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**.

Select a page	🔲 Script 👻 😰	Help				
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Filegroups	Database name		Movies			
	Owner:		<default></default>			
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	Movies	ROWS	PRIMARY	8	By 64 MB Unlimited	
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Connection: IT350\student						
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[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.

Object Explorer	Object Explorer 👻							
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🗉 📕 Security		-						

[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).

IT	350\SQLEXPRESS.Movies - dbo	.Table_2* → ×	IT350\	SQLEXPRESS.Mo
	Column Name	Data Type		Allow Nulls
	DirectorID	int		
	Director_FirstName	varchar(15)		\checkmark
	Director_LastName	varchar(25)		

[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.

IT3	T350\SQLEXPRESS.Movies - dbo.Table_2* 👳 🗙 IT350\SQLEXPRESS.I						
	Column Name		Da	ta Type	e i	Allow Nulls	
۲	DirectorID	-0	Cat Daire	• •			
	Director_Firs		Set Prima	ary key			
	Director Las	ųμ	Insert Co	lumn			
	Director_Las	×	Delete Column				
		挈	Relationships				
		蝐	Indexes/Keys				
		abr	Fulltext Index				
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			Check Co	onstraints.			
		<u>2</u> X	Spatial Indexes				
		<u>.</u>	Generate	Change S	cript		
		۶	Propertie	s		1	Alt+Enter

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

IT3	IT350\SQLEXPRESS.Movies_ dbg Table 2* db Y IT250\SQLEXPRESS Movies_				
	Coly mn Name	2	Save Table_2	Ctrl+S	
▶ ¶	Director		Close	Ctrl+F4	
	Director FirstName	Ð	Close All Documents		
	Director LastName	Ð	Close All But Tool Windows		
Director_cust value			Close All But This		
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ON T	ΗΙς ΤΔΒ		Float		
			Float All		
			Pin Tab		
			New Horizontal Tab Group		
			New Vertical Tab Group		
RIGHT-CLICK ON THIS TAB		₽ 101 🖽	Float Float All Pin Tab New Horizontal Tab Group New Vertical Tab Group		

[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.

Choose Name		?	×
Enter a name for the table:			
Director			
	ОК	Cancel	

[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).

IT3	50\SQLEXPRESS.Movies - dbo	.Table_2* 👳 × IT3	50\SQLEXPRESS.M
	Column Name	Data Type	Allow Nulls
	StarlD	int	
	Star_FirstName	varchar(15)	\checkmark
	Star_LastName	varchar(25)	

[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.



[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).

IT350\SQLEXPRESS.Movies - dbo	.Table_2* 👳 🗙 IT350\	SQLEXPRESSN
Column Name	Data Type	Allow Nulls
GenrelD	int	
Genre	varchar(15)	

[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.

IT3	IT350\SQLEXPRESS.Movies - dbo.Table_2* 👳 🗙 IT350\SQLEXPRES						
	Column Name			Da	ata Type	:	Allow Nu
Þ	GenrelD			• .			
	Genre	0	Set Primary	r Key			
	oeme	ц,	Insert Colu	mn			
		×	Delete Colu	ımn			

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



[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			
	ОК	Cance	:

[18] Right-click on the **Tables** items under **Movies** and select **NEW --> TABLE** from the right-click menu to add a new table.

Object Explorer	*						
Connect - 🛱 🏹 🗏 🝸 🖒 🦀							
 □ Iocalhost\SQLEXPRESS (SQL Server 15.0.2000 - IT350\student) □ Databases □ Database Snapshots □ AdventureWorks2017 							
 DISA IT350_Unit3 Movies_DB Northwind Test_DB WideWorldImporters Movies 							
Image: Bitter Filter Memory Optimized Table Image: Bitter Temporal 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).

IT234\SQI	EXPRESS.Movies - dbo	.Table_1* ↔ ×	SQLQ	uery7.sql - locl
	Column Name	Data Type	2	Allow Nulls
Mov	ielD	int		
Title		varchar(35)		
Ratin	g	numeric(3, 1)		
Direc	torID	int		
Starl	0	int		
Genr	elD	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.



