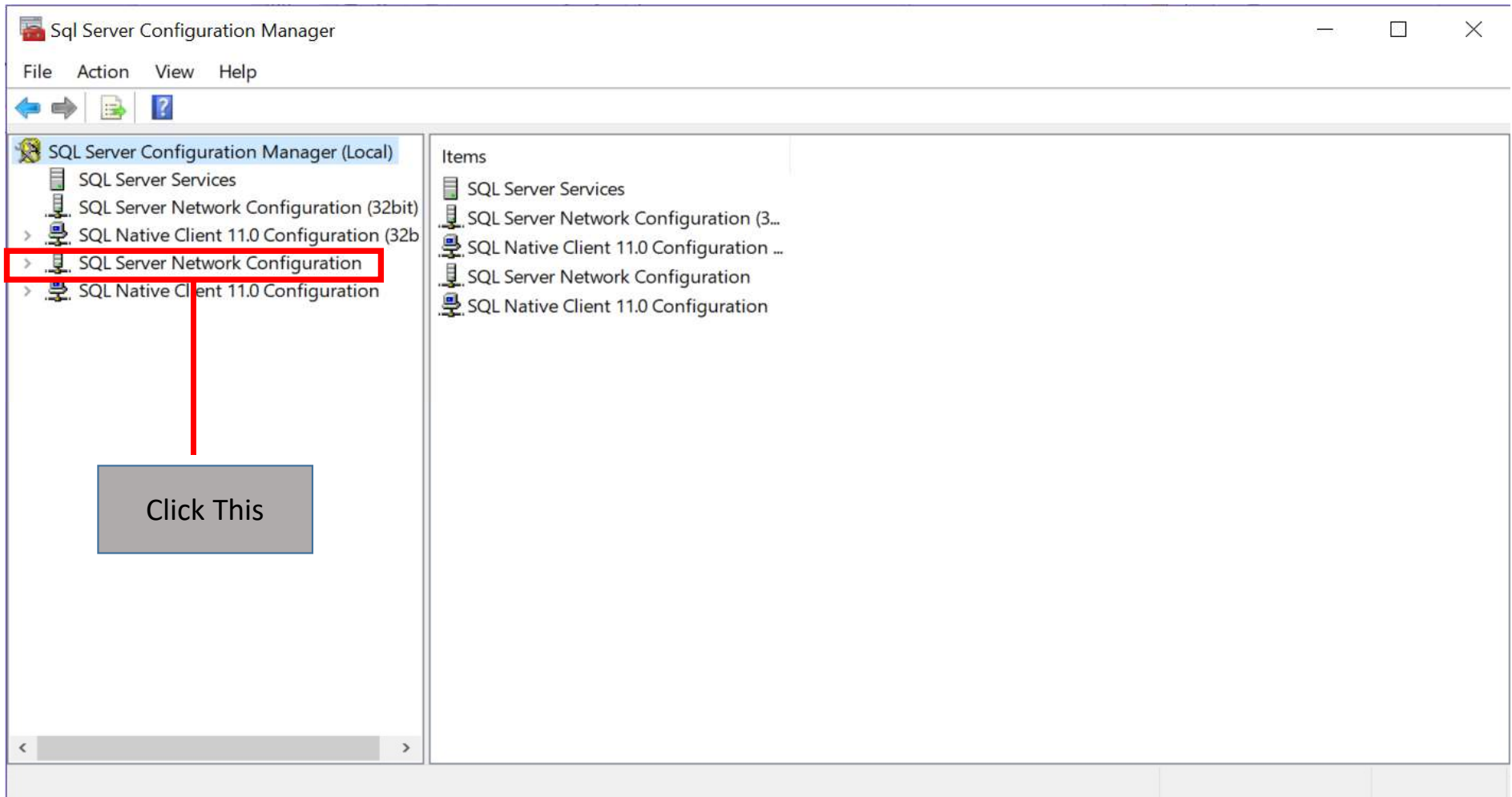


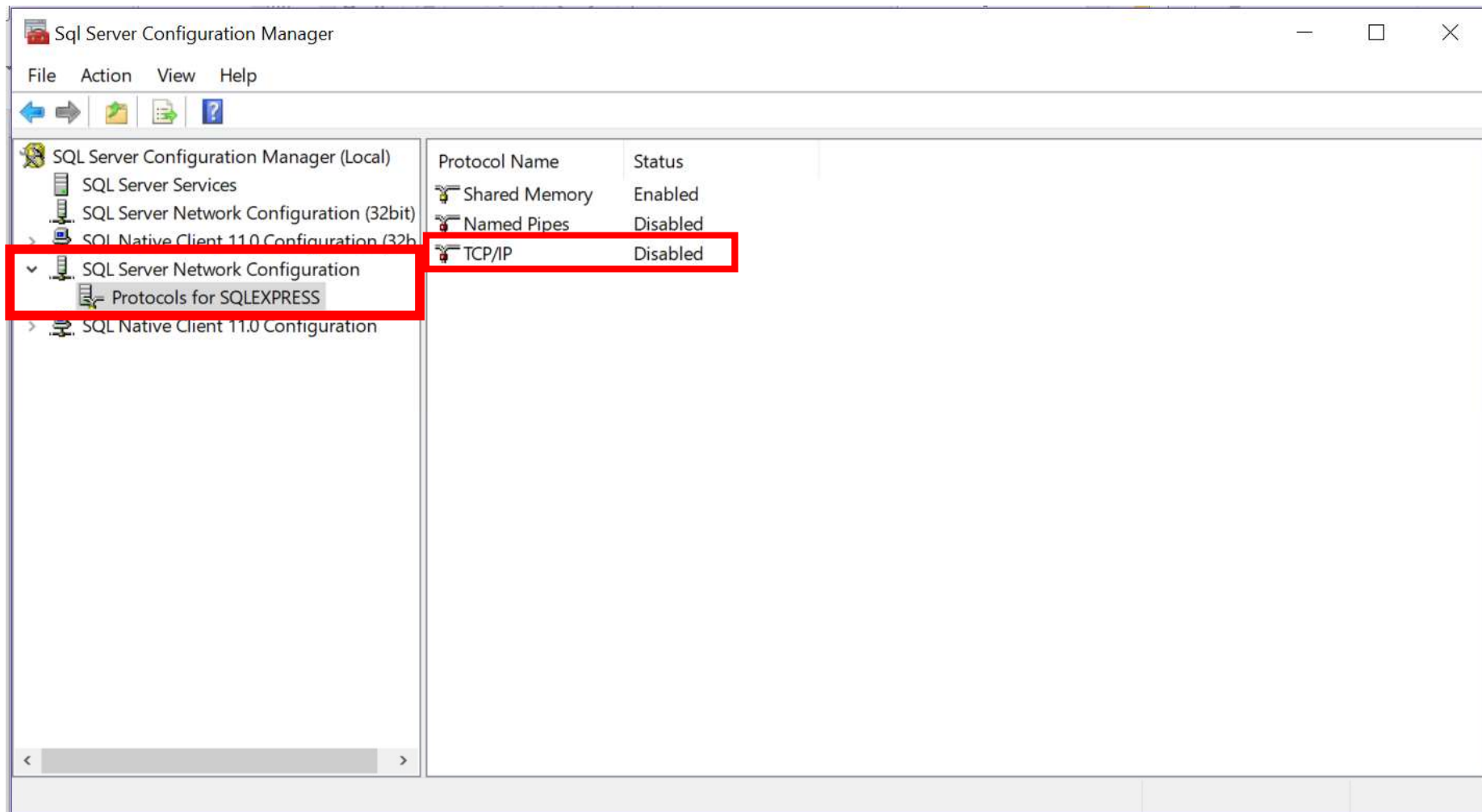
Database System Lab (CSE 3104)

