INSTRUCTIONS FOR USING THE MICROSOFT SQL SERVER MANAGEMENT STUDIO (SSMS) DESIGNER TOOLS TO GENERATE THE MOVIES DATABASE

[1]   In Microsoft SQL Server Management Studio (SSMS), right-click on the **Databases** item in the Object Explorer panel and select **New Database** in the right-click menu.
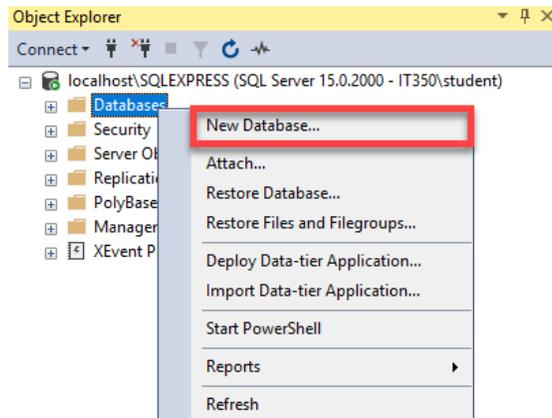
[2]   The **New Database** window will appear. Enter **Movies** in the *Database Name* text field. Leave all other fields as they are and click **OK**.
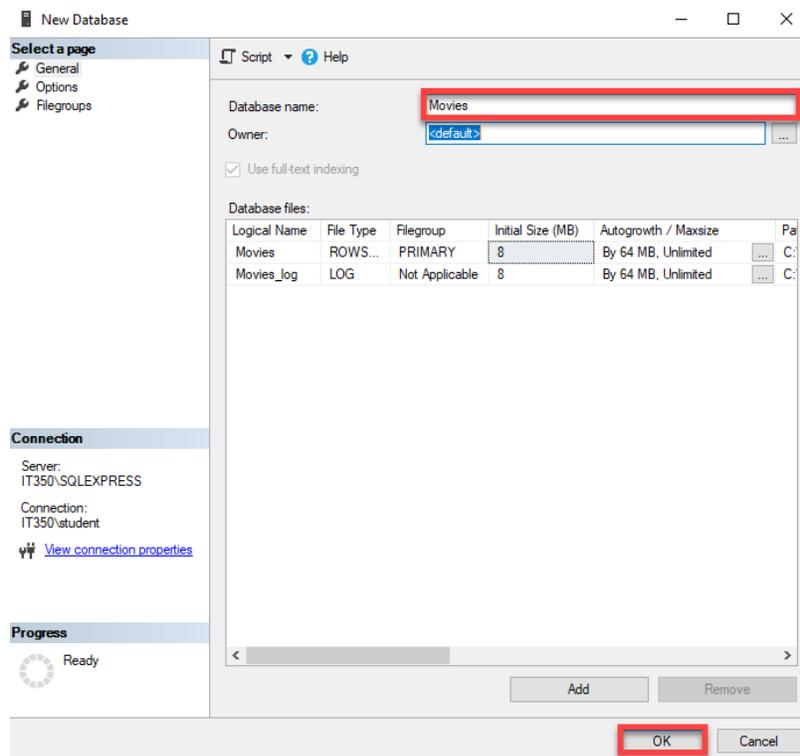
[3]   You now see the database listed under **Databases** in the Object Explorer panel. Expand the **Movies** database tree by clicking on the ⊞ button next to the **Movies** label. Right-click on the **Tables** item under **Movies** and select **NEW --> TABLE** from the right-click menu to add a new table.
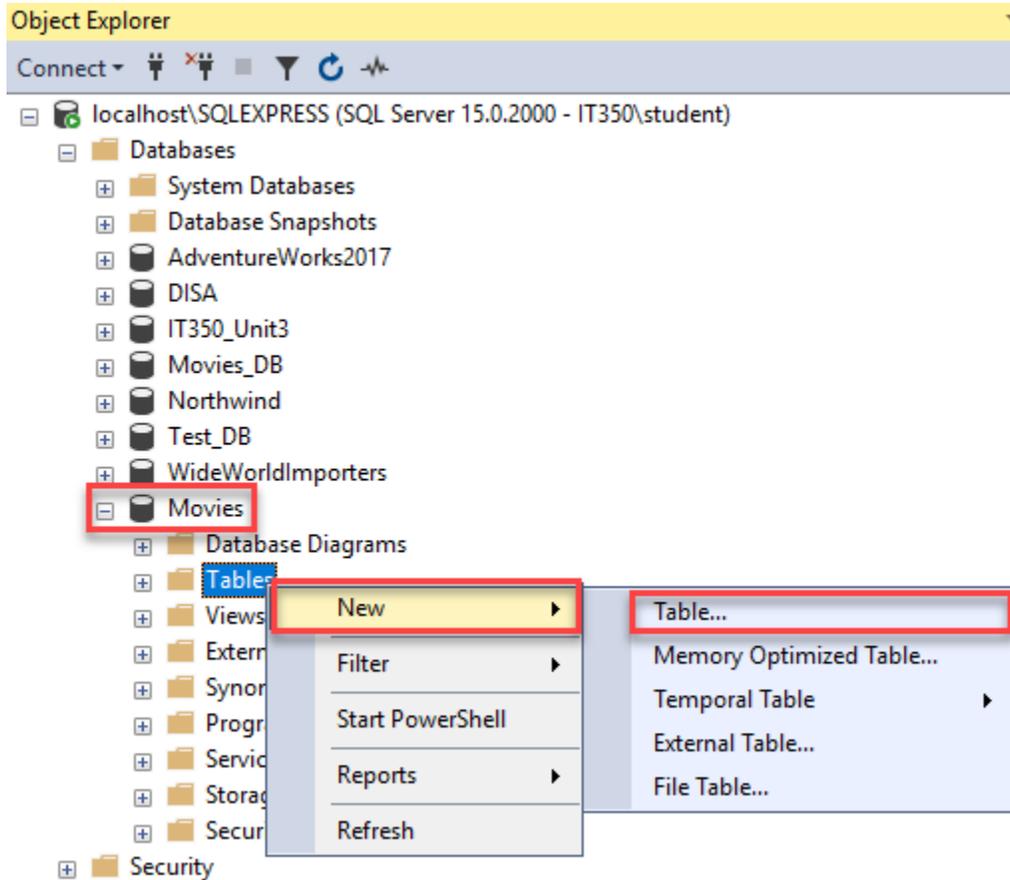
[4]   The screenshot below shows what to enter for the **Director** table in the SSMS Designer window. Do not allow nulls for the **DirectorID** and **Director_LastName** attributes (i.e., leave the **Allow Nulls** checkbox blank for these attributes).

