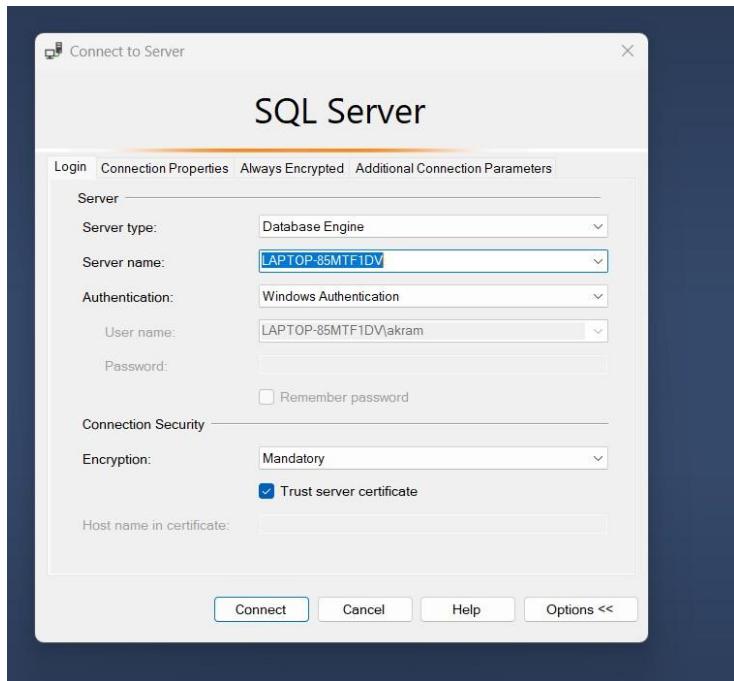


ASSIGNMENT 4

QUESTION 1: Connecting to database