Connecting NetBeans Project to MSSQL Server

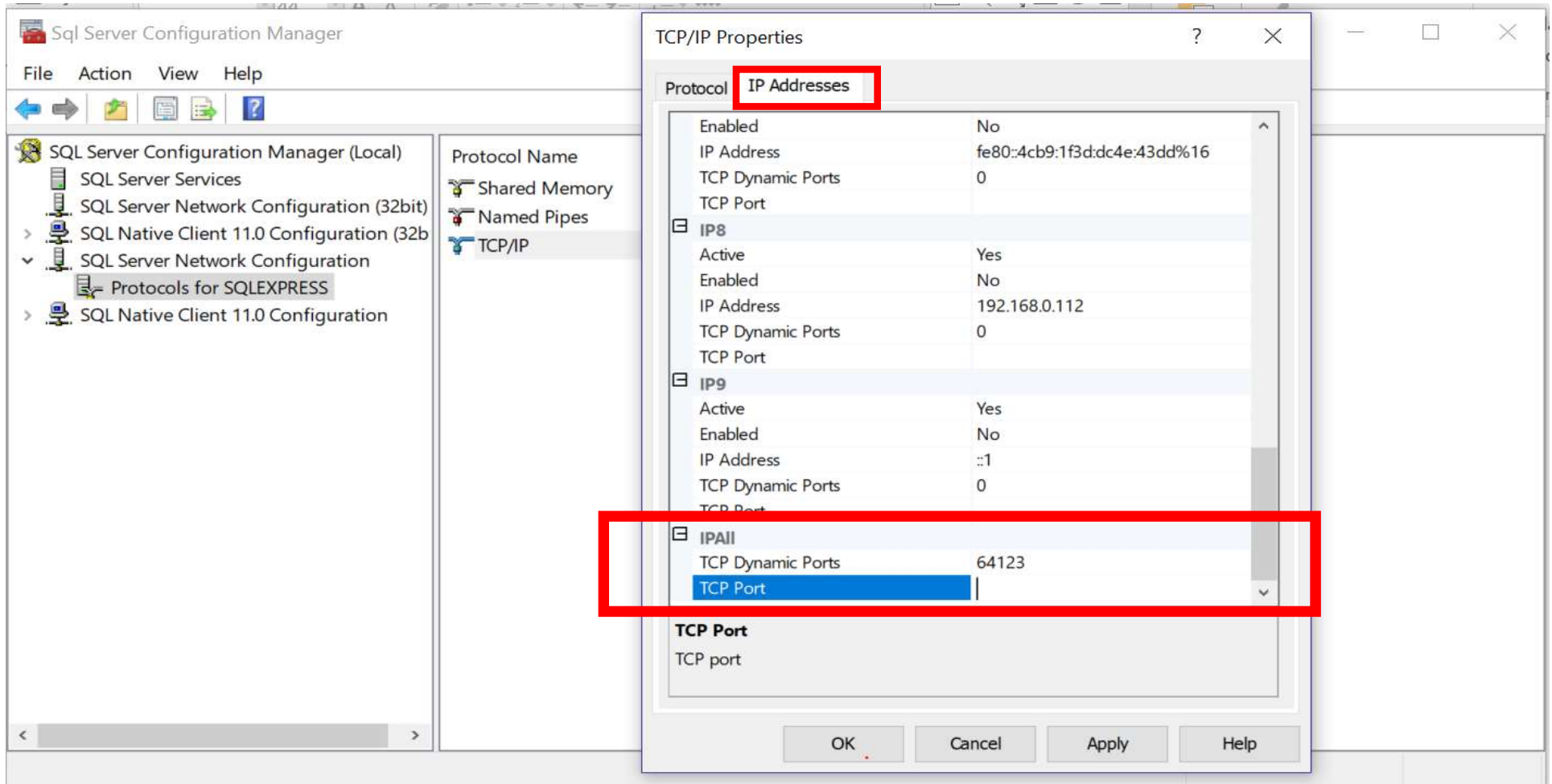
Open the Sql Server Configuration Manager



