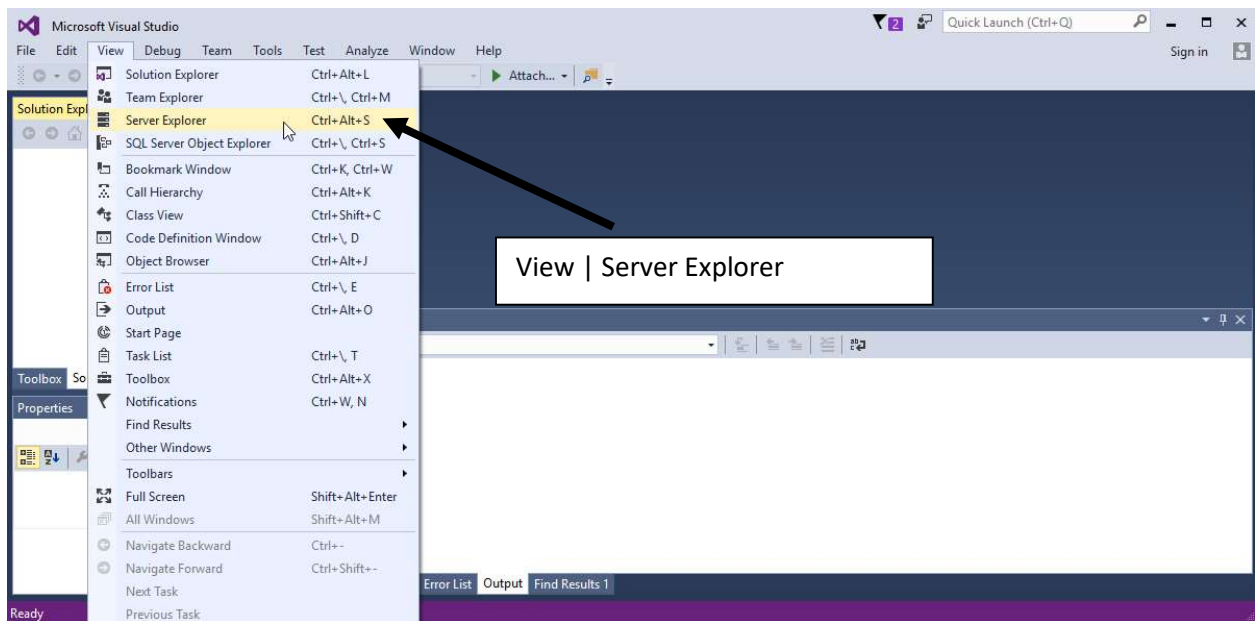# BCS 450 C# Lab – Create SQL Server Express Database

