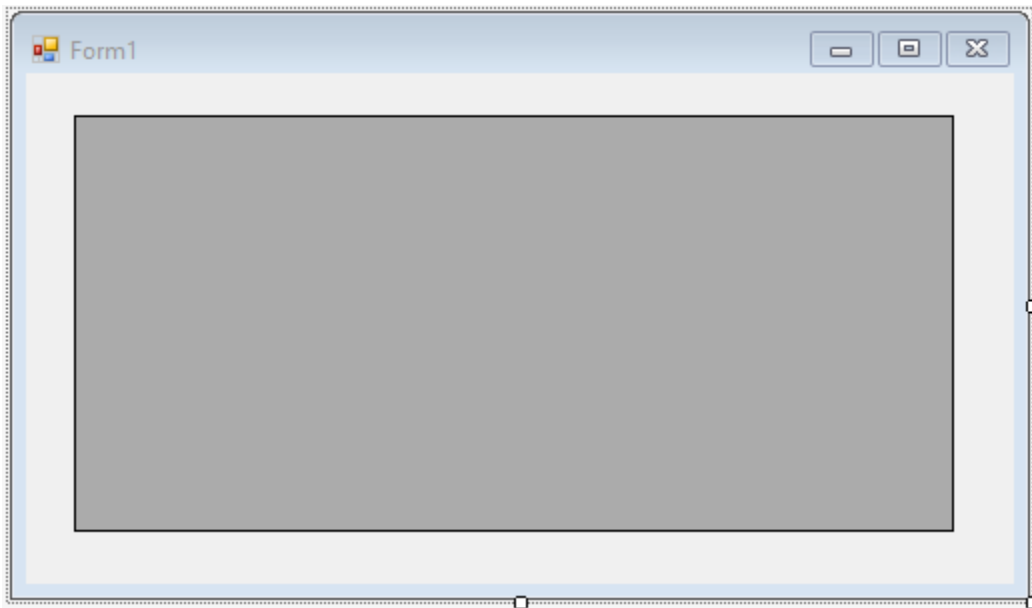


A screenshot of a web browser window. The address bar shows 'localhost:1133/WebSite1/De...'. The main content area displays a table with four columns: Last, ID, First, and ScoreAvg. The table contains two rows of data: one for 'Kadam' with ID 101 and ScoreAvg 82.5, and another for 'Singh' with ID 102 and ScoreAvg 78.5.

Last	ID	First	ScoreAvg
Kadam	101	Trupti	82.5
Singh	102	Rashmi	78.5

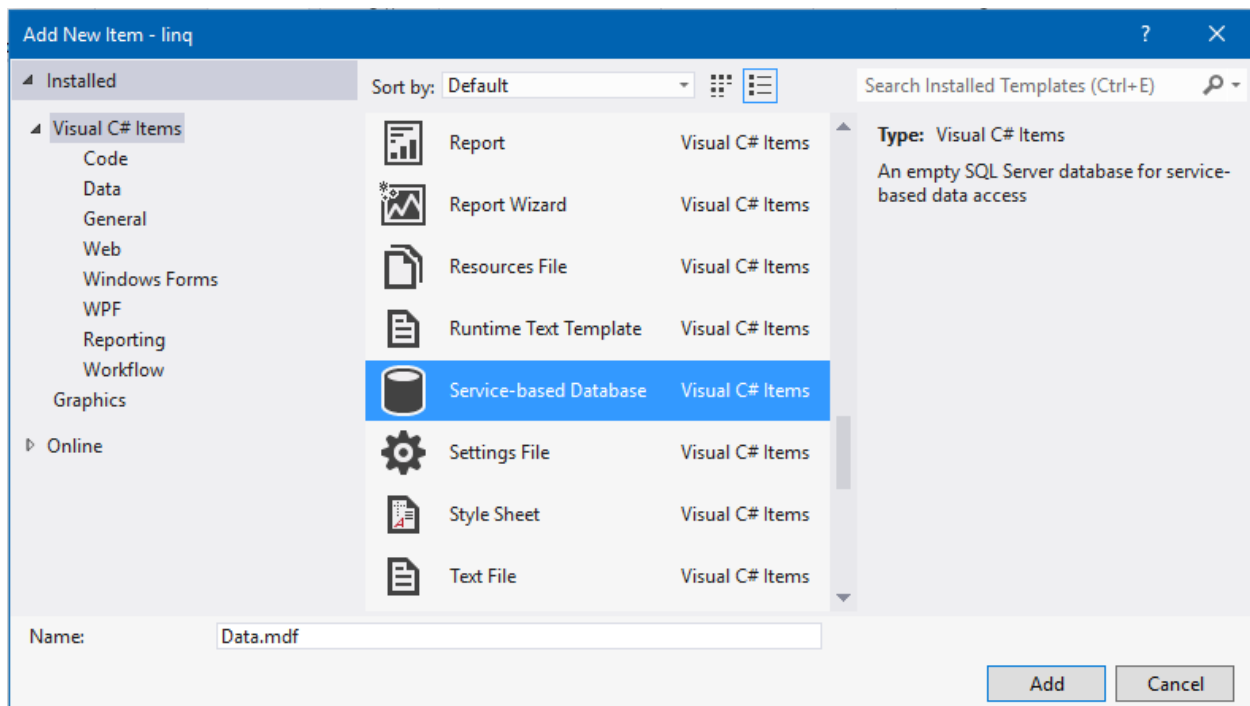
2. Write a C# program to find Employee details from Dataset using LINQ