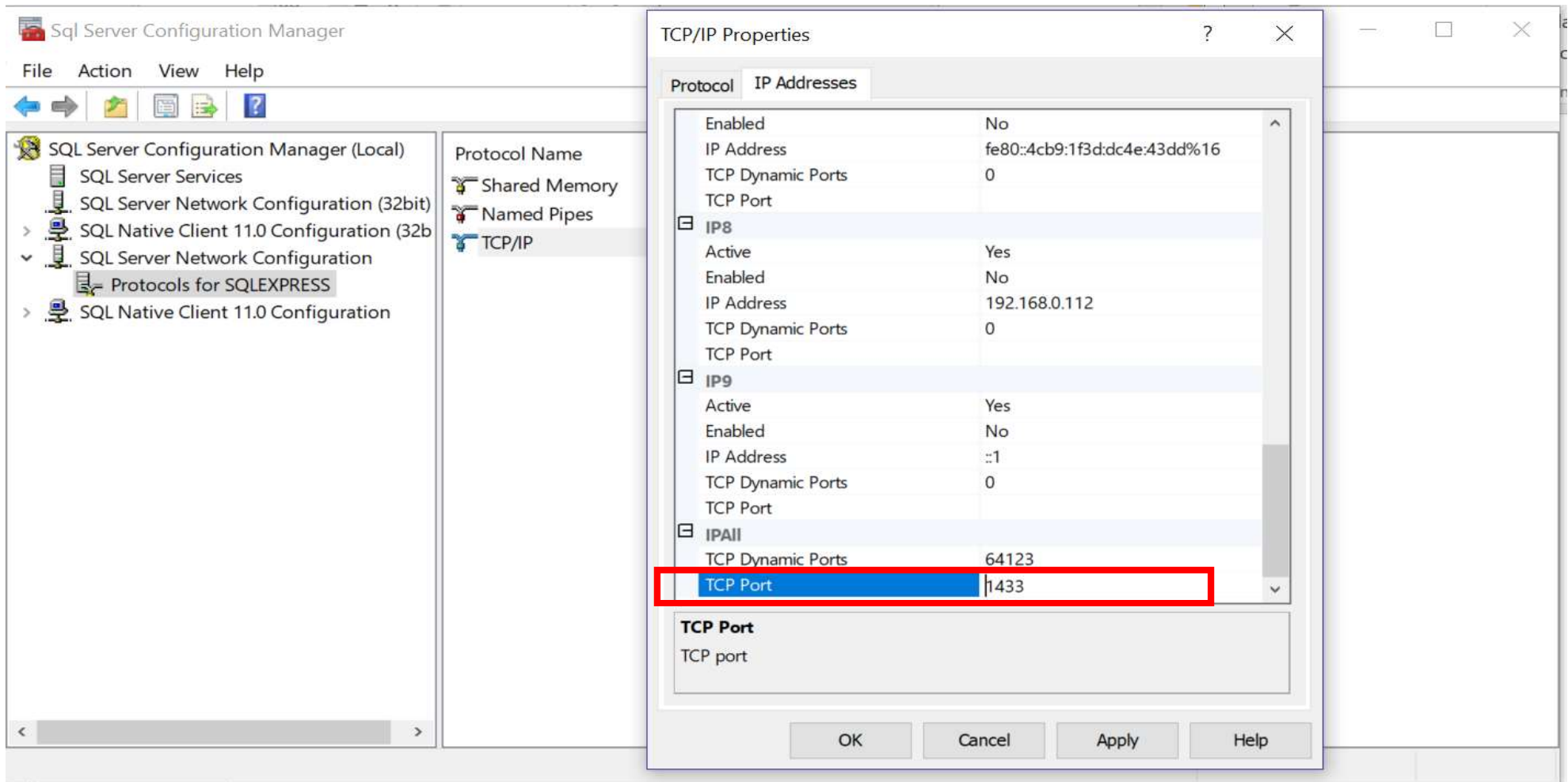
Right Click the TCP/IP, Go to Properties -> IP Addresses



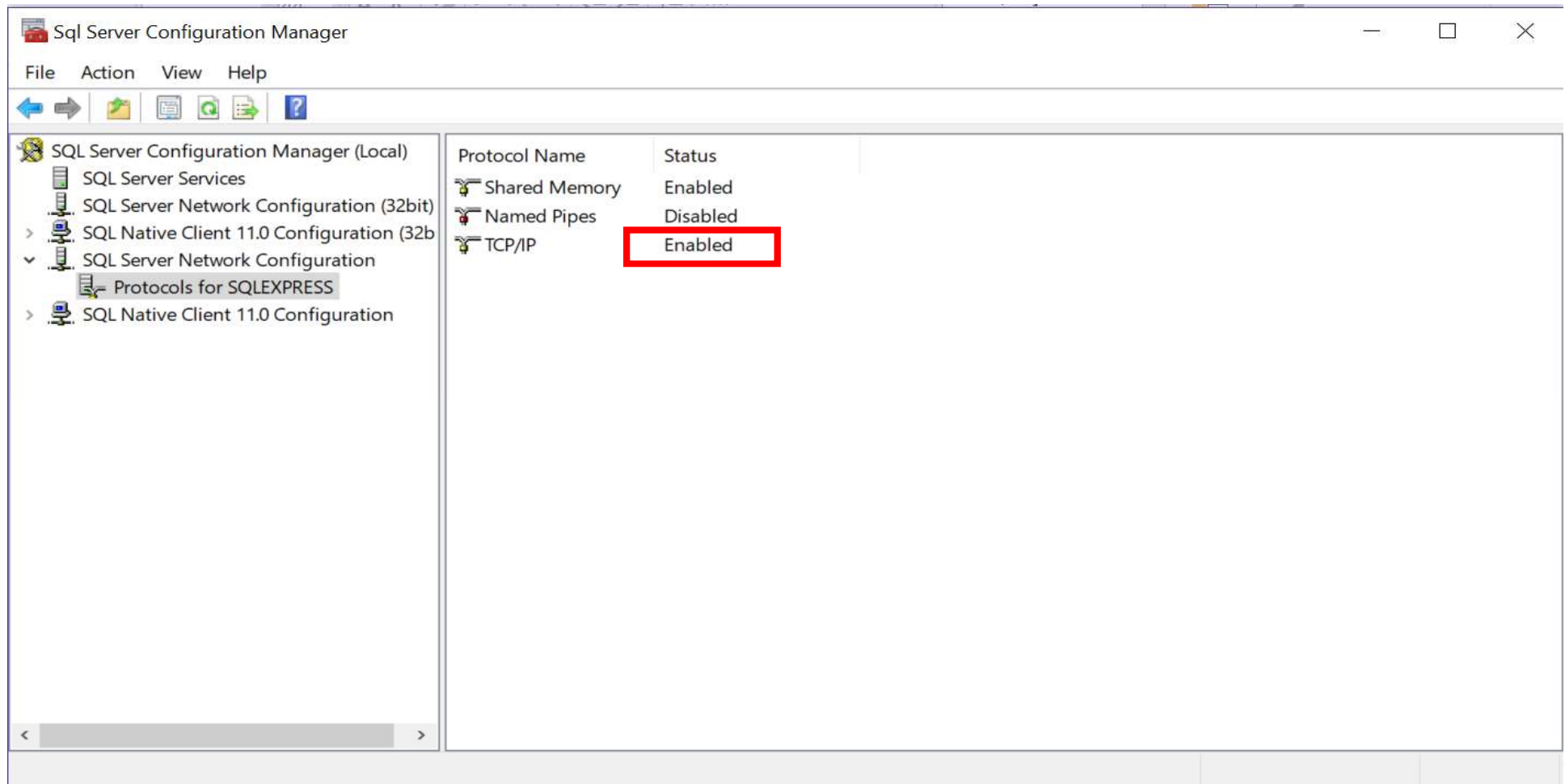
Scroll Down. Go to the last option: **IPAll**. Click on the TCP Port