Overview

You will create a Microsoft SQL Server Express Database and run some queries on the database.
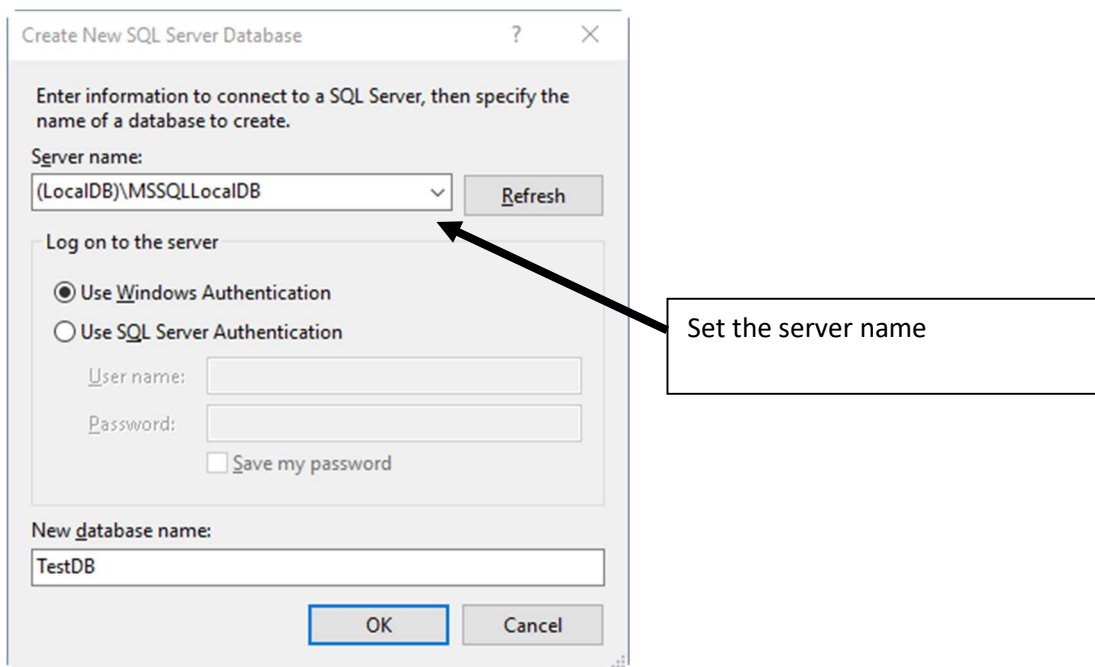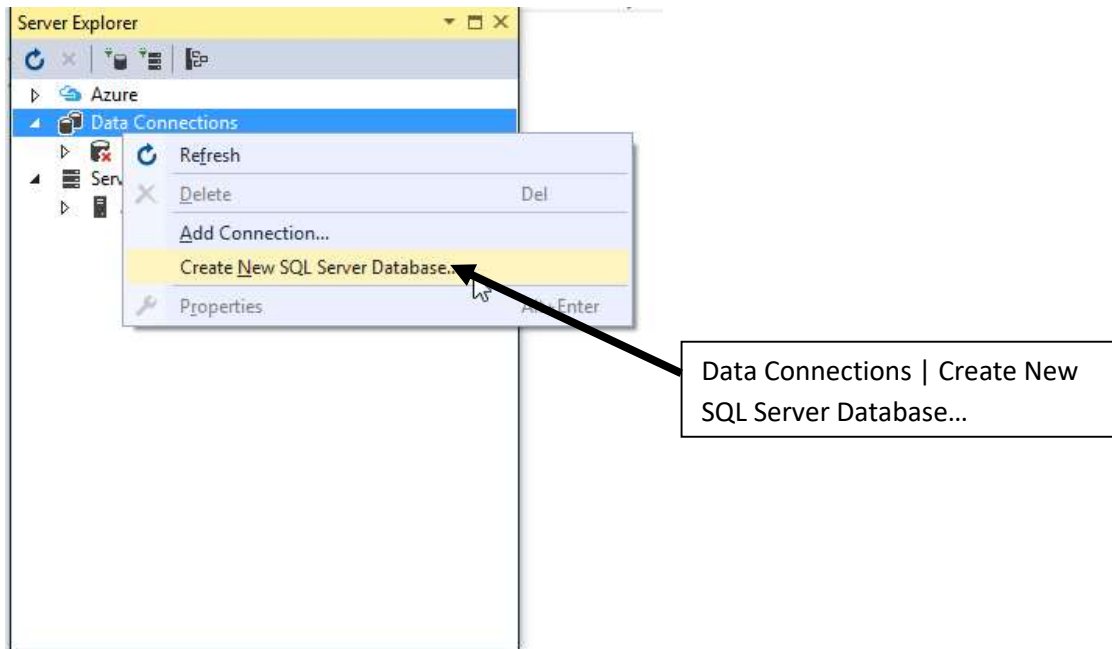
Part 1 – Open Server Explorer in Visual Studio