[5]   Right-click on the **DirectorID** attribute and select **Set Primary Key** from the right-click menu. This will establish the **DirectorID** attribute as the primary key for the table.
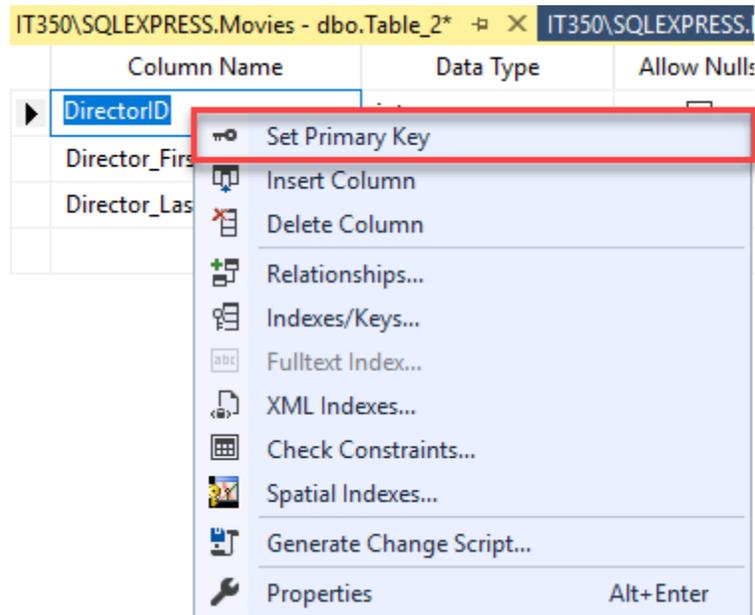
[6]   Right-click on the Designer window tab and select the **Save** option from the right-click menu.