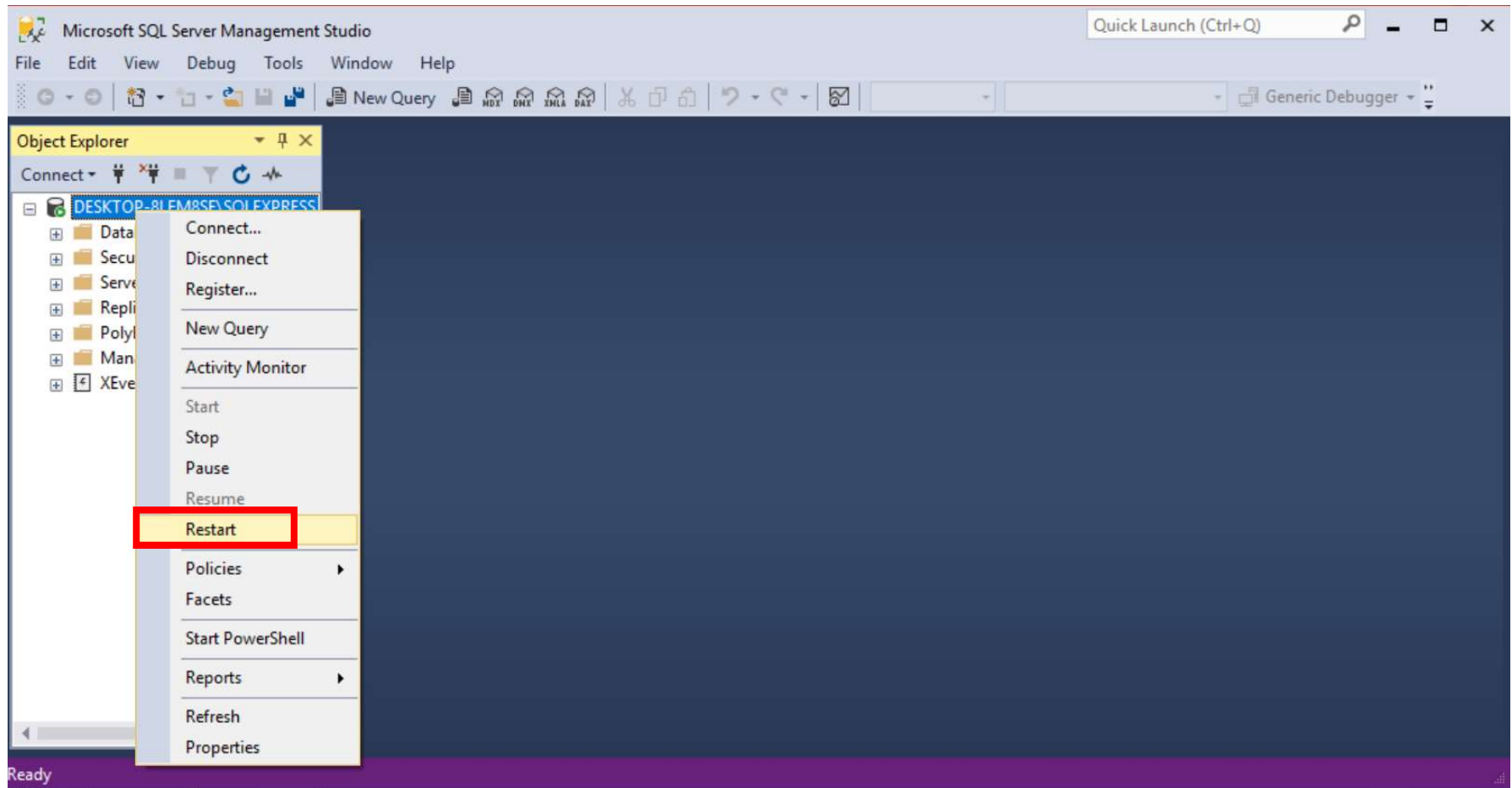
Type 1433 in the TCP Port Option and click Apply.



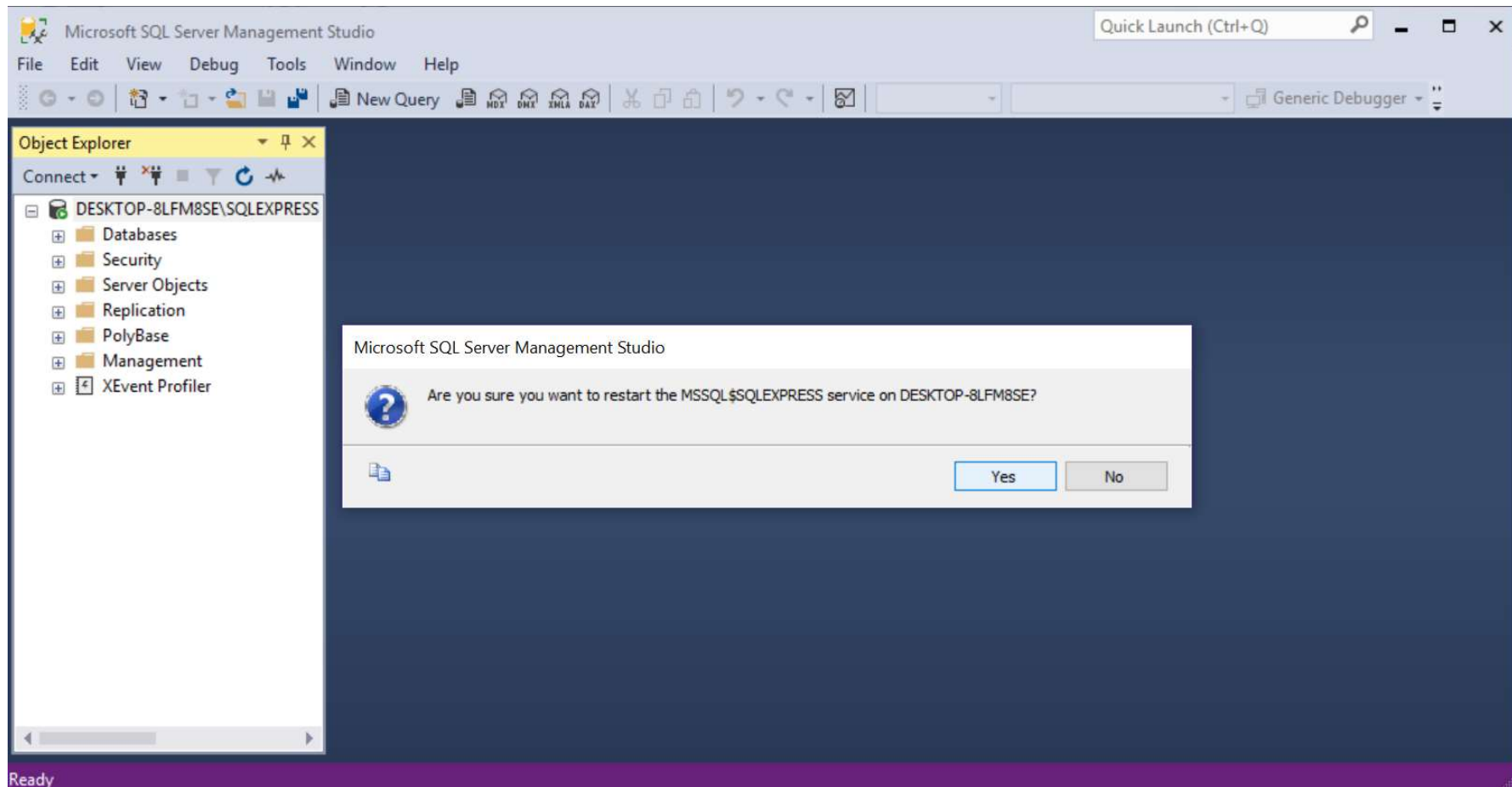
Again Right Click the TCP/IP and Click Enable.