Go to View|Server Explorer (Ctrl-Alt-S). The Server Explorer window will be displayed in Visual Studio.
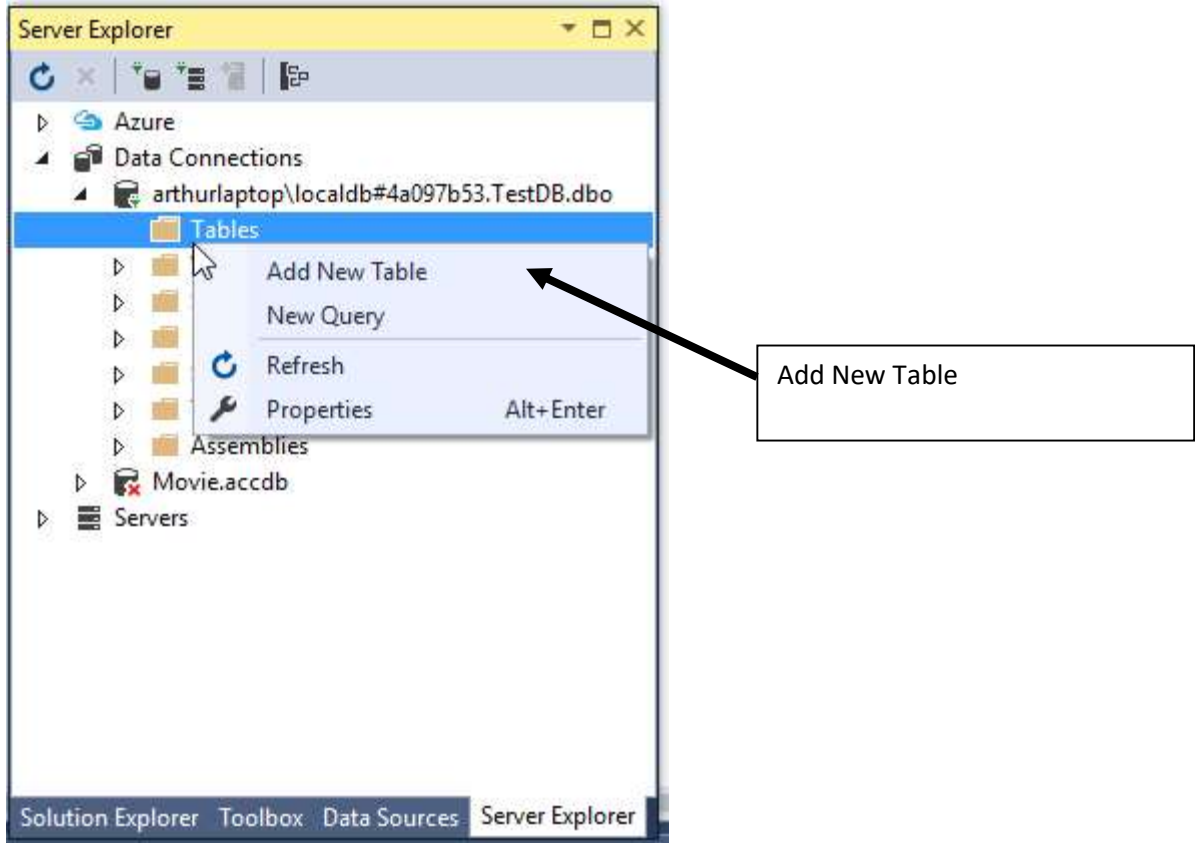

Part 2 – Create a new a database

Create a new database in SQL Server Express.

1. Right-click Data Connections (in Server Explorer) to display a context menu. Alternatively, you can press Shfit+F10 when on the Data Connections node to bring up the context menu.

