

Ex04

Introduction: In the previous exercises, we used MS Excel as sample data source. In organizations, data can come from different departments, different kind of systems and people. Therefore, the design of Power BI can allow data pull from various kind of data sources, such as commonly used DBMS, Text files, websites, and even within Power BI itself.

Objective: Show how Power BI can pull data from difference sources to form Data Model.

Pre-requisites:

- 1) Understand how to load data from MS Excel
- 2) Basic DBMS knowledge and skill will be added advantage.

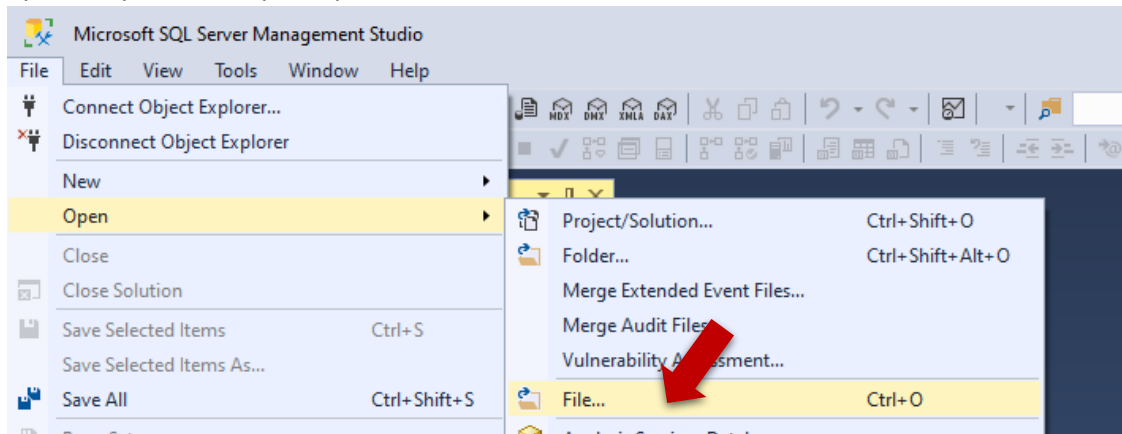
Steps:

Part-1: Prepare Data Workbook

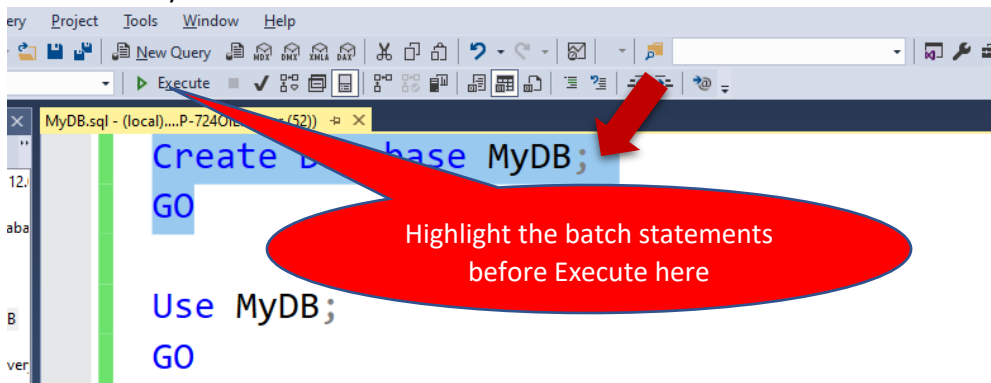
1. Copy from Ex03.xlsx and rename it as "Ex04.xlsx". We will use the same data set from Exercise 3

Part-2: Prepare MyDB Database

2. Launch MS SQL Server Data Engine, and the Management Studio. After login to Management, open the provided MyDB.sql file.

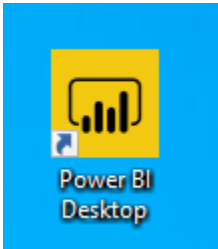


3. From the script editor, highlight each statement batch (Statements end with "GO") and **Execute** them batch by batch:

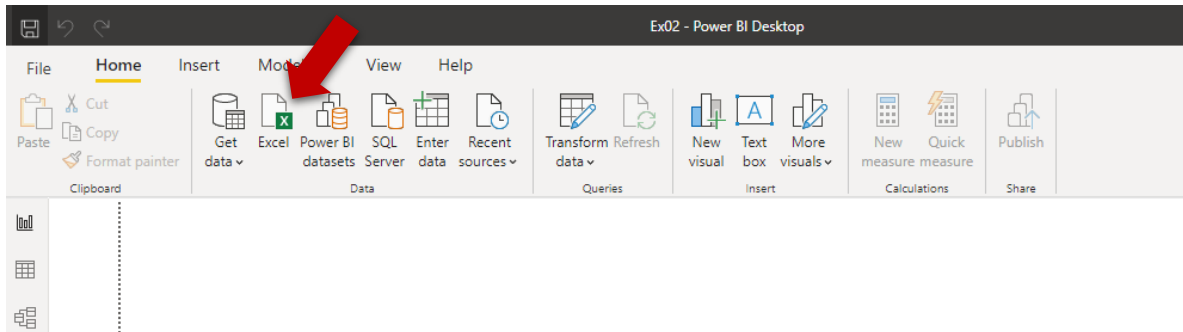


Part-3: Loading Data from Power BI Desktop

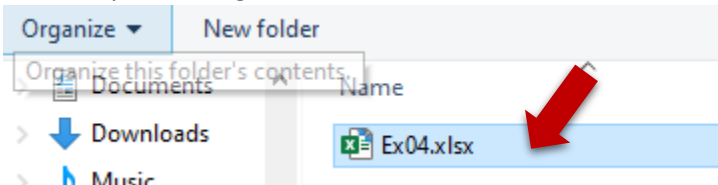
4. Create new Power BI project with name "Ex04.pbix".



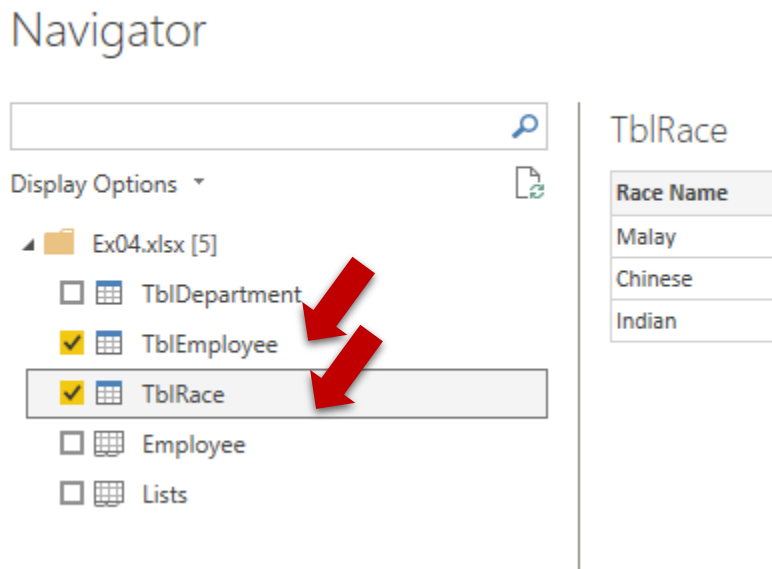
5. From the main UI, select load Excel data source:



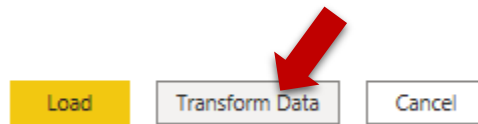
6. In the "Open" dialog box, select excel workbook "Ex03.xlsx" you just created:



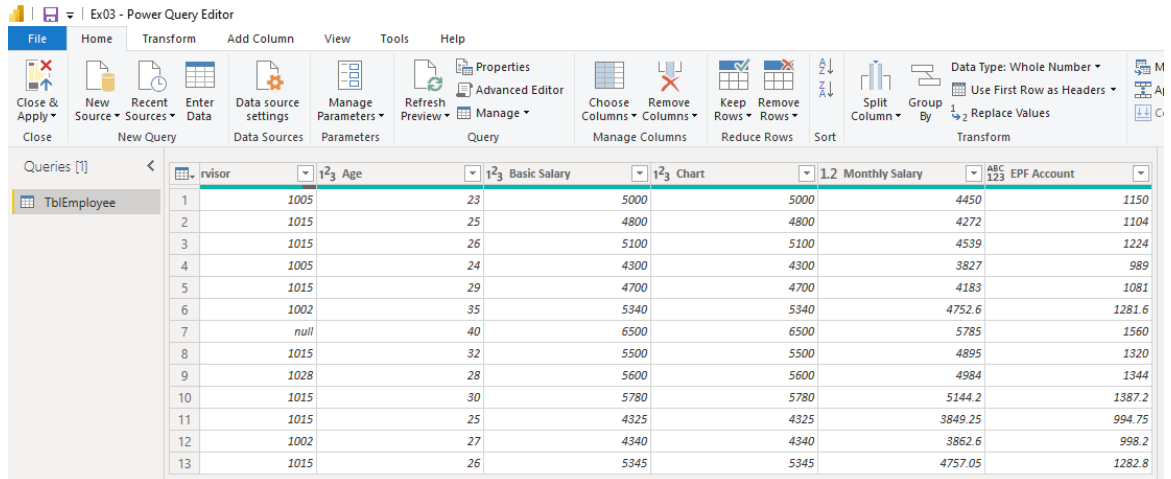
7. Press "Open", in the "Navigator" dialog box, select TblEmployee and TblRace. (Don't load at this moment):