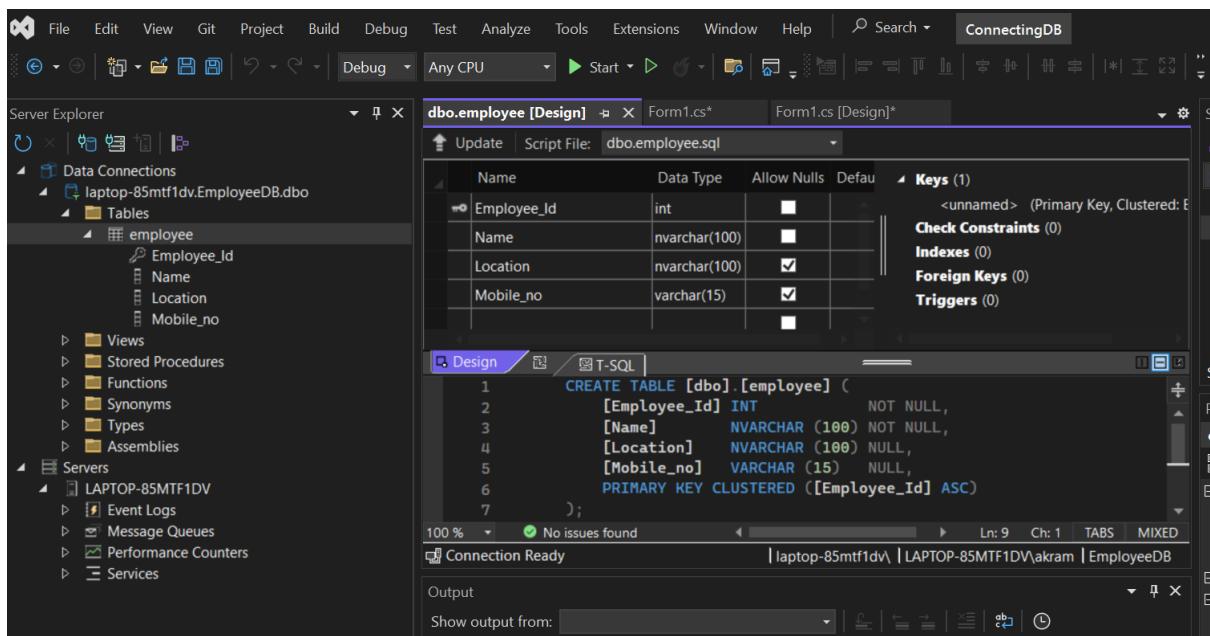
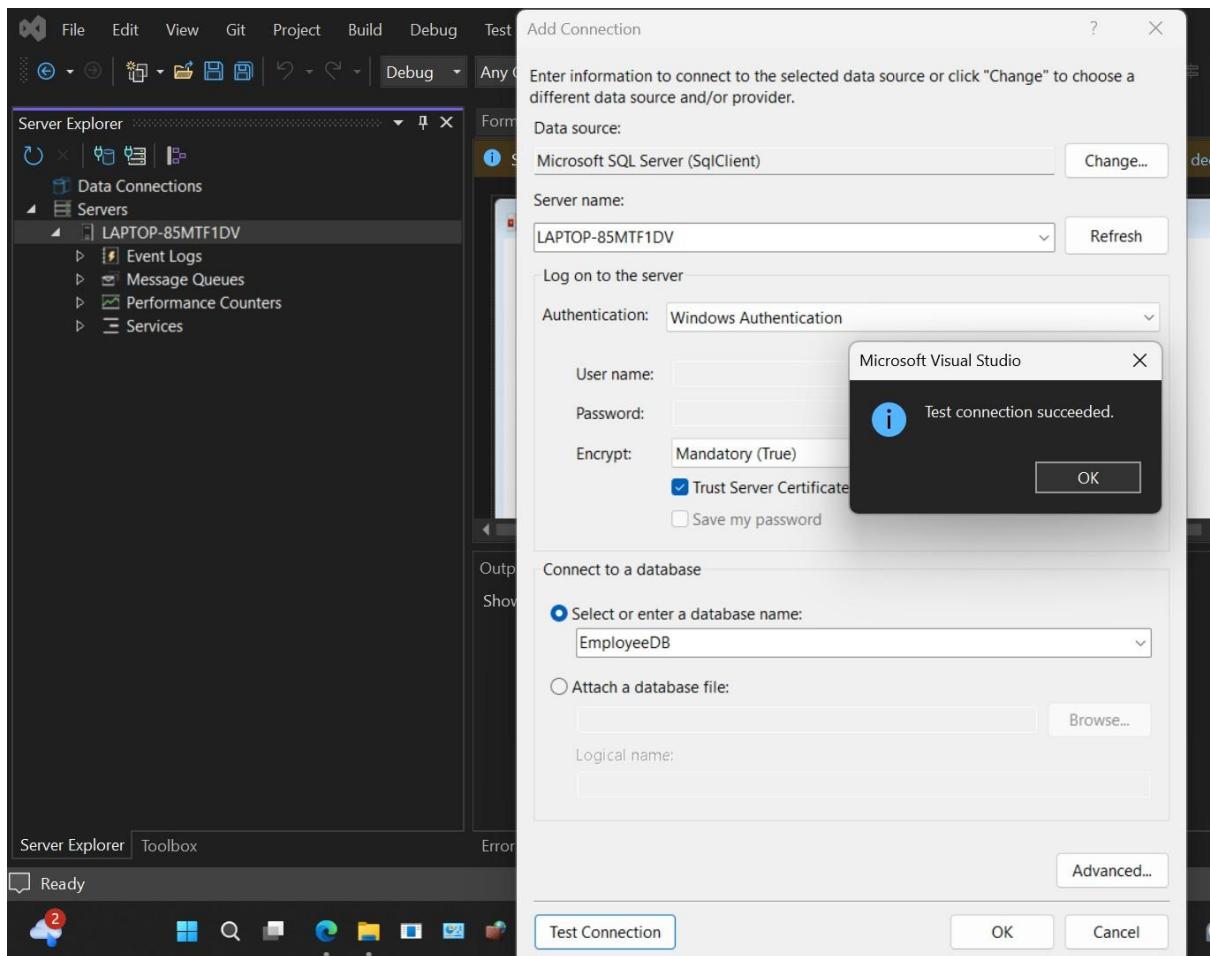