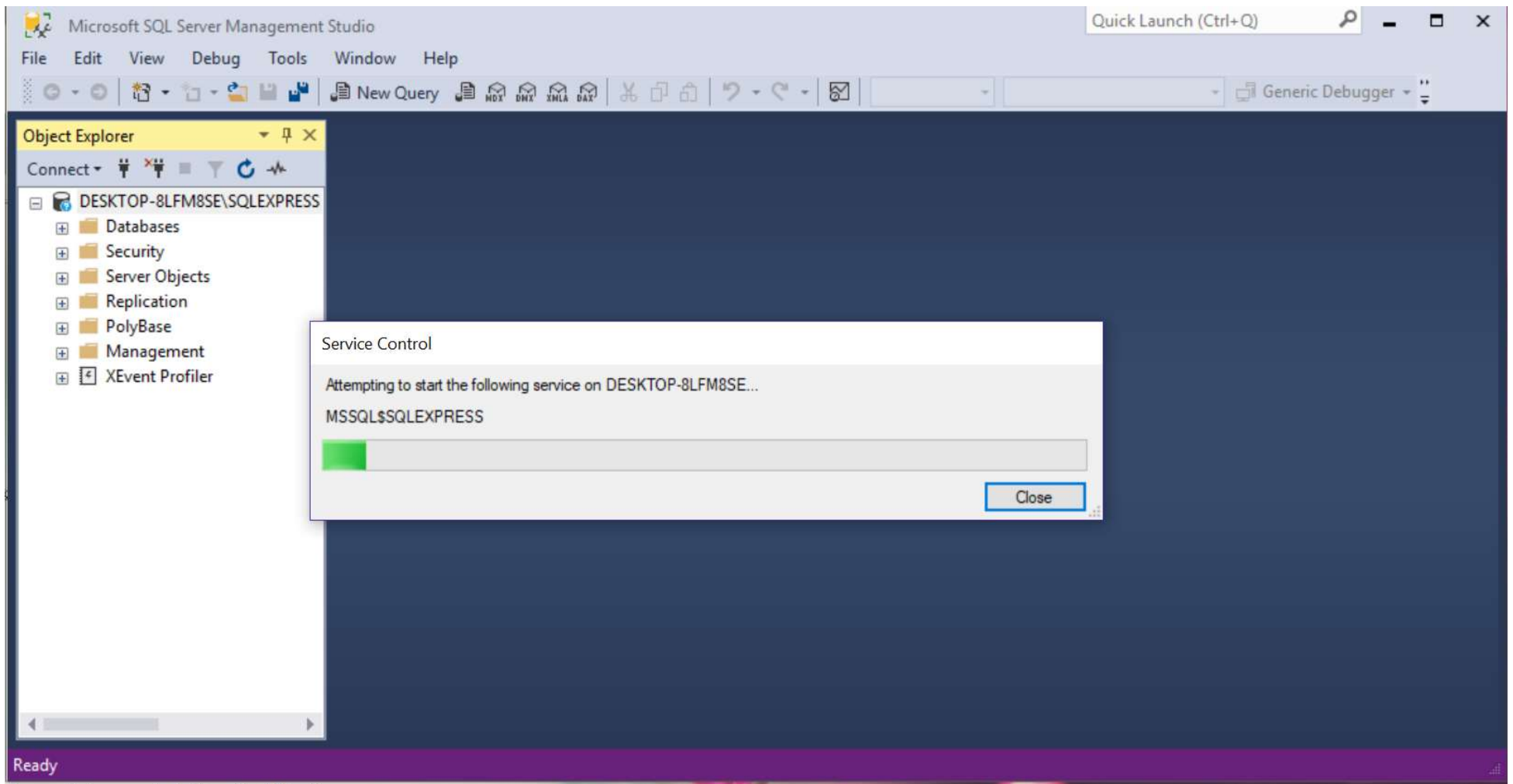


Right Click The SQL Server and Click Restart



Click Yes





Execute the Following queries:

```
Alter login sa with password = '123456'
```

```
Alter login sa enable
```

SQLQuery1.sql - DESKTOP-8LFM8SE\SQLEXPRESS.master (DESKTOP-8LFM8SE\Arony (52))* - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

master Execute Debug

Object Explorer

- DESKTOP-8LFM8SE\SQLEXPRESS (SQL S
 - Databases
 - Security
 - Logins
 - ##MS_PolicyEventProcessing
 - ##MS_PolicyTsqlExecutionLo
 - BUILTIN\Users
 - DESKTOP-8LFM8SE\Arony
 - NT AUTHORITY\SYSTEM
 - NT Service\MSSQL\$SQLEXPR
 - NT SERVICE\SQLTELEMETRY
 - NT SERVICE\SQLWriter
 - NT SERVICE\Winmgmt
 - sa**
 - Server Roles
 - Credentials
 - Audits
 - Server Audit Specifications
 - Server Objects
 - Replication

project.sql - DESK...8LFM8SE\Arony (55))* SQLQuery1.sql - D...LFM8SE\Arony (52))*

```
Alter login sa with password = '123456'  
  
Alter login sa enable
```

146 %

sa is now disable. Execute the queries to change the password to 123456 and to enable it