RIGHT-CLICK
ON THIS TAB
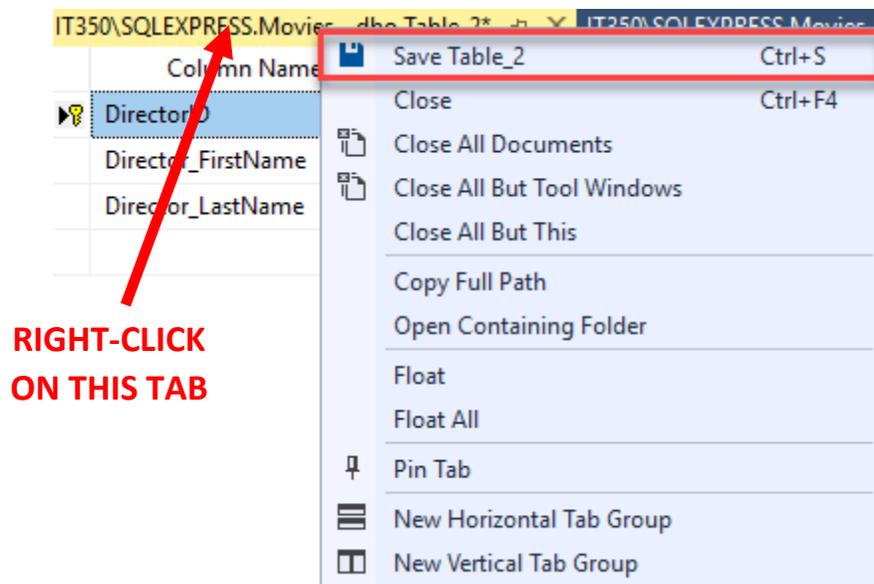
[7]   The **Choose Name** prompt will appear. Enter **Director** into the *Enter a name for the table* text field. Click the **OK** button when finished.
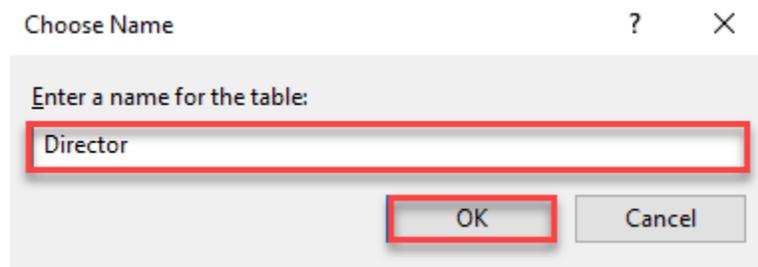
[8]   Right-click on the **Tables** items under **Movies** and select **NEW --> TABLE** from the right-click menu to add a new table.
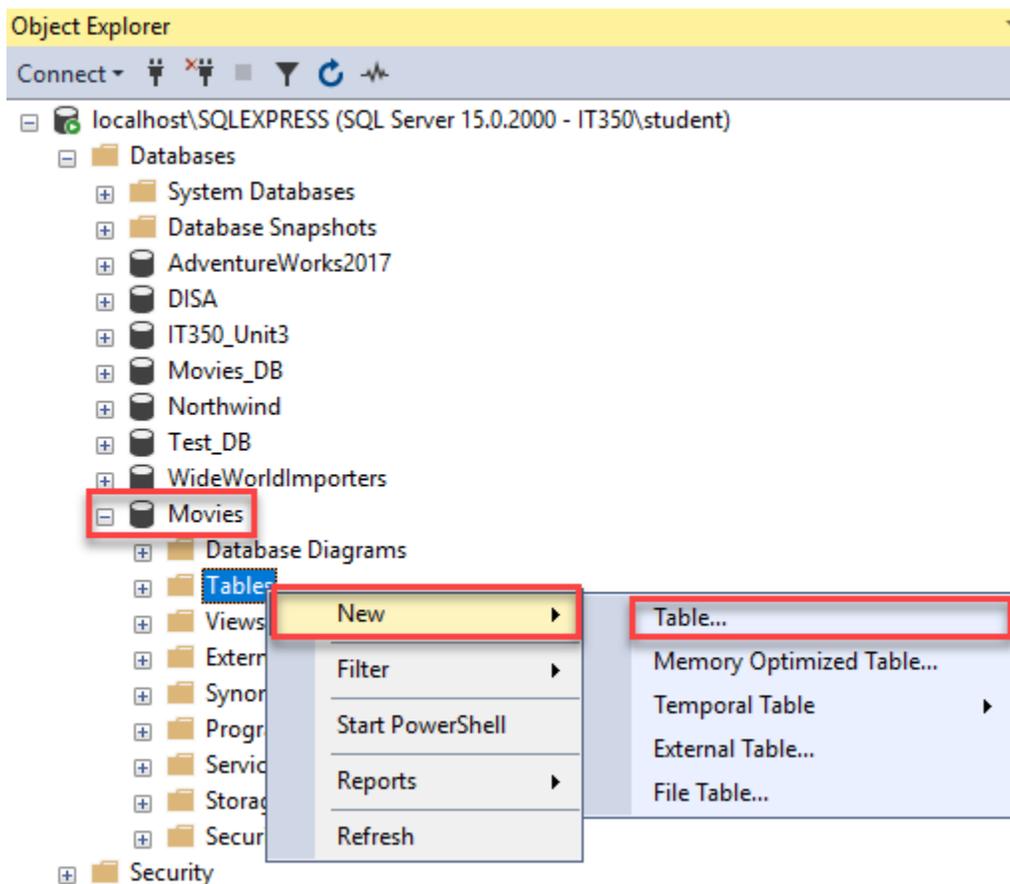
[9]   The screenshot below shows what to enter for the **Star** table in the SSMS Designer window. Do
        not allow nulls for the **StarID** and **Star_LastName** attributes (i.e., leave the **Allow Nulls** checkbox
        blank for these attributes).
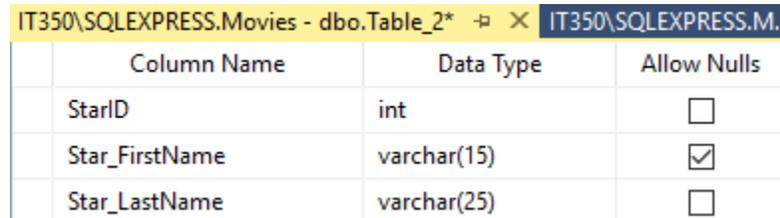
[10]   Right-click on the **StarID** attribute and select **Set Primary Key** from the right-click menu. This
        will establish the **StarID** attribute as the primary key for the table.
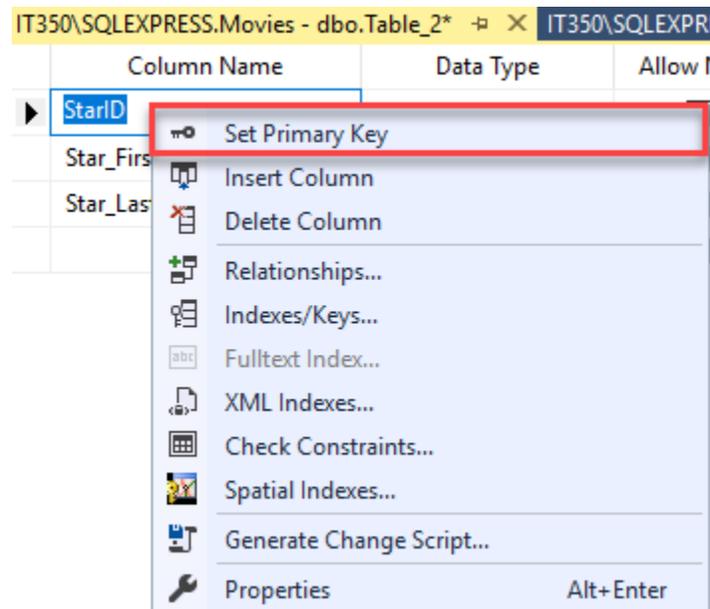
[11]   Right-click on the Designer window tab and select the **Save** option from the right-click menu.
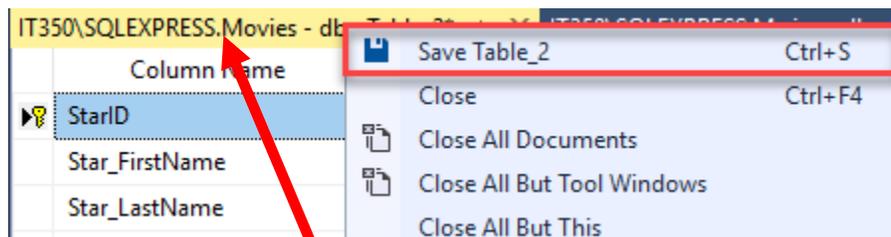
**RIGHT-CLICK
ON THIS TAB**