2. Choose Create New SQL Server Database…

3. Set the server name to **(LocalDb)\MSSQLLocalDB** and the database name to whatever you want.

Data Connections | Create New SQL Server Database…

Set the server name

Part 3 – Create a new a table in the database

1. Expand the database node in Server Explorer.
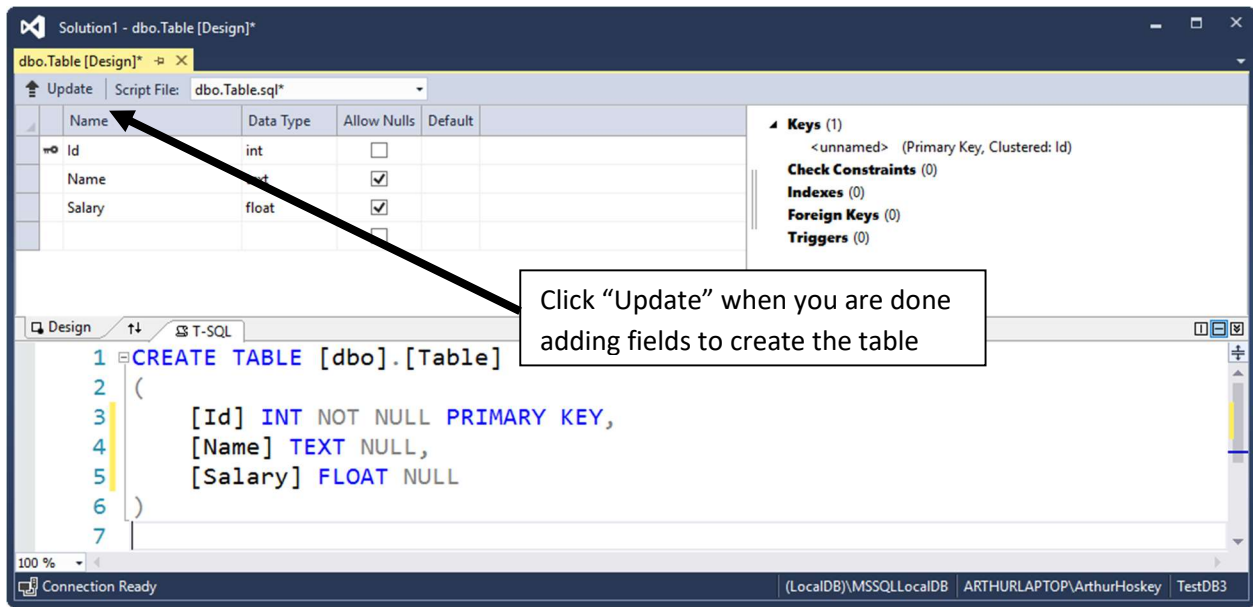
2. Right click tables and choose Add New Table…

Part 4 – Add fields to the table

Add the following fields to the table:

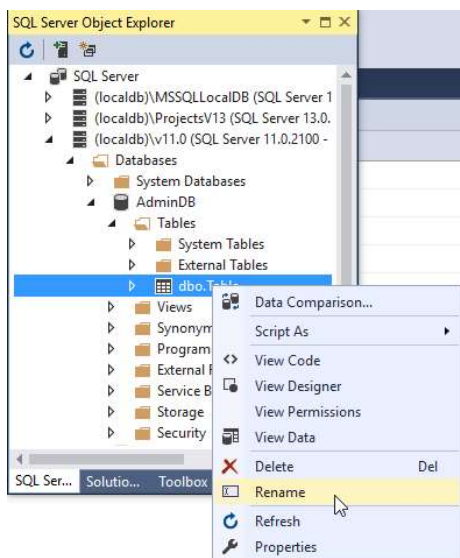| Field Name	Datatype
Id	Int
Name	Text
Salary	Float

Make sure you click the "Update" button when you are done adding fields. Alternatively, you can press Shift+Alt+U to update the database. The table will not actually be created in the database until you execute the update.