146 %

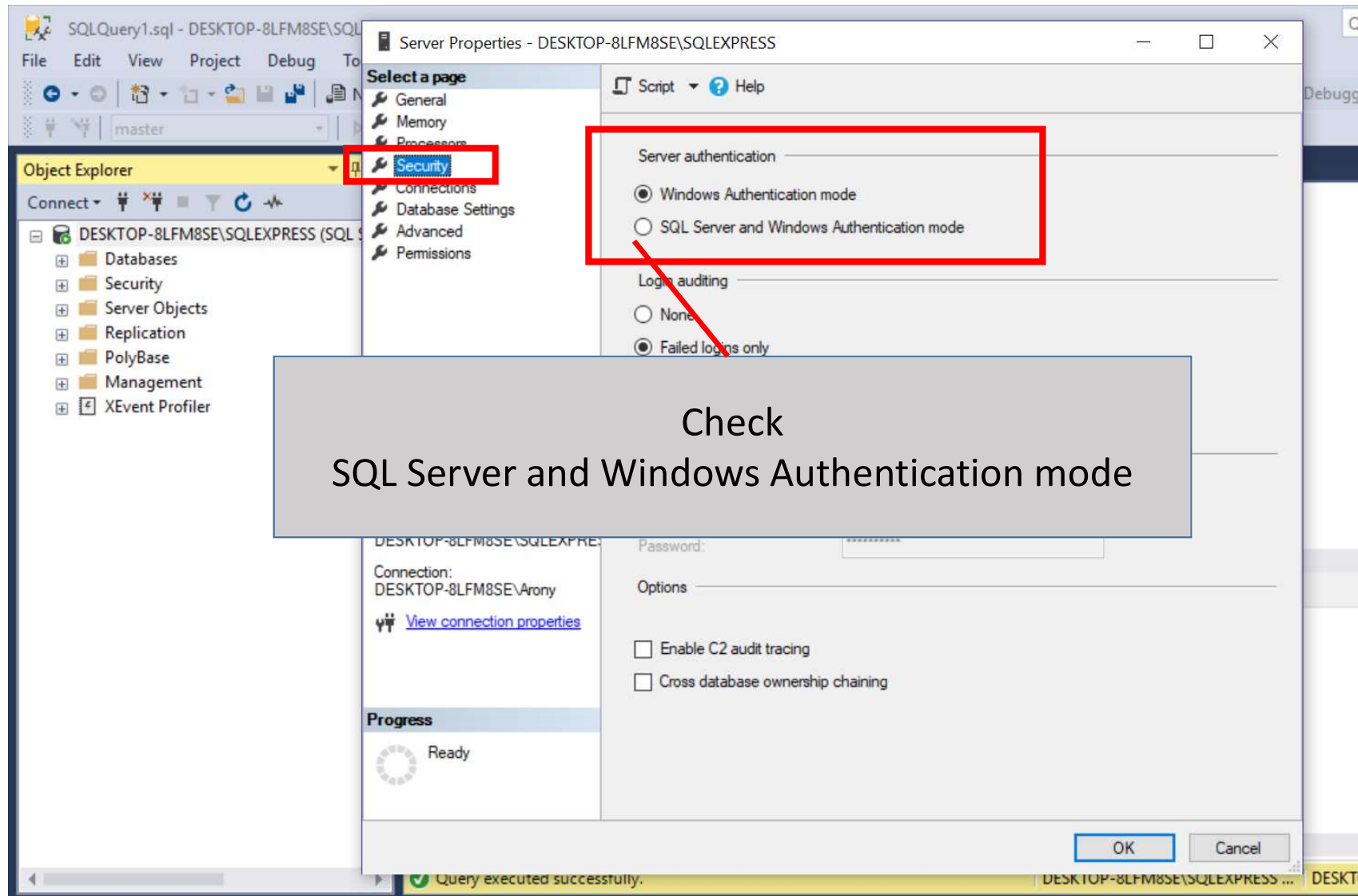
Query executed successfully. | DESKTOP-8LFM8SE\SQLEXPRESS ... | DESKTOP-8LFM8SE\Arony ... | master | 00:00:00 | 0 rows