[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.

Choose Name		?	\times
Enter a name for the table:			
Movies			
	ОК	Canc	el

[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.

Foreign Key Relationships	?	×
Selected Relationship:		
Use the add button to create a new relationship.		
<u>A</u> dd <u>D</u> elete	<u>C</u> los	e

[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 (....).

Foreign Key Relationships				?	Х
Selected Relationship:					
FK_Movies_Movies1*	Editing properties for new relationship. The 'Tables And Columns Specification' property needs to be filled in before the new relationship will be accepted.				
	~	(General)			
		Check Existing Data On Creati	Yes		
	>	Tables And Columns Specific			
	~	Identity			
		(Name)	FK_Movies_Movies1		
		Description			
	~	Table Designer			
		Enforce For Replication	Yes CLICK	ON THIS	5
		Enforce Foreign Key Constrair	Yes		
		INSERT And UPDATE Specifica			
<u>A</u> dd <u>D</u> elete				<u>C</u> lose	

[26] The **Tables and Columns** window will appear. Change the *Primary Key Table* entry to **Director**.

Tables and Columns	?	\times
Relationship name:		
FK_Movies_Director		
Primary key table:	Foreign key table:	
Director 🗸	Movies	
~	MovielD	

[27] Click on the *Primary Key Table* attribute drop-down box and select **DirectorID**.

Tables and Columns		?	×
Relationship name:			
FK_Movies_Director			
Primary key table:	Foreign key table:		
Director \checkmark	Movies		
DirectorID 🗸	MovielD		

[28] Click on the *Foreign Key Table* attribute drop-down box and select **DirectorID**.

Tables and Columns	? ×
Relationship name:	
FK_Movies_Director	
Primary key table:	Foreign key table:
Director ~	Movies
DirectorID	DirectorID 🗸

[29] Click on the **OK** button to establish the foreign key to primary key relationship between the **Movies** and **Director** tables.

ables and Columns			?	\times
Relationship name:				
FK_Movies_Director				
Primary key table:		Foreign key table:		
Director	~	Movies		
DirectorID		DirectorID		\sim
		ОК	Cance	al

[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.

Foreign Key Relationships				?	×	
Selected Relationship:						
FK_Movies_Director FK_Movies_Genre FK_Movies_Star	Editing properties for existing relationship.					
	~	(General)				
		Check Existing Data On Creati	Yes			
		Tables And Columns Specifica				
	~	Identity				
		(Name)	FK_Movies_Star			
		Description				
	~	Table Designer				
		Enforce For Replication	Yes			
		Enforce Foreign Key Constrair	Yes			
		INSERT And UPDATE Specifica				
Add Delete				Close		

[31] Click on the Save All (💾) button in the top menu bar of Microsoft SSMS.



[32] The **Save** prompt will appear. Click on the **Yes** button.

Save				?	\times
<u>^</u>	The following tables will	be saved to your d	atabase. Do you w	ant to continue?	
Star Genre Directo Movie	Dr S				^
<					>
🖂 War	n about Tables Affected	Ves	No	Save Tevt Fi	le
				Save reaction	

[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 (^C) 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.



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



[36] You can verify the establishment of foreign and primary key constraints by navigating further into the Object Explorer tree.

	dbo.M	ovies
	Col	umns
	-0	MovielD (PK, int, not null)
		Title (varchar(35), not null)
	<u>_</u>	DirectorID (FK, int, not null)
	<u>_</u>	StarlD (FK, int, not null)
	<u>e</u>	GenreID (FK, int, not null)
		Rating (numeric(3,1), not null)
	🗌 Key	rs
		PK_Movies
	<u>c</u> =	FK_Movies_Director
	<u>_</u>	FK_Movies_Genre
	<u>c</u> =	FK_Movies_Star