The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar reads 'SQLQuery1.sql - LAPTOP-85MTF1DV.EmployeeDB (LAPTOP-85MTF1DV\akram (67))* - Microsoft SQL Server'. The menu bar includes File, Edit, View, Project, Tools, Window, and Help. The toolbar has various icons for file operations. The 'Object Explorer' pane on the left shows the database structure, with the 'dbo.employee' table highlighted and selected. The 'SQLQuery1.sql' pane on the right displays the following SQL code:

```
CREATE TABLE emp
Employee_Id
Name NVARCHAR(50)
Location NVARCHAR(50)
Mobile_no VARCHAR(15)
);

INSERT INTO emp
(1, 'John Smith'
(2, 'Alice John'
(3, 'Michael Brown'
(4, 'Emma Davis'
(5, 'David Wilson'

select * from emp
```



QUESTION 2 : User registration windows forms

DESCRIPTION: Create a dummy data table as show below and insert dummy data into that, Create a windows application that has two textbox with username and password fields, a dropdown list with elements admin and non admin, design three windows forms one for login, one to print “hello admin” message and one for to print “hello user ” message.

The screenshot shows the SQL Server Management Studio interface. In the top tab bar, there are two tabs: "SQLQuery2.sql - L...MTF1DV\akram (60)*" and "SQLQuery1.sql - L...MTF1DV\akram (67)*". The main window displays the following SQL script:

```
USE EmployeeDB;
GO

-- Create table if it doesn't exist
CREATE TABLE dbo.AppUsers
(
    UserId INT IDENTITY(1,1) PRIMARY KEY,
    Username NVARCHAR(50) NOT NULL UNIQUE,
    Password NVARCHAR(255) NOT NULL,
    RoleName NVARCHAR(20) NOT NULL -- 'admin' or 'non admin'
);

INSERT INTO dbo.AppUsers (Username, Password, RoleName) VALUES
('akram', '12345', 'admin'),
('testuser', '12345', 'non admin');

select * from AppUsers;
```

The "Results" tab is selected, showing the output of the "select * from AppUsers;" query:

	UserId	Username	Password	RoleName
1	1	akram	12345	admin
2	2	testuser	12345	non admin