[12]   The **Choose Name** prompt will appear. Enter **Star** into the *Enter a name for the table* text field. Click the **OK** button when finished.
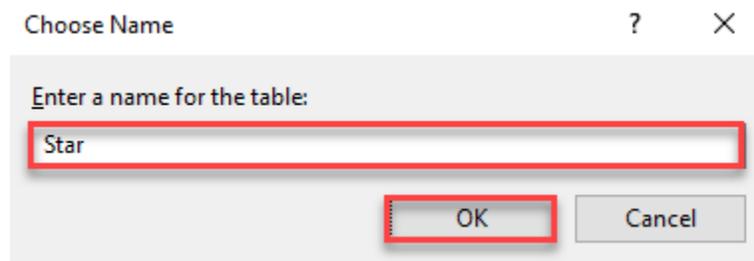
[13]   Right-click on the **Tables** items under **Movies** and select **NEW --> TABLE** from the right-click menu to add a new table.
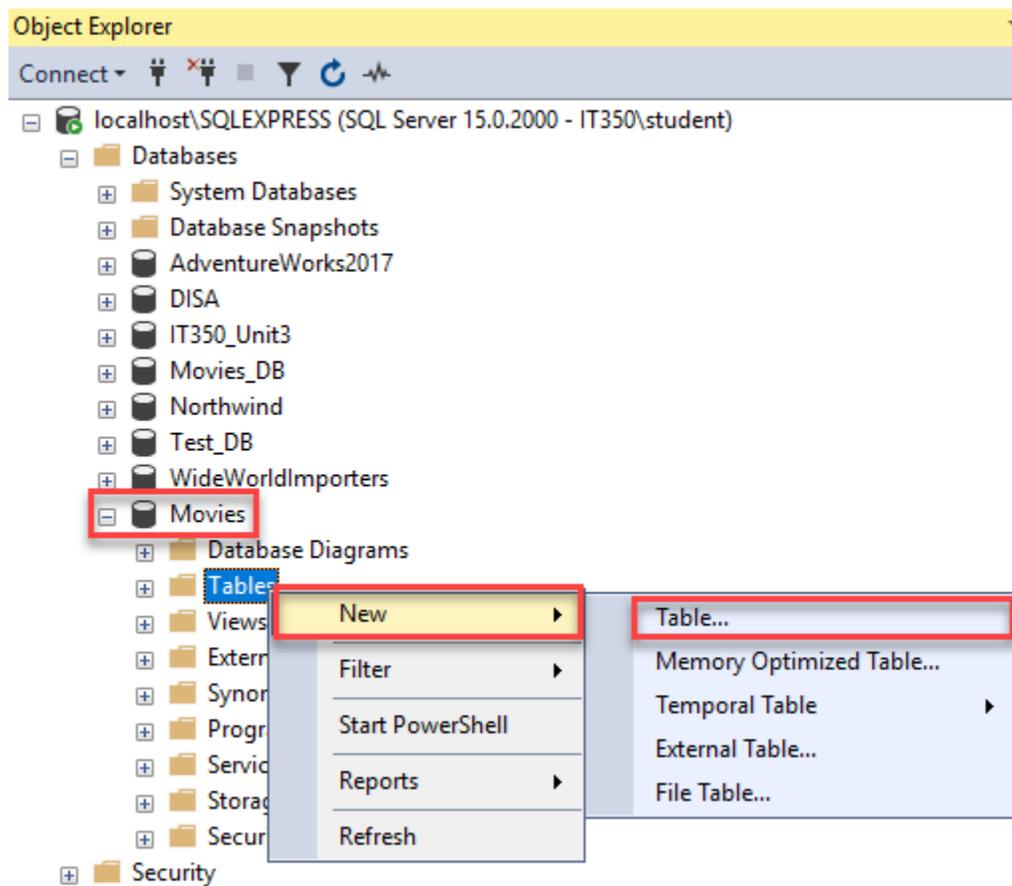
[14]   The screenshot below shows what to enter for the **Genre** table in the SSMS Designer window.
         Do not allow nulls for the **GenreID** and **Genre** attributes (i.e., leave the **Allow Nulls** checkbox
         blank for these attributes).
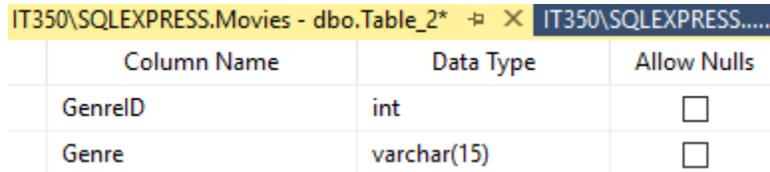
Column Name	Data Type	Allow Nulls
GenreID	int	☐
Genre	varchar(15)	☐

IT350\SQLEXPRESS.Movies - dbo.Table_2*   ✛ ✕   IT350\SQLEXPRESS.....N

[15]   Right-click on the **GenreID** attribute and select **Set Primary Key** from the right-click menu. This
         will establish the **GenreID** attribute as the primary key for the table.
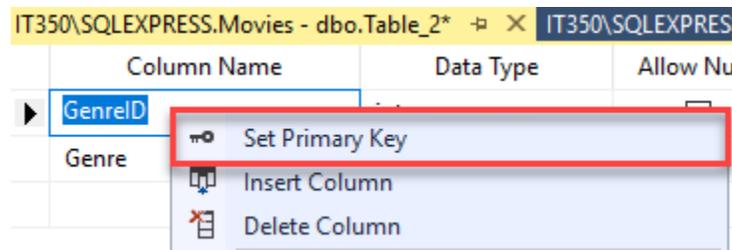
IT350\SQLEXPRESS.Movies - dbo.Table_2*   ✛ ✕   IT350\SQLEXPRES

Column Name	Data Type	Allow Nu
▶ GenreID		
Genre		

- ☞○ Set Primary Key
- 🔲 Insert Column
- 🗎 Delete Column

[16]   Right-click on the Designer window tab and select the **Save** option from the right-click menu.

IT350\SQLEXPRESS

💾	Save Table_2	Ctrl+S
	Close	Ctrl+F4
🗐	Close All Documents	
🗐	Close All But Tool Windows	
	Close All But This	
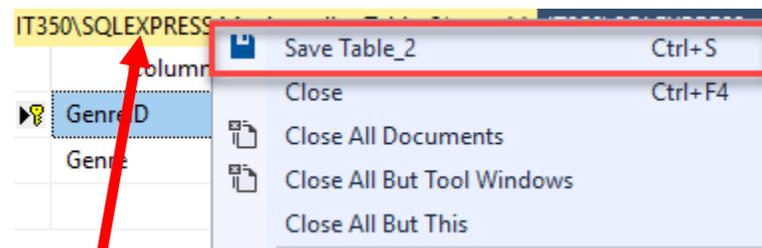
▶🔑 GenreID
Genre

**RIGHT-CLICK
ON THIS TAB**

[17]   The **Choose Name** prompt will appear. Enter **Genre** into the ***Enter a name for the table*** text
         field. Click the **OK** button when finished.

Choose Name   ?   ✕

Enter a name for the table:

Genre

OK   Cancel

[18]   Right-click on the **Tables** items under **Movies** and select **NEW --> TABLE** from the right-click
menu to add a new table.
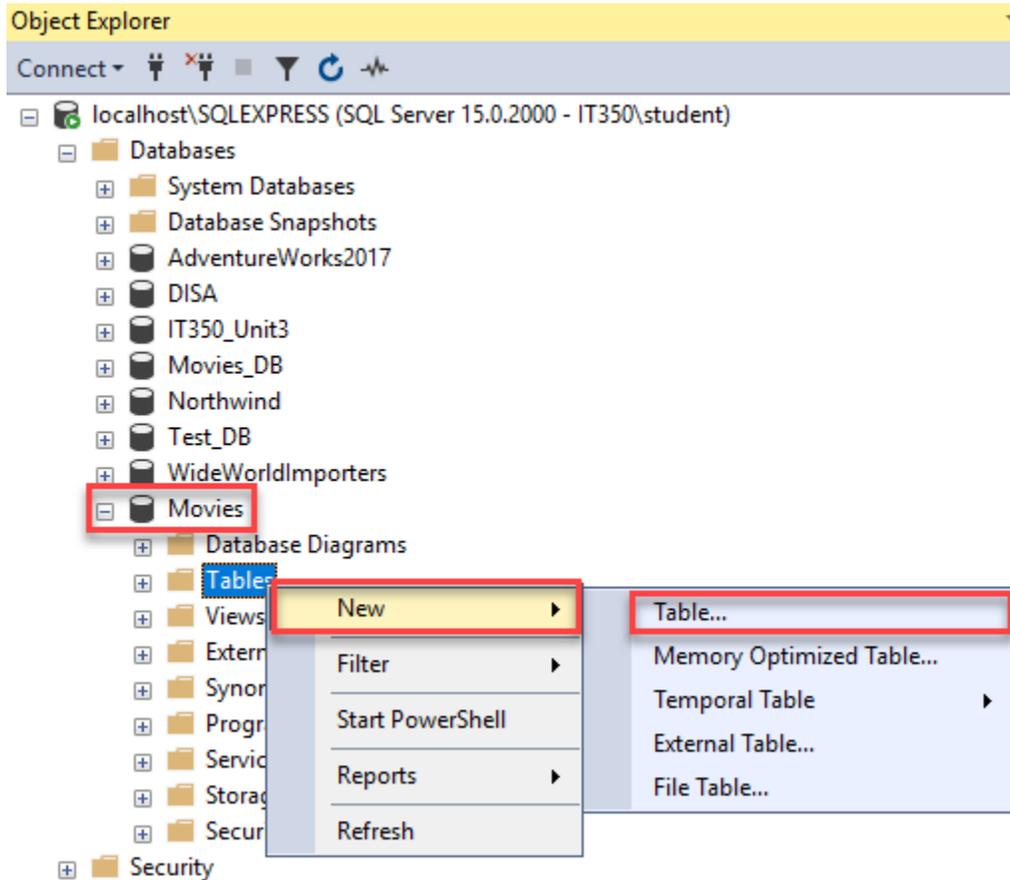
[19]   This screenshot below shows what to enter for the **Movies** table in the Designer window. Do
not allow nulls for any of the table attributes (i.e., leave the checkbox blank for all attributes).

Column Name	Data Type	Allow Nulls
MovieID	int	☐
Title	varchar(35)	☐
Rating	numeric(3, 1)	☐
DirectorID	int	☐
StarID	int	☐
GenreID	int	☐

[20]   Right-click on the **MovieID** attribute and select **Set Primary Key** from the right-click menu. This will establish the **MovieID** attribute as the primary key for the table.
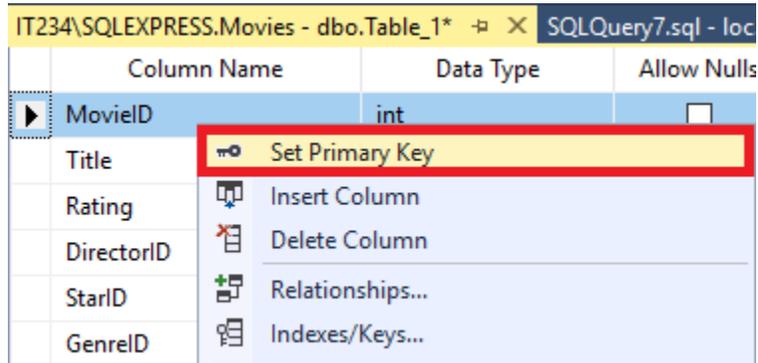
[21]   Right-click on the Designer window tab and select the **Save** option from the right-click menu.
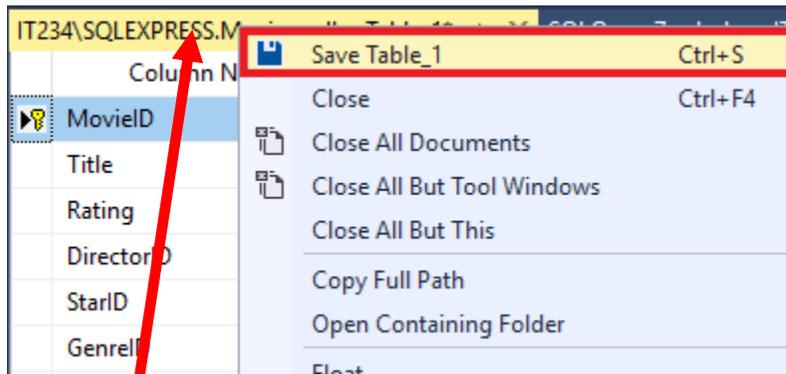
RIGHT-CLICK ON THIS TAB

[22]   The **Choose Name** prompt will appear. Enter **Movies** into the *Enter a name for the table* text field. Click the **OK** button when finished.