The SQL create table statement will be generated for you automatically as you add fields. When you click "Update" the create table statement will be executed on the database causing the table to actually get created.
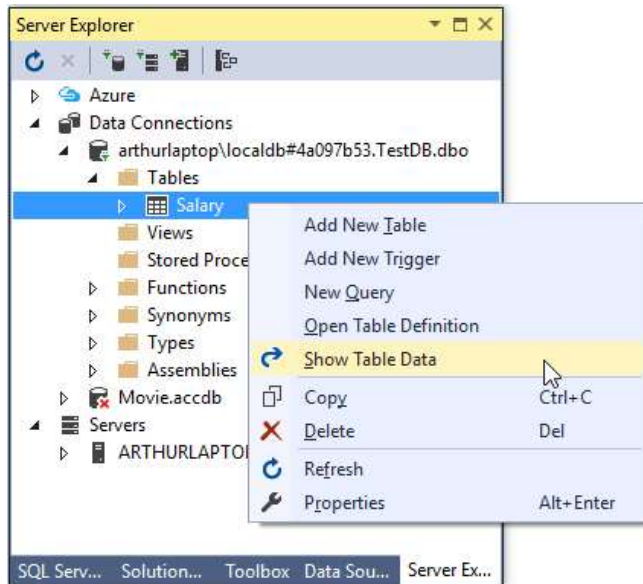
Part 5 – Rename the table

1. Open SQL Object Explorer (go to View | SQL Server Object Explorer). Alternatively, you can type Ctrl+\, Ctrl+S to open SQL Object Explorer.
2. Choose Rename option to rename the table
3. For example, rename the table to Salary

Part 6 – Add data to the table

To add data right click the table and choose Show Table Data.

Now add a few rows of data to the table. Just type data into the last row.Here is the data to add to the table organized by column:

Id	Name	Salary
1	Jane Smith	100000
2	John Doe	50000

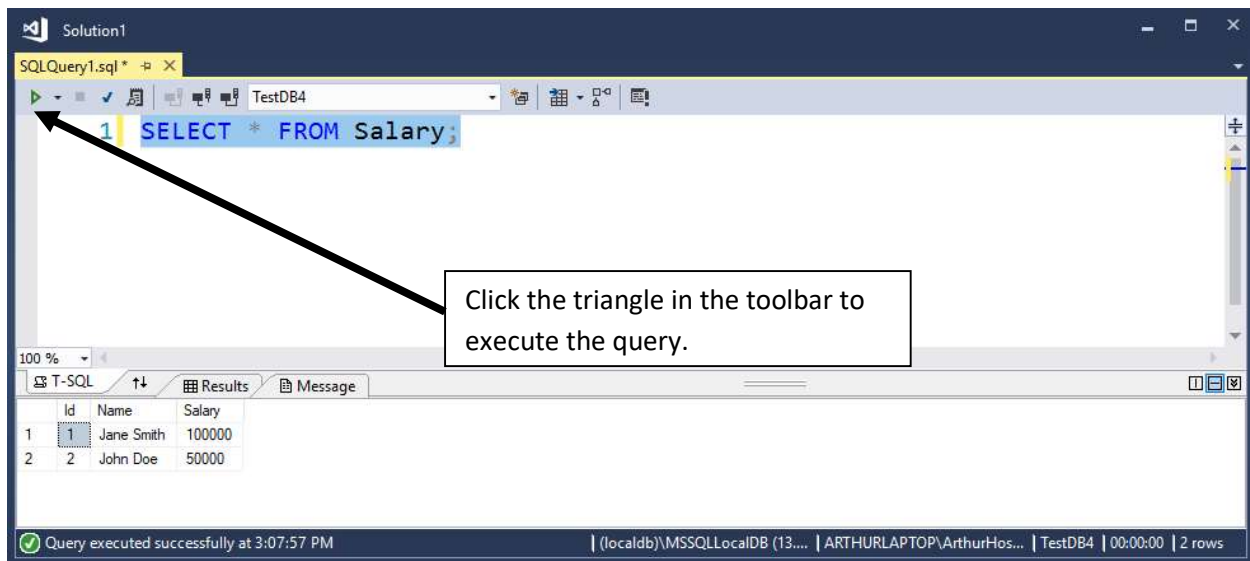Following is a screenshot of what it looks like after adding:

Part 7 – Run Queries

Right-click TestDB database inside of SQL Server Object Explorer. Choose New Query from the context menu.

Type the following query into the editor:

```sql
SELECT * FROM Salary;
```

Now run the query. You can run the query by typing Ctrl+Shift+E.

Type in another query and run it. Here is the query:

```
SELECT Name FROM Salary
WHERE Salary > 75000;
```