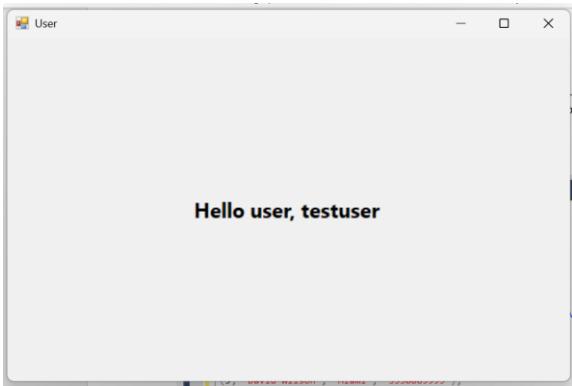
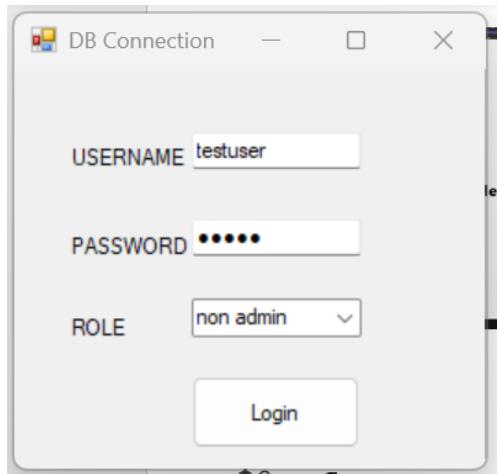
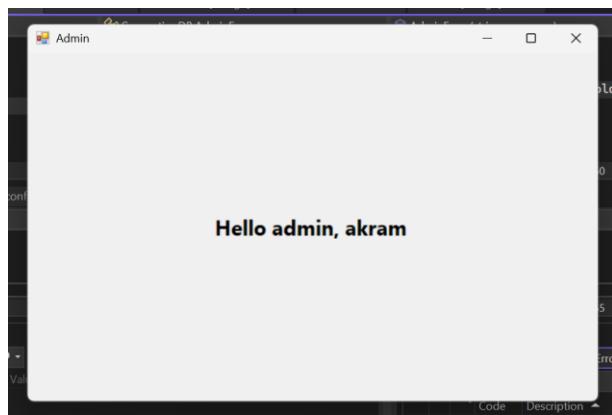
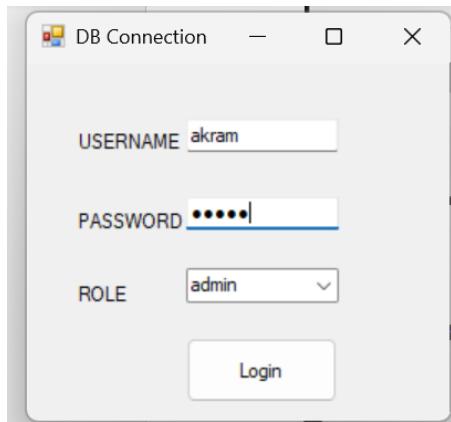
The screenshot shows the Microsoft SQL Server Management Studio interface. The "Object Explorer" pane on the left shows the database structure of "EmployeeDB", with the "dbo.AppUsers" table highlighted and selected. The "SQLQuery2.sql" pane on the right contains the same SQL script as the previous screenshot:

```
USE EmployeeDB;
GO

-- Create table if it doesn't exist
CREATE TABLE dbo.AppUsers
(
    UserId INT IDENTITY(1,1) PRIMARY KEY,
    Username NVARCHAR(50) NOT NULL UNIQUE,
    Password NVARCHAR(255) NOT NULL,
    RoleName NVARCHAR(20) NOT NULL -- 'admin' or 'non admin'
);

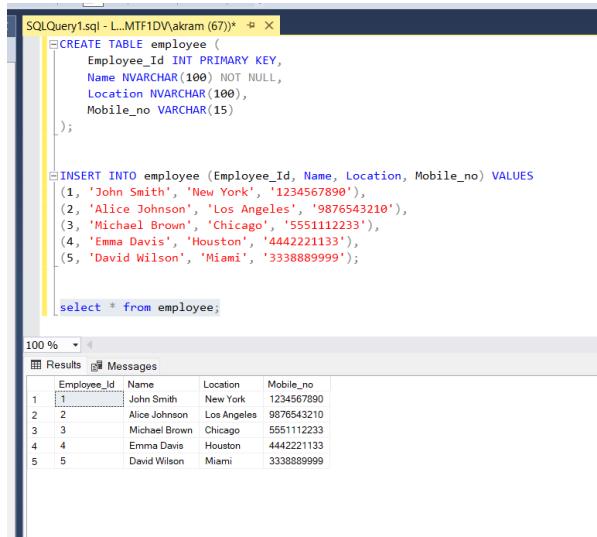
INSERT INTO dbo.AppUsers (Username, Password, RoleName) VALUES
('akram', '12345', 'admin'),
('testuser', '12345', 'non admin');

select * from AppUsers;
```



QUESTION 3 : CRUD Operations DESCRIPTION: Create a table in MSSQL Server database in the name of employee, with four columns Employee_Id, Name, Location, and Mobile_no. and insert some dummy data into that.