[23]   You will now need to establish the foreign key constraints within the **Movies** database. All of
         the foreign key constraints need to be applied to the **Movies** table. Right-click on an area within
         the Microsoft SSMS Designer window containing the **Movies** table structure and select the
         Relationships option in the right-click menu.
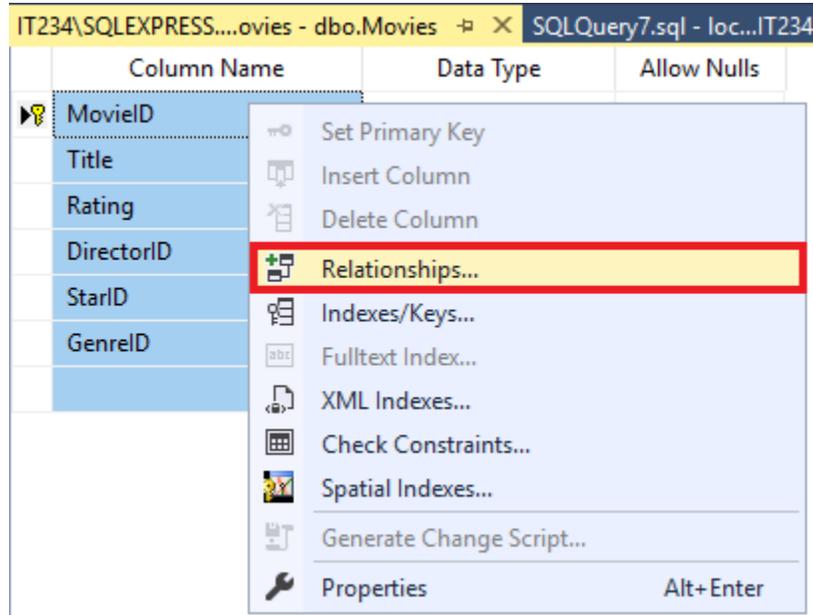
[24]   The **Foreign Key Relationships** window will appear. Click on the **ADD** button.
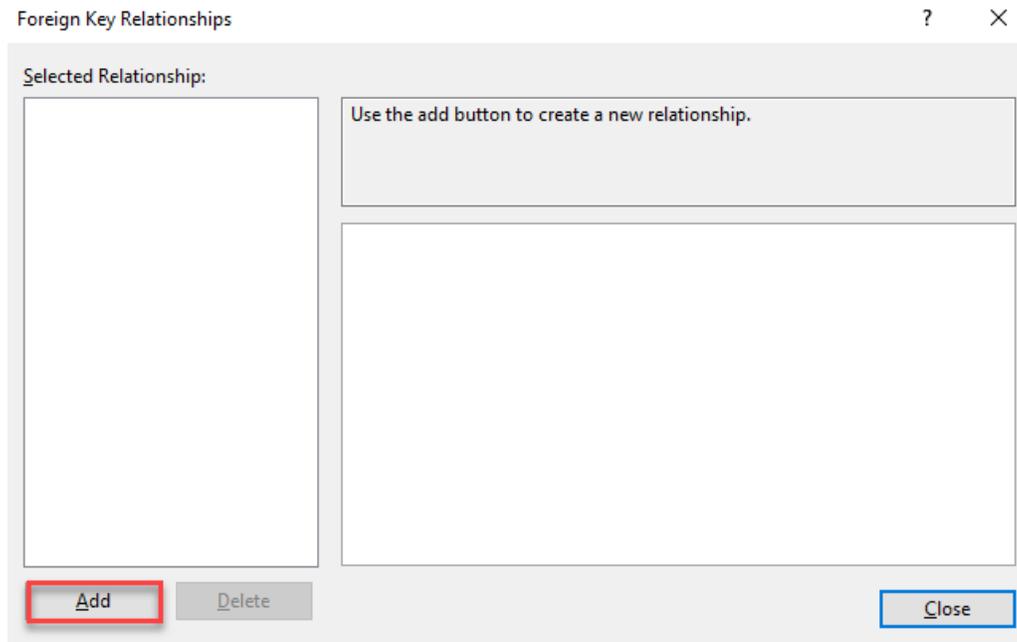
[25]   A new item will appear in the Selected Relationship list. Click on the **Tables and Columns Specification** item in the right panel. Then click on the button containing three dots (⋯).
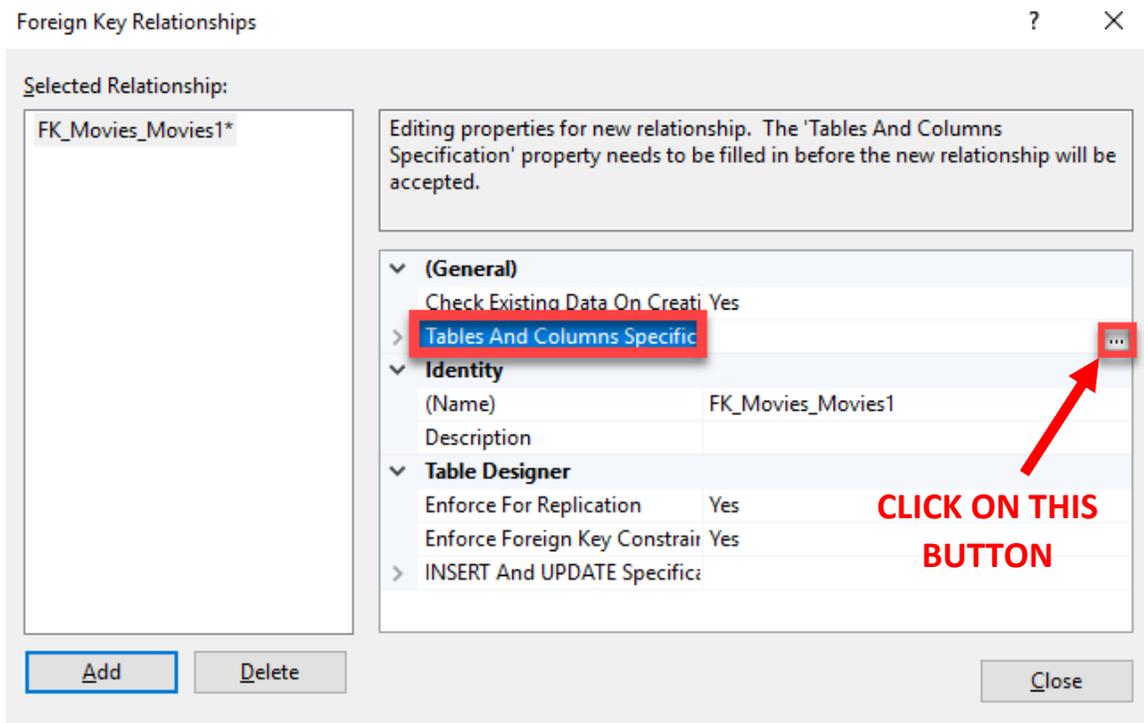
[26]   The **Tables and Columns** window will appear. Change the *Primary Key Table* entry to **Director**.
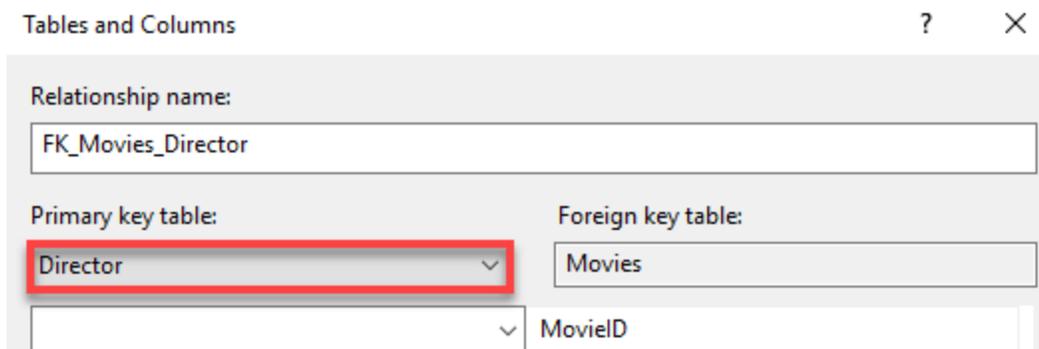
[27] Click on the *Primary Key Table* attribute drop-down box and select **DirectorID**.
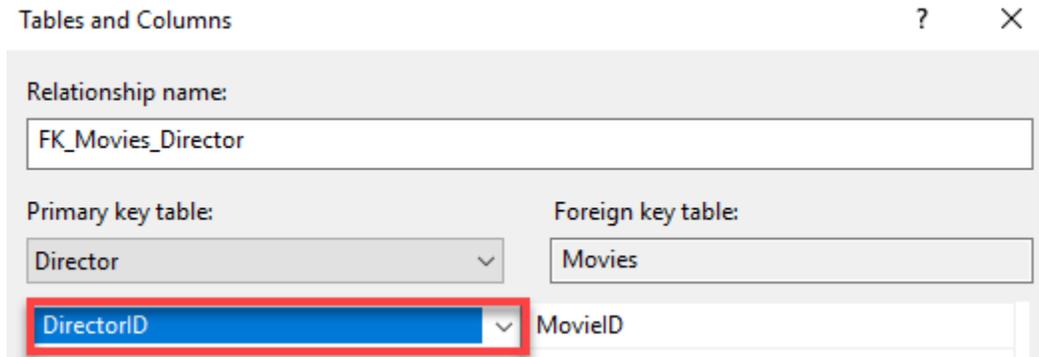
[28] Click on the *Foreign Key Table* attribute drop-down box and select **DirectorID**.
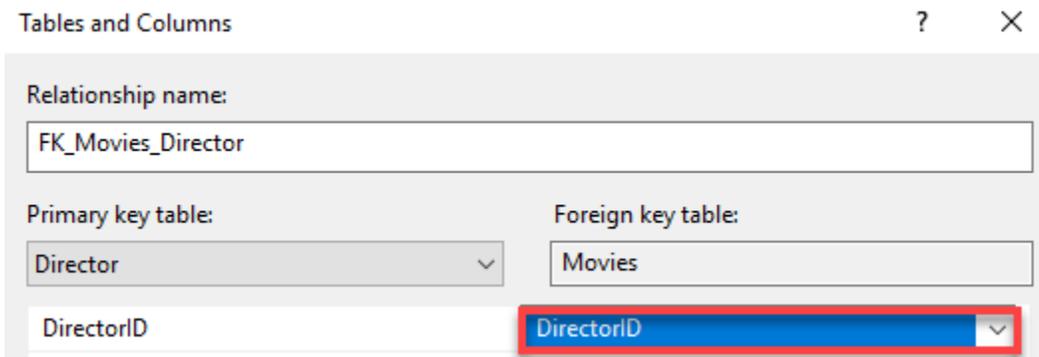
[29]   Click on the **OK** button to establish the foreign key to primary key relationship between the **Movies** and **Director** tables.

