BindingSource Application – with DataRelation

```sql
create database Music_DB
go
use Music_DB
go

create table RecordCompany(
RCid int primary key identity(1,1),
Name varchar(50)
)

create table Singer(
Sid int primary key identity(1,1),
Name varchar(50),
Age int,
RCid int foreign key references RecordCompany(RCid)
)

select * from RecordCompany
select * from Singer

insert into RecordCompany
values ('Record Company 1'), ('Record Company 2')

insert into Singer
values ('bon jovi', 56, 1), ('guns n roses', 45, 2)

select * from RecordCompany
select * from Singer
```
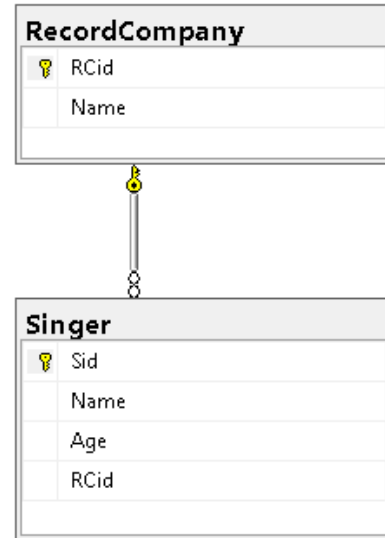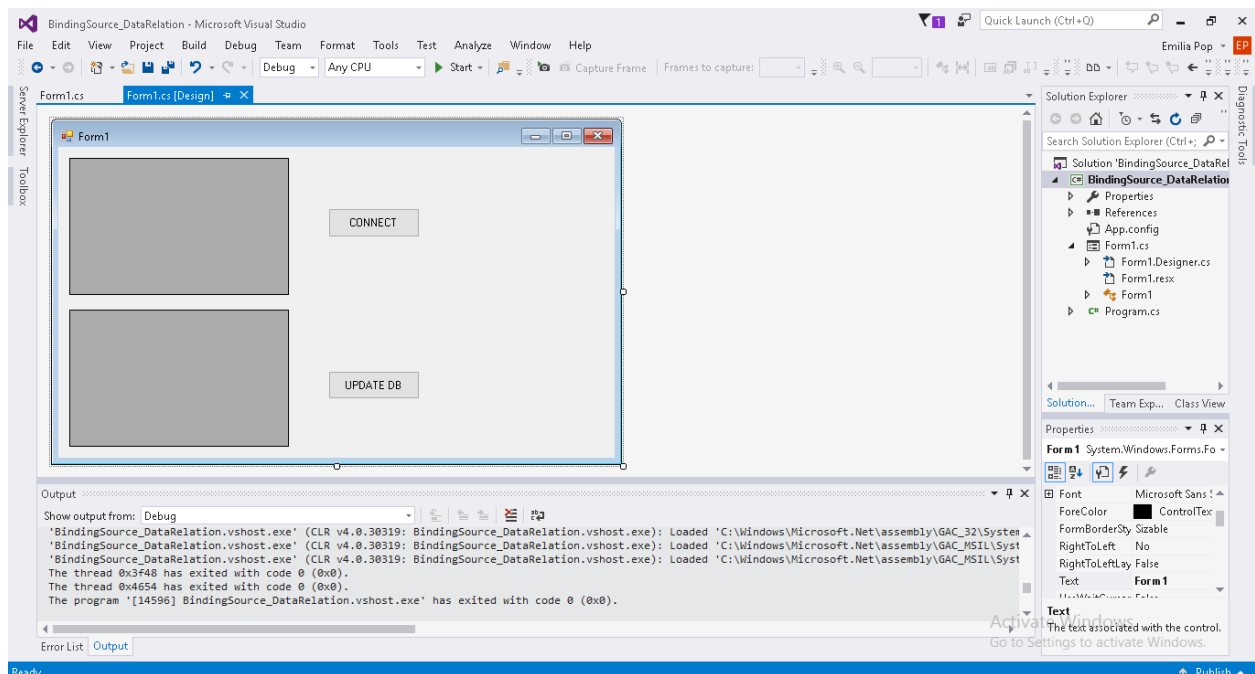
	RCid	Name
1	1	Record Company 1
2	2	Record Company 2

	Sid	Name	Age	RCid
1	1	bon jovi	56	1
2	2	guns n roses	45	2

RecordCompany
- 🔑 RCid
- Name

Singer
- 🔑 Sid
- Name
- Age
- RCid

WINDOWS FORMS APPLICATION / WINDOWS FORMS APP(.NET FRAMEWORK)

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

namespace BindingSource_DataRelation
{
    public partial class Form1 : Form
    {
        SqlConnection connection;
        SqlDataAdapter daSinger, daRecordCompany;
        DataSet ds;
        SqlCommandBuilder cb;
        BindingSource bsSinger, bsRecordCompany;
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            daSinger.Update(ds, "Singer");
        }



        private void button2_Click(object sender, EventArgs e)
        {
            connection = new SqlConnection(@"Data Source = DESKTOP-ATJN5FL\SQLEXPRESS;
Initial Catalog=Music_DB; Integrated Security = True");
            ds = new DataSet();
            daSinger = new SqlDataAdapter("select * from Singer", connection);
            daRecordCompany = new SqlDataAdapter("select * from RecordCompany",
connection);
            cb = new SqlCommandBuilder(daSinger);

            daSinger.Fill(ds, "Singer");
            daRecordCompany.Fill(ds, "RecordCompany");

            DataRelation dr = new DataRelation("FK_RecordCompany_Singer",
ds.Tables["RecordCompany"].Columns["RCid"], ds.Tables["Singer"].Columns["RCid"]);
            ds.Relations.Add(dr);

            bsSinger = new BindingSource();
            bsRecordCompany = new BindingSource();

            bsRecordCompany.DataSource = ds;
            bsRecordCompany.DataMember = "RecordCompany";

            bsSinger.DataSource = bsRecordCompany;
            bsSinger.DataMember = "FK_RecordCompany_Singer";
```

```
            GridSinger.DataSource = bsSinger;
            GridRecordCompany.DataSource = bsRecordCompany;
        }


    }
}
```

Form1

	RCid	Name
	1	Record Company 1
▶	2	Record Company 2
*		

CONNECT

	Sid	Name	Age	RCid
▶	2	guns n roses	45	2
	3	metallica	50	2
*				

UPDATE DB

Form1

	RCid	Name
▶	1	Record Company 1
	2	Record Company 2
*		

CONNECT

	Sid	Name	Age	RCid
	1	bon jovi	56	1
⁄		Enrique Igleasias	40	1
*				

UPDATE DB

Form1

	RCid	Name
▶	1	Record Company 1
	2	Record Company 2
*		

CONNECT

	Sid	Name	Age	RCid
	1	bon jovi	56	1
▶	5	enrique iglesias	40	1
*				

UPDATE DB

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