Table creation



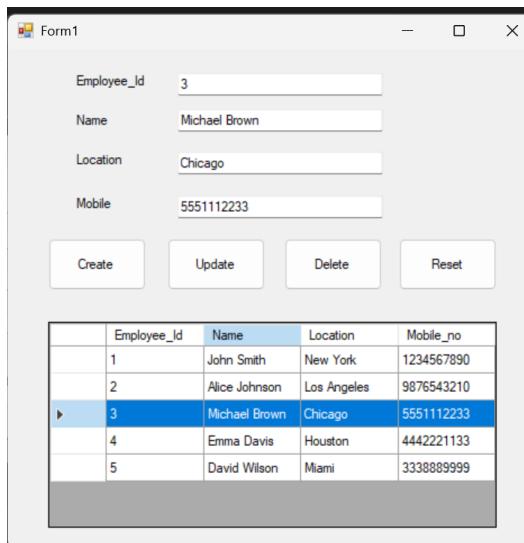
```

CREATE TABLE employee (
    Employee_Id INT PRIMARY KEY,
    Name NVARCHAR(100) NOT NULL,
    Location NVARCHAR(100),
    Mobile_no VARCHAR(15)
);

INSERT INTO employee (Employee_Id, Name, Location, Mobile_no) VALUES
(1, 'John Smith', 'New York', '1234567890'),
(2, 'Alice Johnson', 'Los Angeles', '9876543210'),
(3, 'Michael Brown', 'Chicago', '5551112233'),
(4, 'Emma Davis', 'Houston', '4442221133'),
(5, 'David Wilson', 'Miami', '3338889999');

select * from employee;

```



Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890
2	Alice Johnson	Los Angeles	9876543210
3	Michael Brown	Chicago	5551112233
4	Emma Davis	Houston	4442221133
5	David Wilson	Miami	3338889999

Delete

Form1

Employee_Id	5
Name	David Wilson
Location	Miami
Mobile	3338889999

Create **Update** **Delete** **Reset**

Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890
2	Alice Johnson	Los Angeles	9876543210
3	Michael Brown	Chicago	5551112233
5	David Wilson	Miami	3338889999

Confirm			
Delete employee 5?			
Yes			No

Form1

Employee_Id	4
Name	Emma Davis
Location	Houston
Mobile	4442221133

Create **Update** **Delete** **Reset**

Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890
2	Alice Johnson	Los Angeles	9876543210
3	Michael Brown	Chicago	5551112233
4	Emma Davis	Houston	4442221133

Creation

Form1

Employee_Id	5
Name	John Smith
Location	Atlanta
Mobile	4442212345

Create **Update** **Delete** **Reset**

Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890
2	Alice Johnson	Los Angeles	9876543210
3	Michael Brown	Chicago	5551112233
4	Emma Davis	Houston	4442221133

Form1

Employee_Id	5
Name	John Smith
Location	Atlanta
Mobile	4442212345

Create **Update** **Delete** **Reset**

	Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890	
2	Alice Johnson	Los Angeles	9876543210	
3	Michael Brown	Chicago	5551112233	
4	Emma Davis	Houston	4442221133	
▶ 5	John Smith	Atlanta	4442212345	

Update

Form1

Employee_Id	5
Name	John Sam
Location	London
Mobile	00735812345678

Create **Update** **Delete** **Reset**

	Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890	
2	Alice Johnson	Los Angeles	9876543210	
3	Michael Brown	Chicago	5551112233	
4	Emma Davis	Houston	4442221133	
▶ 5	John Smith	Atlanta	4442212345	

Form1

Employee_Id	5
Name	John Sam
Location	London
Mobile	00735812345678

Create Update Delete Reset

Employee_Id	Name	Location	Mobile_no
1	John Smith	New York	1234567890
2	Alice Johnson	Los Angeles	9876543210
3	Michael Brown	Chicago	5551112233
4	Emma Davis	Houston	4442221133
5	John Sam	London	00735812345...

Form1

Employee_Id	
Name	
Location	
Mobile	

Create Update Delete Reset

Employee_Id	Name	Location	Mobile_no
1	John	New York	1234567890
2	Alice	Los Angeles	9876543210
3	Mich	Chicago	5551112233
4	Emm,	Houston	4442221133
5	John Sam	London	00735812345...

Employee_Id must be a whole number.

OK