[30]   Repeat Steps 24-29 to establish the foreign key to primary key relationships between the remaining tables. Use the database design diagram provided with the unit assignment to denote the remaining relationships. When finished, click on the **CLOSE** button in the **Foreign Key Relationships** window.

[31]   Click on the **Save All** (🖫) button in the top menu bar of Microsoft SSMS.
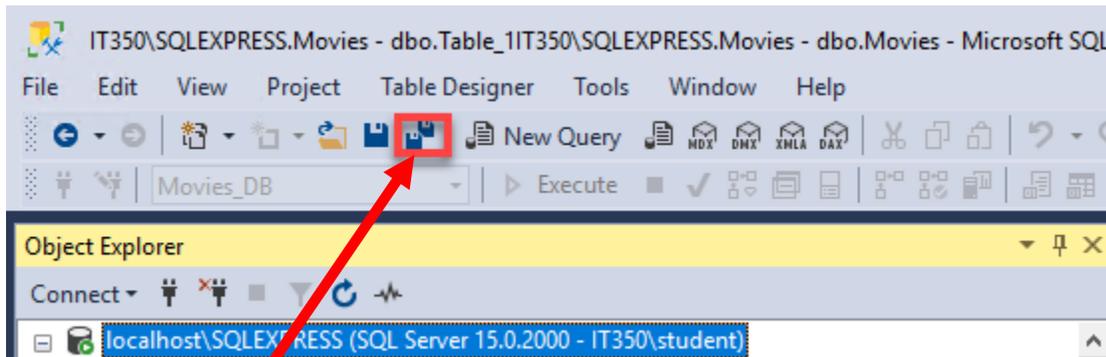
CLICK ON THIS BUTTON