Form design:




Create database:

Right click on project-> add -> add new item -> service-based database



Create emp table:

Update Script File: `dbo.emp.sql`

	Name	Data Type	Allow Nulls	Default
	eid	int	<input type="checkbox"/>	
	enm	varchar(50)	<input checked="" type="checkbox"/>	
	job	varchar(50)	<input checked="" type="checkbox"/>	
	sal	int	<input checked="" type="checkbox"/>	
			<input type="checkbox"/>	

Design T-SQL

```
CREATE TABLE [dbo].[emp] (  
    [eid] INT NOT NULL,  
    [enm] VARCHAR (50) NULL,  
    [job] VARCHAR (50) NULL,  
    [sal] INT NULL,  
    PRIMARY KEY CLUSTERED ([eid] ASC)  
);
```

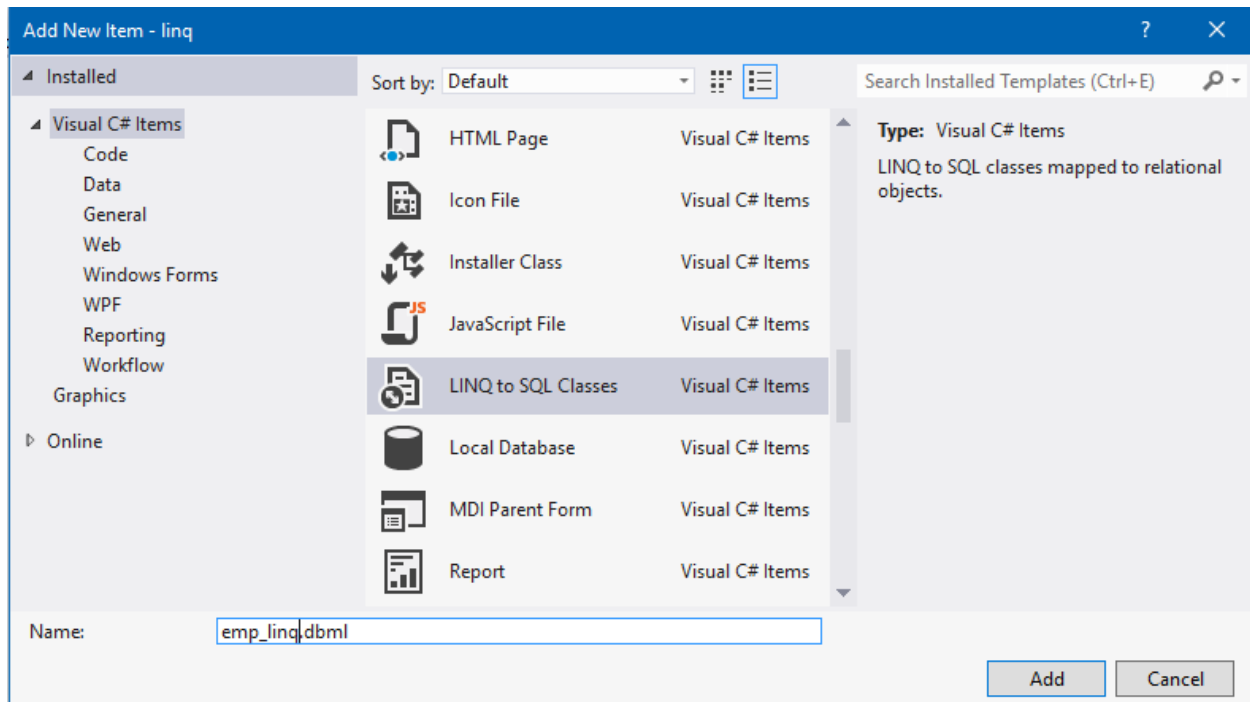
Insert data into emp table:

Max Rows: 1000

	eid	enm	job	sal
	1	ram	assitant	12000
	2	sham	operator	10000
	3	priti	operator	10000
	4	baban	admin	20000
▶▶	NULL	NULL	NULL	NULL

Add "linq to sql classes" to application;

Right click on project-> add -> add new item -> linq to classes

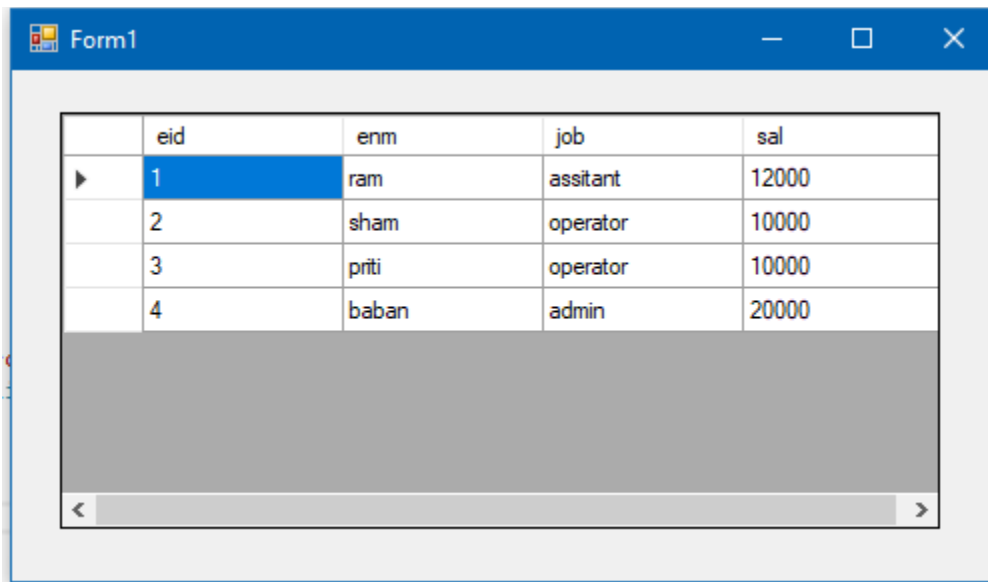


Form code and header files:

```
using System.Data.SqlClient;
SqlConnection con;
private void Form1_Load(object sender, EventArgs e)
{
    con = new SqlConnection("Data
Source=(LocalDB)\\v11.0;AttachDbFilename=C:\\Users\\Shreesh\\documents\\visual studio
2012\\Projects\\linq\\linq\\data.mdf;Integrated Security=True");
    emp_linqDataContext ds = new emp_linqDataContext();
    var exp = (from str in ds.emps
    select new
    {
        str.eid,
        str.enm,
        str.job,
```

```
        str.sal  
    });  
    dataGridView1.DataSource = exp;  
}
```

Form run:



The screenshot shows a Windows application window titled "Form1". Inside the window is a data grid with five columns: an index column, "eid", "enm", "job", and "sal". The first row is selected, showing eid 1, enm ram, job assitant, and sal 12000. Below the grid is a large grey rectangular area and a horizontal scrollbar.

	eid	enm	job	sal
▶	1	ram	assitant	12000
	2	sham	operator	10000
	3	p riti	operator	10000
	4	bab an	admin	20000