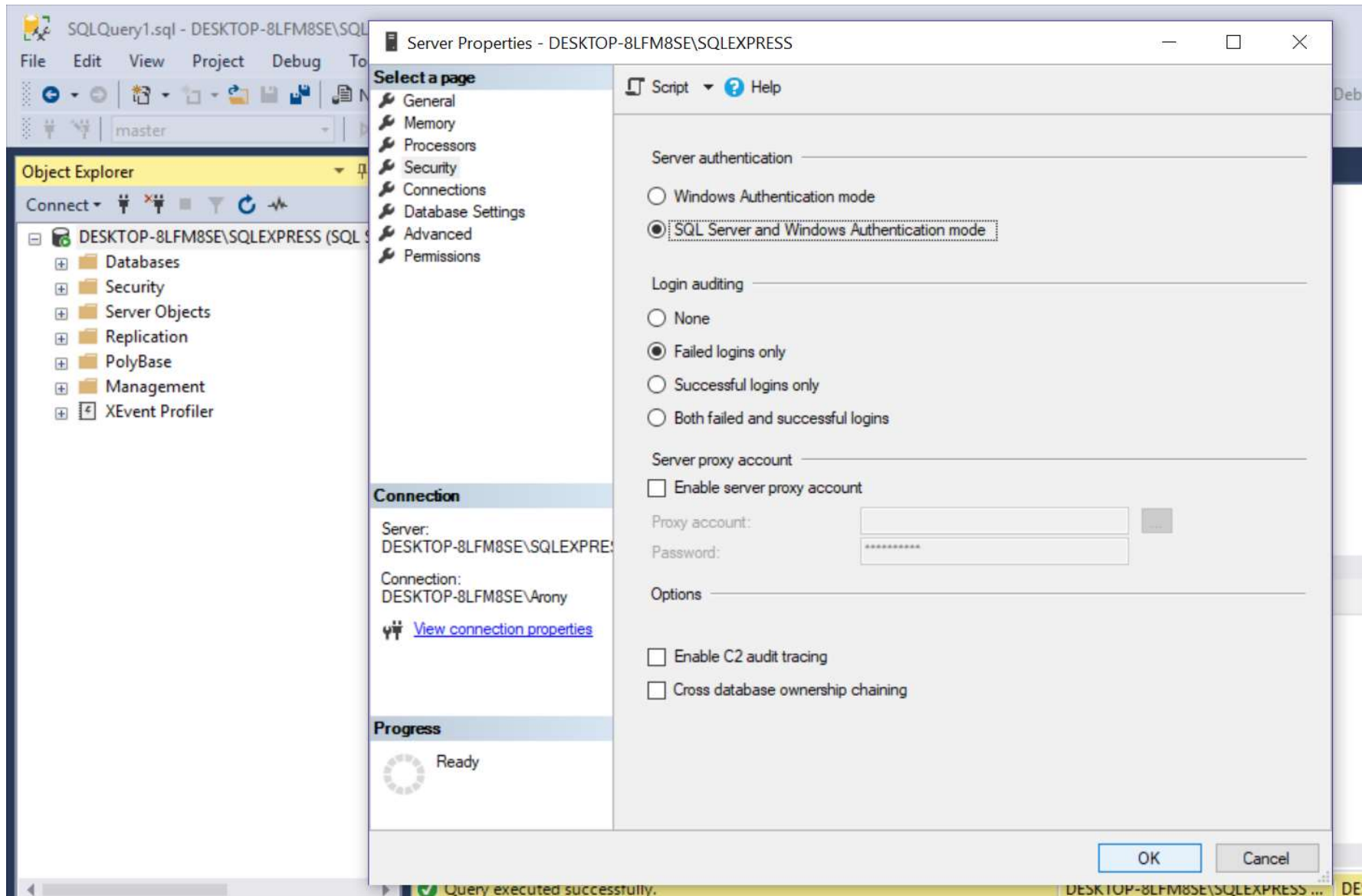
Ready Ln 4 Col 22 Ch 22 INS

Right Click
Sql Server.

Go to

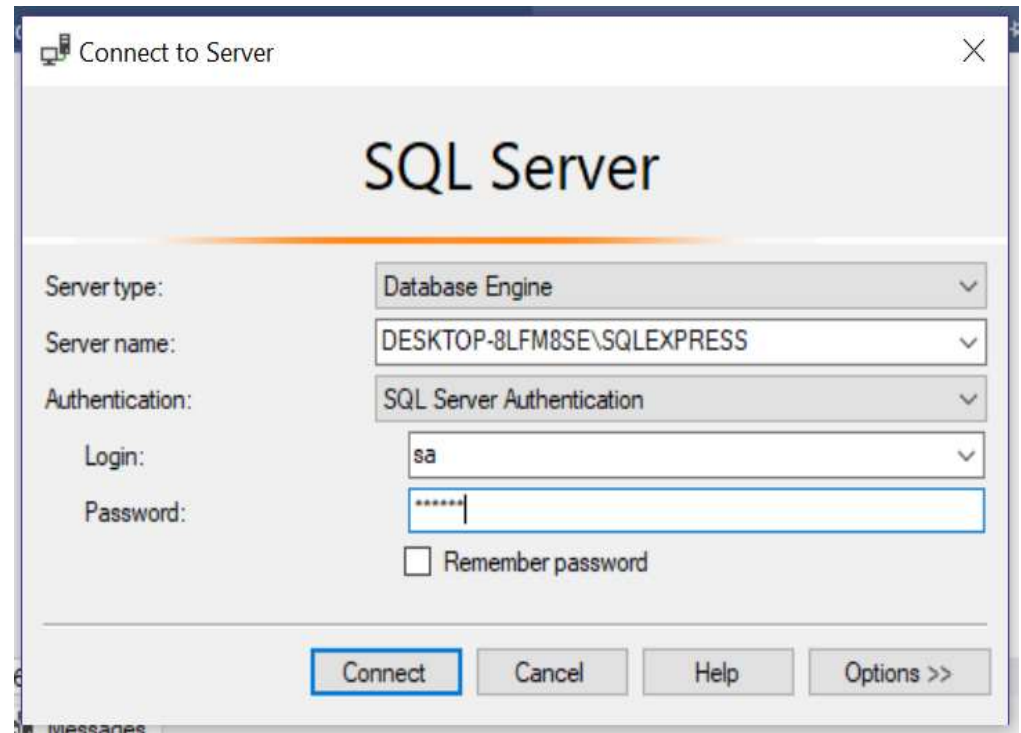
Properties
-> Security





Steps:

- Disconnect the sql server
- Then again click connect.
- Change Authentication from Windows Authentication to SQL Server Authentication
- Give Login : sa
Password : 123456
- Click Connect



Steps:

- Create your project Database in Microsoft SQL SERVER Management Studio.
- Create table and insert data in the database.

You can use this for testing Purpose

Create Database ProjectDB;

Use ProjectDB;

CREATE TABLE Customer(

CustomerID int IDENTITY(1,1) NOT NULL PRIMARY KEY,
FirstName varchar (50) NOT NULL,
LastName varchar (50) NOT NULL,
CustomerAddress varchar (50) NOT NULL,
City varchar (50) NOT NULL,
Country varchar (50) NOT NULL
);

INSERT INTO CUSTOMER

VALUES ('Amy', 'Johnson', '11000 Beecher', 'Joliet', 'USA'),
('Bill', 'Brown', '7312 Bettis Ave.', 'Pittsburg', 'USA'),
('Janna', 'Smith', '200 E. Elm Apt. #32', 'Sparks', 'USA'),
('Evette', 'LeBlanc', '207 Queens Quay West', 'Toronto', 'CA'),
('Drew', 'Brisco', '1690 Hollis Street', 'Ottawa', 'CA')

Steps:

- Open NetBeans. Create New Project -> Project Name
Unclick the create main class before finishing
- Create a new class named ConnectMSSQL.
- Copy and paste the connectDB() method given in the next slide inside the Class ConnectMSSQL

```
public void connectDB(){
    try {
        Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
        Connection connection = DriverManager
            .getConnection(
                "jdbc:sqlserver://localhost:1433;databaseName=ProjectDB;selectMethod=cursor", "sa", "123456");

        System.out.println("DATABASE NAME IS:"
            + connection.getMetaData().getDatabaseProductName());
        Statement statement = connection.createStatement();
        ResultSet resultSet = statement
            .executeQuery("SELECT FirstName FROM Customer");
        while (resultSet.next()) {
            System.out.println("Customer NAME:"
                + resultSet.getString("FirstName"));
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
```