[32]   The **Save** prompt will appear. Click on the **Yes** button.
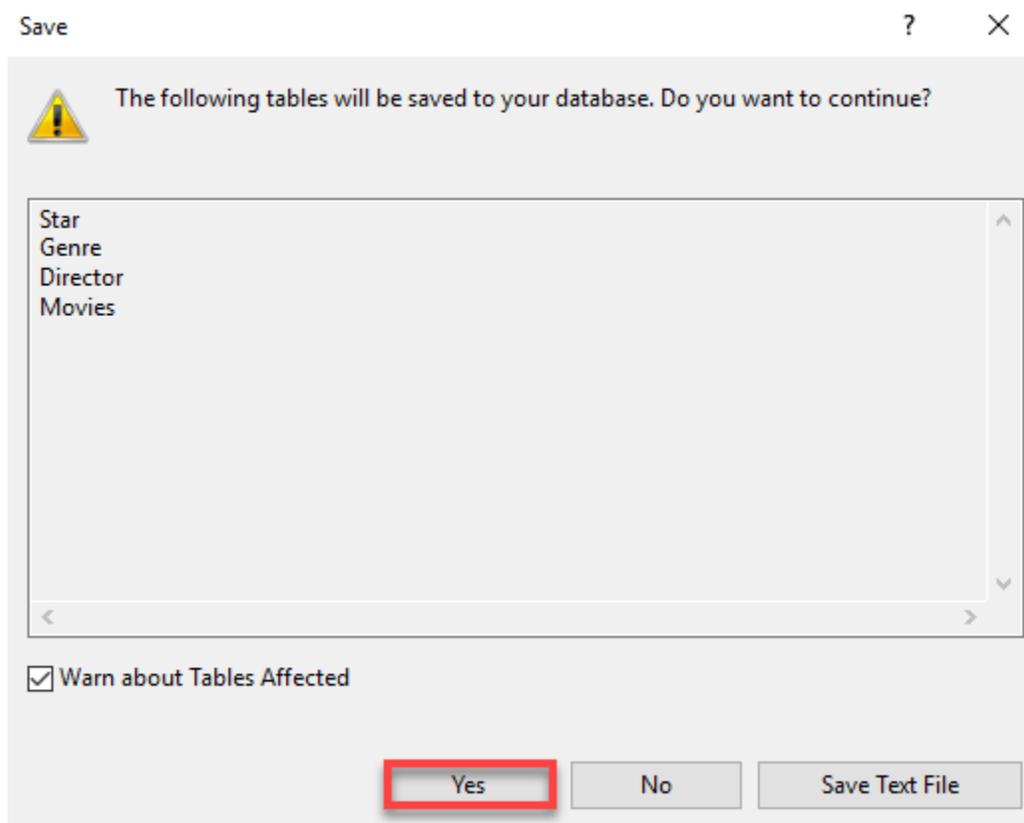
[33]   In the Object Explorer panel, select the server instance item at the very top of the object tree. Then click on the refresh button (🔄) to refresh the list of database objects.
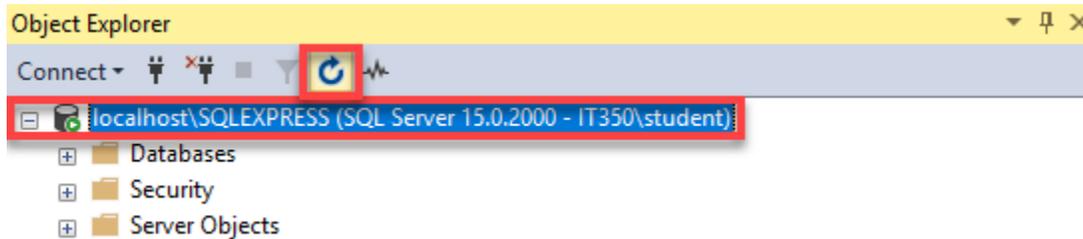
[34]   In the Object Explorer panel, expand the list of tables by clicking on the ⊞ buttons next to the **Databases**, **Movies**, and **Tables** items.
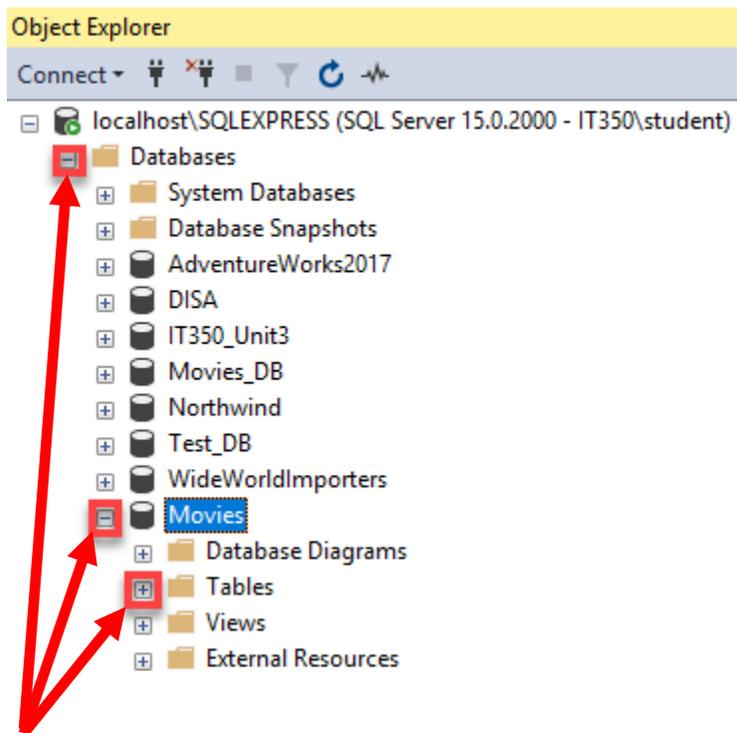
CLICK ON THESE BUTTONS TO EXPAND THE DATABASE OBJECT TREE

[35]   The list of tables created should now appear under the **Tables** item in the Object Explorer tree.

□ 🗄 Movies
   ⊞ 📁 Database Diagrams
   □ 📁 Tables
      ⊞ 📁 System Tables
      ⊞ 📁 FileTables
      ⊞ 📁 External Tables
      ⊞ 📁 Graph Tables
      ⊞ ▦ dbo.Director
      ⊞ ▦ dbo.Genre
      ⊞ ▦ dbo.Movies
      ⊞ ▦ dbo.Star
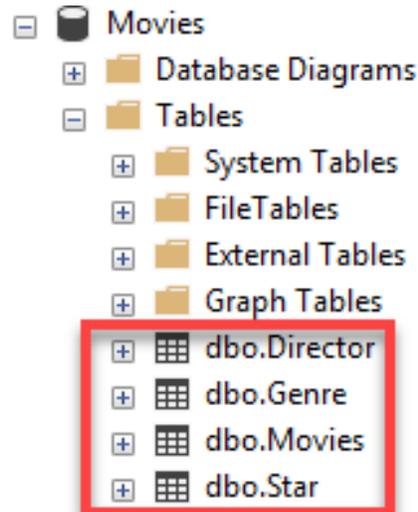
[36]   You can verify the establishment of foreign and primary key constraints by navigating further
        into the Object Explorer tree.

□ ▦ dbo.Movies
   □ 📁 Columns
         🔑 MovieID (PK, int, not null)
         🗏 Title (varchar(35), not null)
         🗝 DirectorID (FK, int, not null)
         🗝 StarID (FK, int, not null)
         🗝 GenreID (FK, int, not null)
         🗏 Rating (numeric(3,1), not null)
   □ 📁 Keys
         🔑 PK_Movies
         🗝 FK_Movies_Director
         🗝 FK_Movies_Genre
         🗝 FK_Movies_Star