The Class will look like this

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

public class ConnectMSSQL {

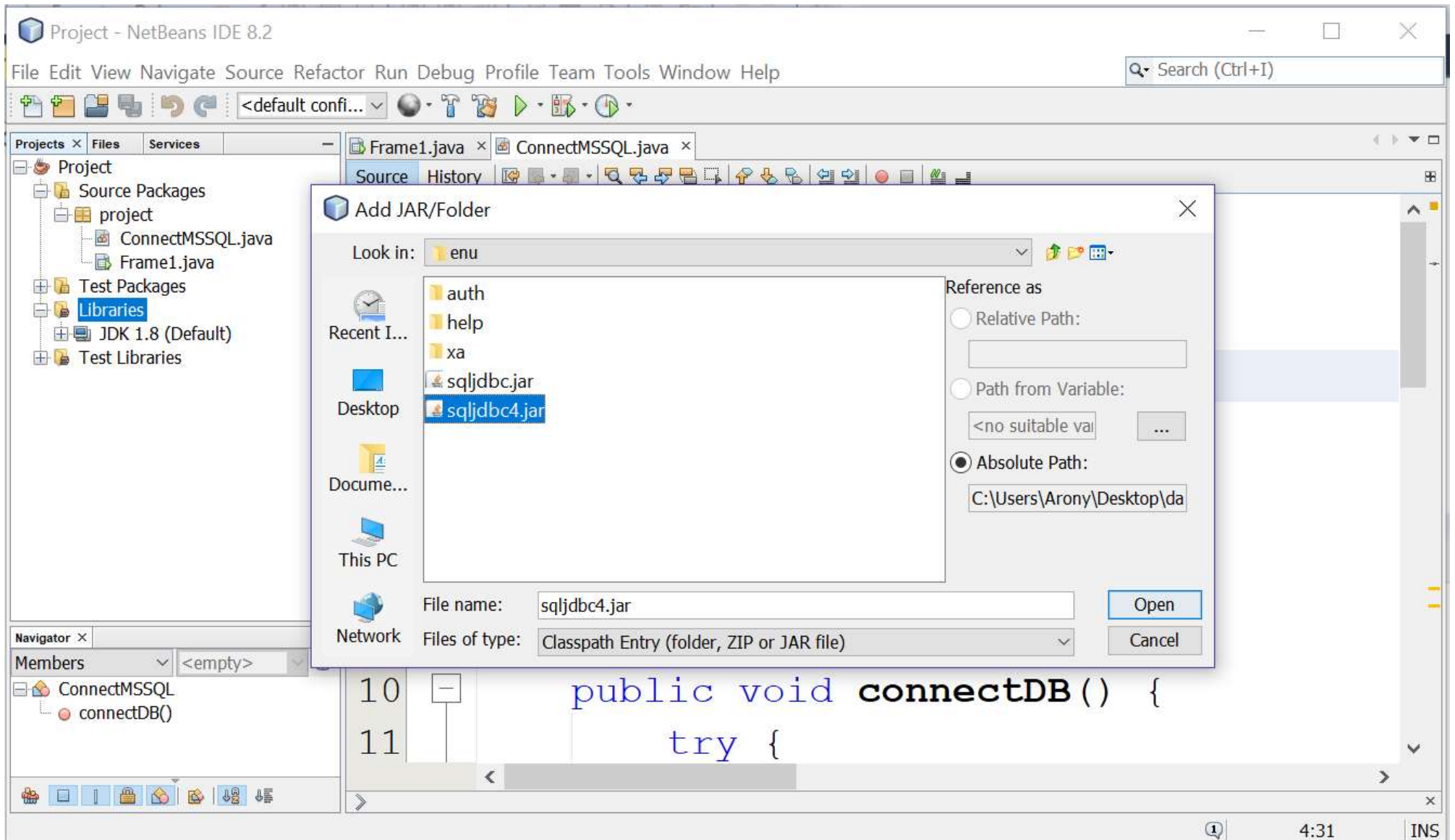
    public void connectDB() {
        try {
            Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
            Connection connection = DriverManager.getConnection(
                "jdbc:sqlserver://localhost:1433;databaseName=ProjectDB;selectMethod=cursor", "sa", "123456");

            System.out.println("DATABASE NAME IS:" + connection.getMetaData().getDatabaseProductName());

            Statement statement = connection.createStatement();
            ResultSet resultSet = statement.executeQuery("SELECT FirstName FROM Customer");

            while (resultSet.next()) {
                System.out.println("Customer NAME:" + resultSet.getString("FirstName"));
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

- Right click Libraries in the Project Created in Netbeans
- Select Add Jar/Folder
- Add the **sqljdbc4.jar** to the Libraries



- Create a JFrame Form inside the project
- Put button on the frame
- Go to the back end of the button
- Create an Object of the Class `ConnectMSSQL`
- Call the method `connectDB()`

Projects Files Services

Project

- Source Packages
 - project
 - ConnectMSSQL.java
 - Frame1.java
- Test Packages
- Libraries
 - sqljdbc4.jar
 - JDK 1.8 (Default)
- Test Libraries

okButton [JButton] - Navigator

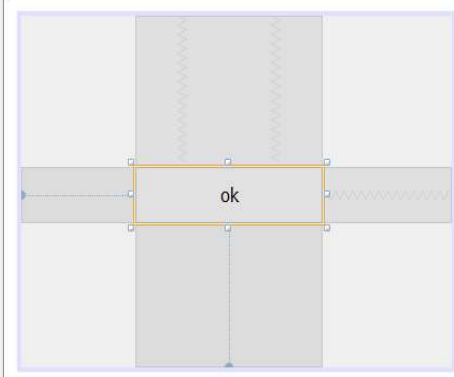
Form Frame1

- Other Components
 - [JFrame]
 - okButton [JButton]

Frame1.java x ConnectMSSQL.java x

Source Design History [Icons]

To change layout manager of a container use Set Layout submenu from its context menu.



Palette

Swing Containers

- Panel
- Tabbed Pane
- Split Pane
- Scroll Pane
- Tool Bar
- Desktop Pane
- Internal Frame
- Layered Pane

Swing Controls

- Label
- Button
- Toggle Button
- Check Box
- Radio Button
- Button Group
- Combo Box
- List
- Text Field
- Text Area
- Scroll Bar
- Slider
- Progress Bar
- Formatted Field
- Password Field
- Spinner
- Separator
- Text Pane
- Editor Pane
- Tree
- Table

Swing Menus

Swing Windows

Swing Fillers

AWT

Beans

okButton [JButton] - Properties

Properties Binding Events Code

Properties

| | |
|------------------|-----------------|
| action | <none> |
| background | [240,240,240] |
| font | Tahoma 16 Plain |
| foreground | [0,0,0] |
| icon | <none> |
| mnemonic | |
| text | ok |
| toolTipText | |
| Other Properties | |
| UIClassID | ButtonUI |
| actionCommand | ok |
| alignmentX | 0.0 |
| alignmentY | 0.5 |
| autoscrolls | |

```
60
61  private void okButtonActionPerformed(java.awt.event.ActionEvent
62      // TODO add your handling code here:
63
64      ConnectMSSQL cnObj = new ConnectMSSQL();
65      cnObj.connectDB();
66
67  }
68
```


- Run the frame and Click ok
- You should get the desired Output