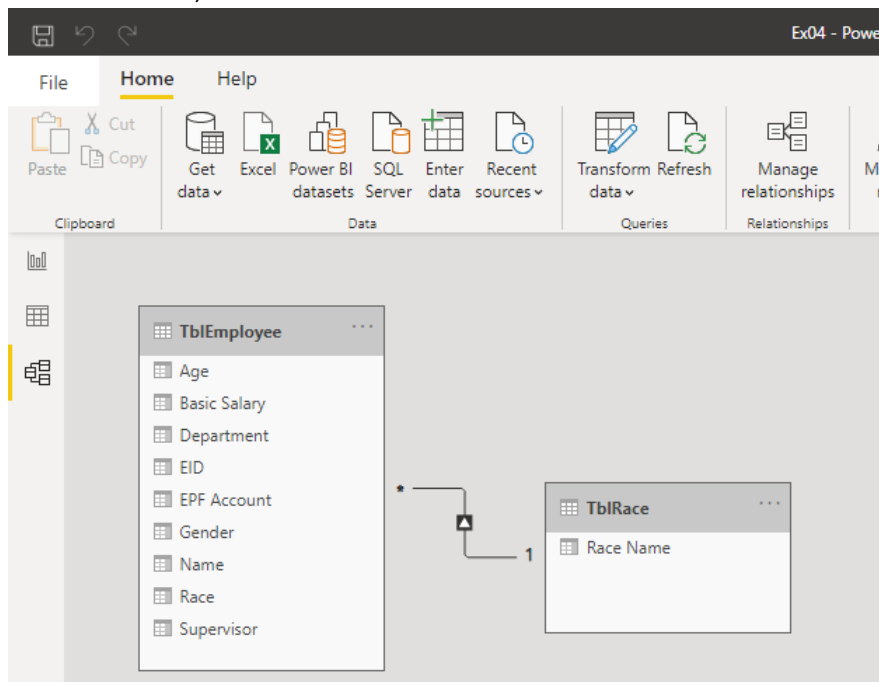
- Still under “Navigator” dialog box, press the “Transform Data” button at the bottom right of the dialog box:



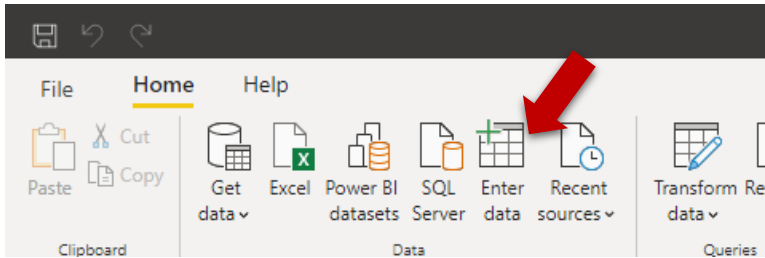
This will open the Query Editor:



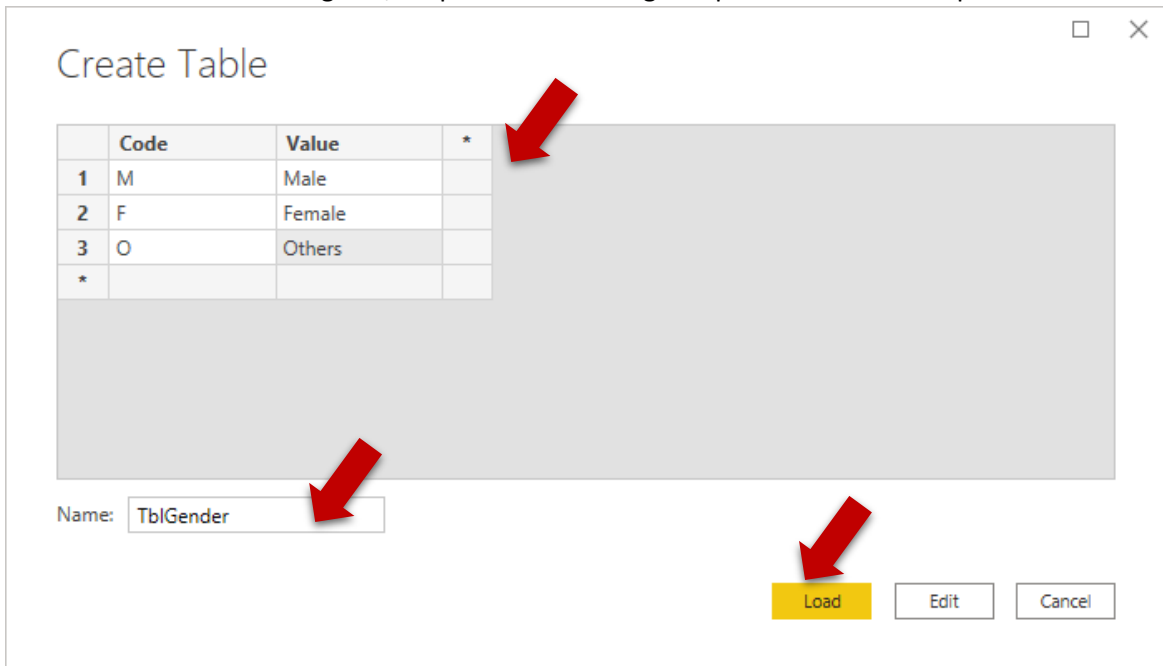
- From the only table (TblEmployee), right click the column headers to “Remove” the following 3 columns (Need to scroll to far right of the table):
 - Chart
 - Monthly Salary
- Select the “Close & Apply” under “Home” ribbon tab to start the loading and transformation. Wait until the loading process finish.
- Back to main UI, select the Model View:



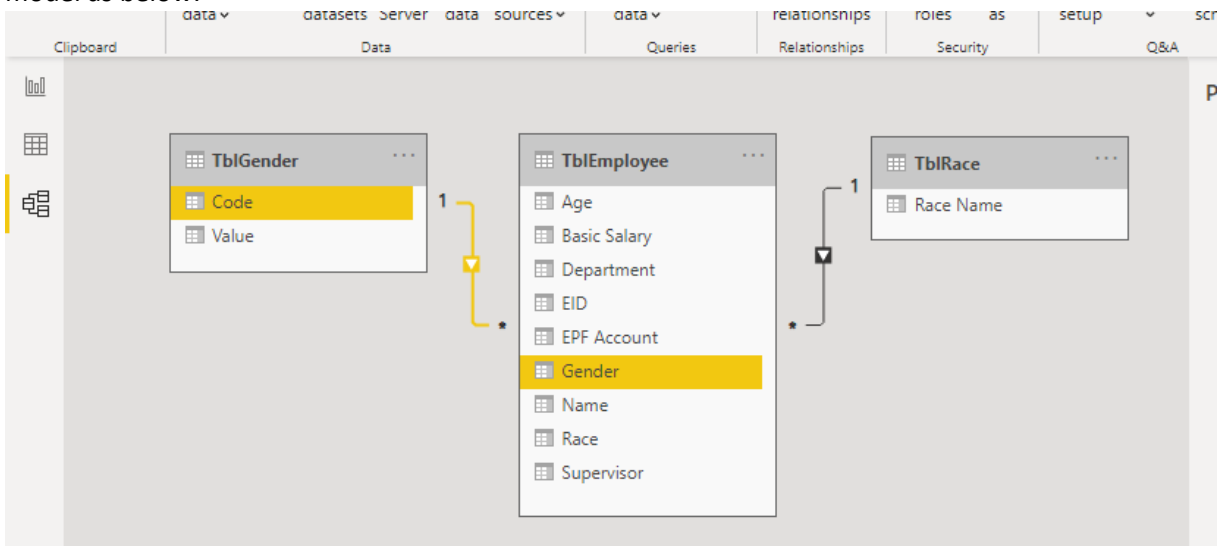
12. Select “Enter Data” from the “Home” ribbon tab:



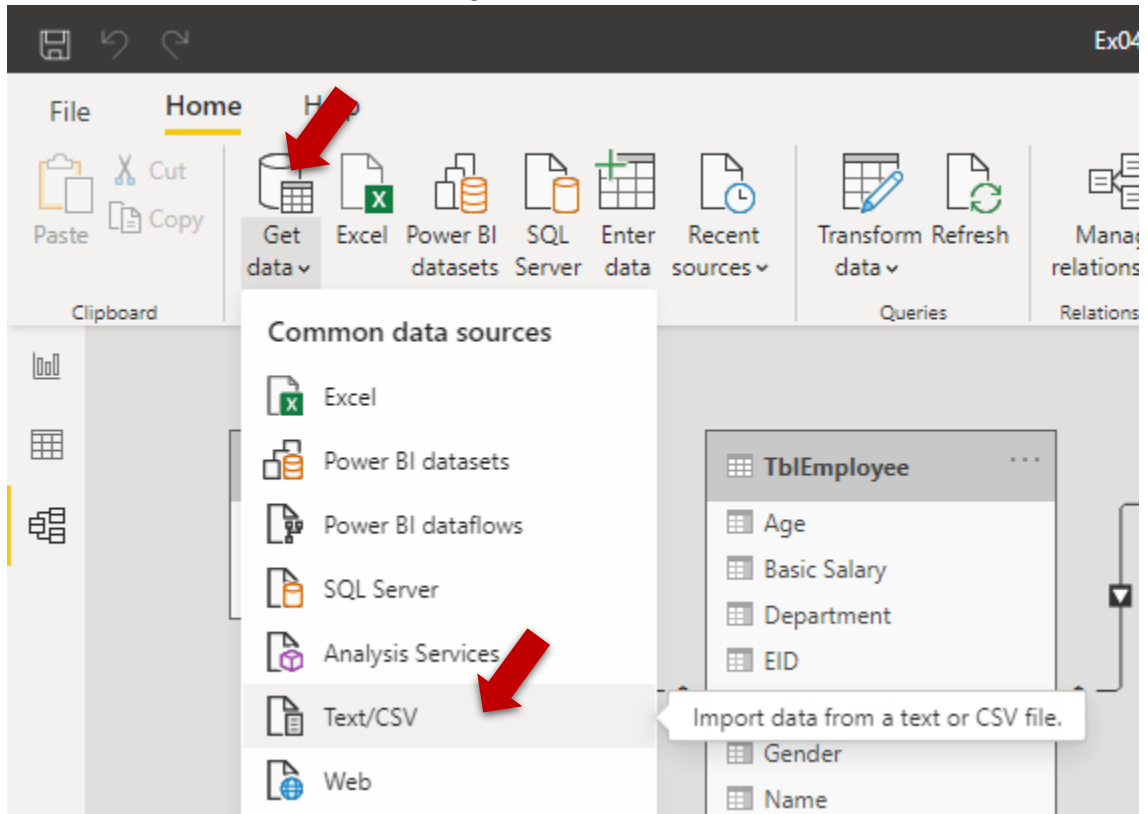
13. In the “Create Table” dialog box, Prepare the following and press “Load” to complete:



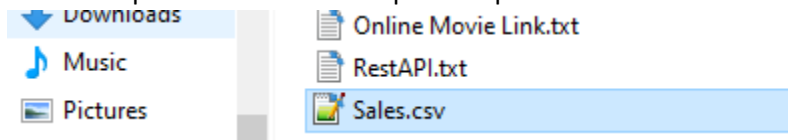
14. In Data Model, drag “Gender” field from TblEmployee to “Code” field of TblGender. Arrange the model as below:



15. From “Home” ribbon tab, select loading data source “Text/CSV”:

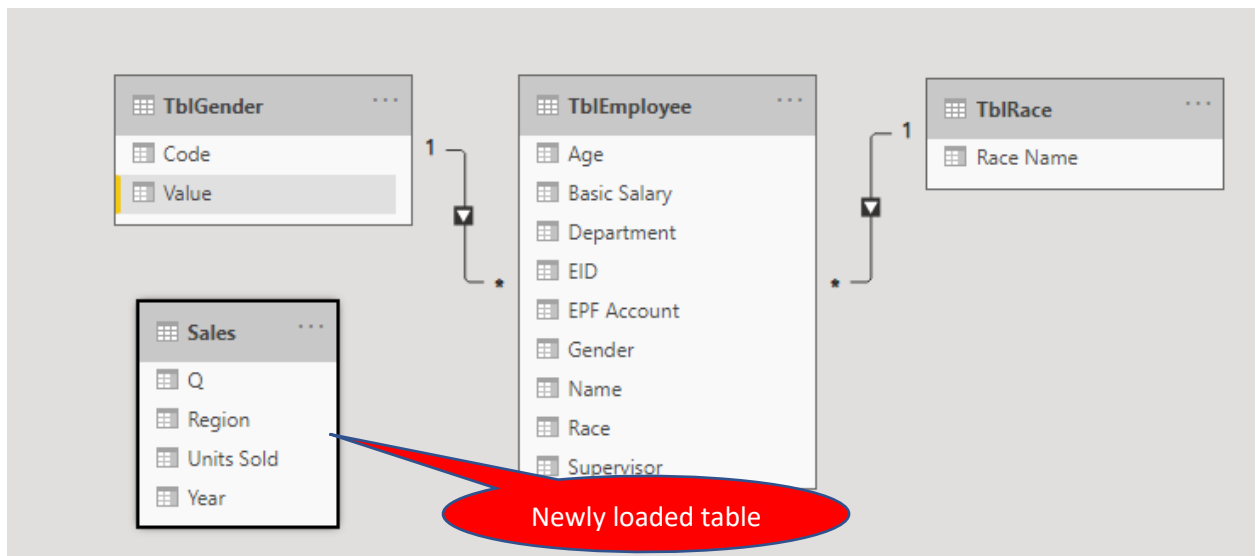


16. Select the provided CSV file and press “Open”:

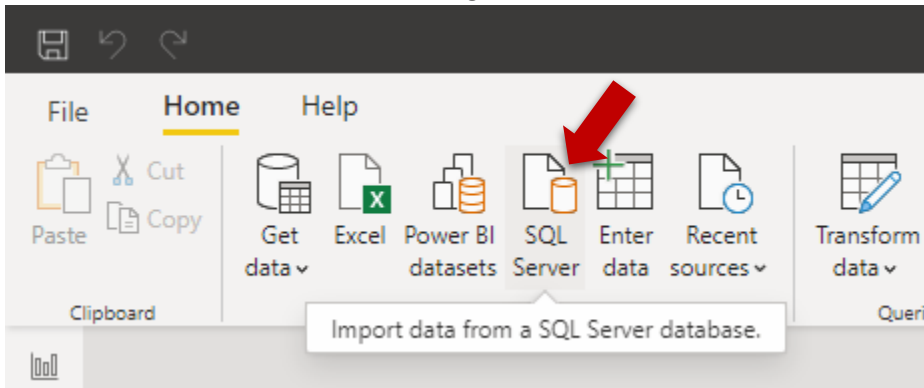


17. Preview the data and press “Load”.

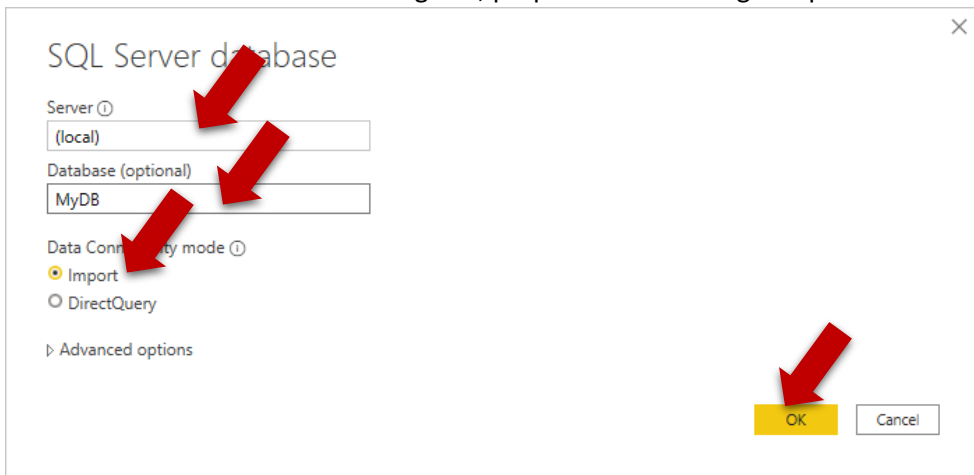
18. Back to Data Model, check the loaded table (you might need to scroll to right to find it). Arrange the model as below:



19. From “Home” ribbon tab, select loading data source “SQL Server”:

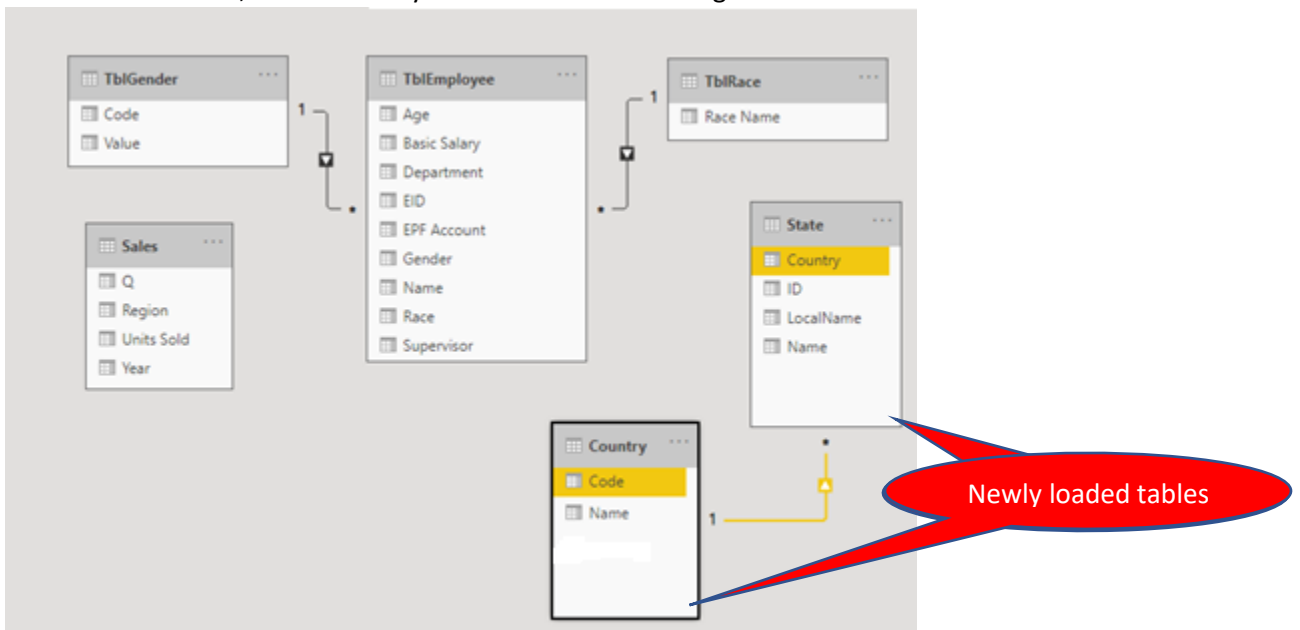


20. In the “SQL Server database” dialog box, prepare the following and press “OK”:

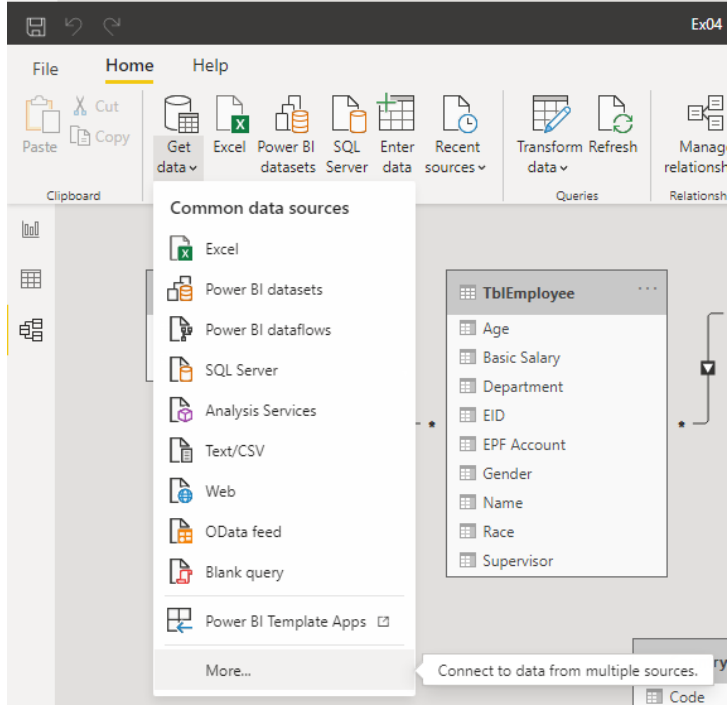


21. In the “Navigator” dialog box, select “Country” and “State” tables. Preview the table data and press “Load” to complete.

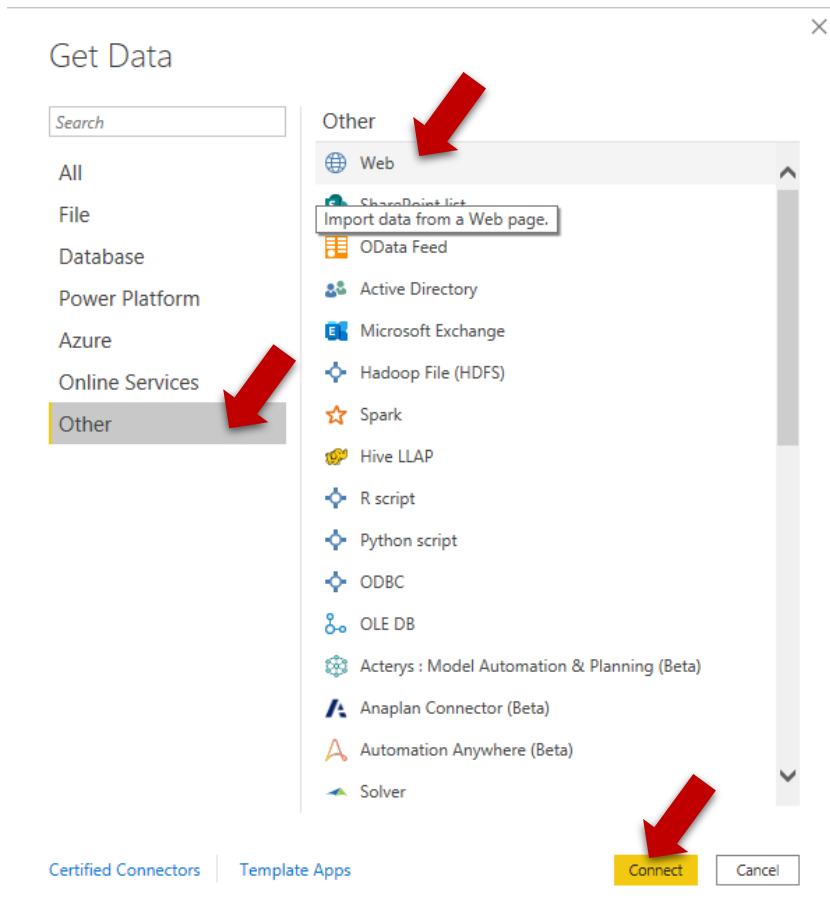
22. Back to Data Model, find the newly loaded tables and arrange as below:



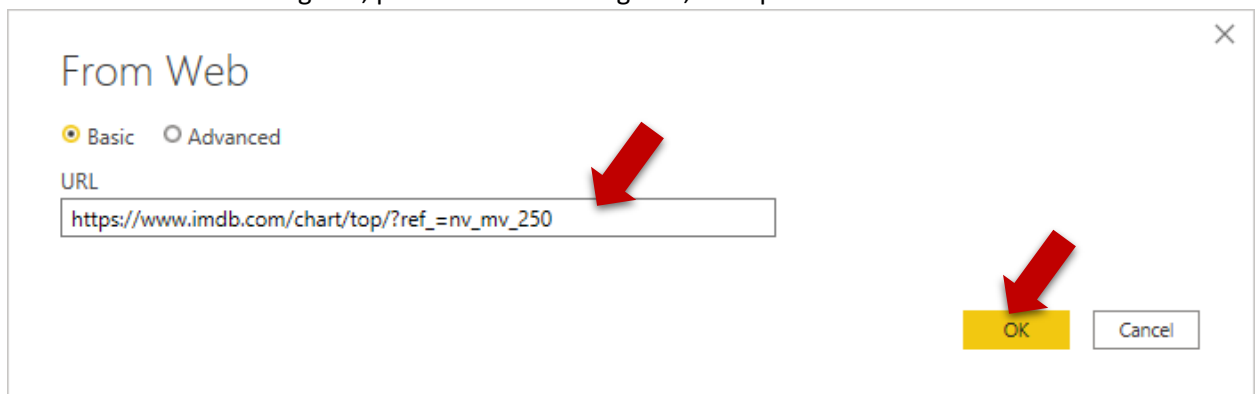
23. We will now try to load data from website. Select “More...”:



24. In the “Get Data” dialog box, select “Other”, “Web” then press “Connect”:



25. In the “From Web” dialog box, provide the following URL, then press “OK”:



Notes: You may navigate to URL https://www.imdb.com/chart/top/?ref =nv_mv_250 for viewing the web contents from browser.

26. In the “Navigator” preview the data and select Table 1 (Don’t load at the moment, we need to transform the data):

Navigator

Table View Web View

Table 1

Rank & Title	IMDb Rating
1. The Shawshank Redemption (1994)	
2. The Godfather (1972)	
3. The Godfather: Part II (1974)	
4. The Dark Knight (2008)	
5. 12 Angry Men (1957)	
6. Schindler's List (1993)	
7. The Lord of the Rings: The Return of the King (2003)	
8. Pulp Fiction (1994)	
9. The Good, the Bad and the Ugly (1966)	
10. The Lord of the Rings: The Fellowship of the Ring (2001)	
11. Fight Club (1999)	
12. Forrest Gump (1994)	
13. Inception (2010)	
14. The Lord of the Rings: The Two Towers (2002)	
15. Star Wars: Episode V - The Empire Strikes Back (1980)	
16. The Matrix (1999)	
17. Goodfellas (1990)	
18. One Flew Over the Cuckoo's Nest (1975)	
19. Seven Samurai (1954)	
20. Se7en (1995)	
21. Life Is Beautiful (1997)	

Add Table Using Examples

Load Transform Data Cancel

In this part exercise, we need to capture the Rank, Title, Year or publishing, and IMBb Rating.
 What is the challenge you can spot here?

Ya. The first 3 set of data all in one column.

27. While still in the Navigator, press “Transform Data”.

28. Under Query Editor, first of all, change the table name:

Transform Combine AI Insights

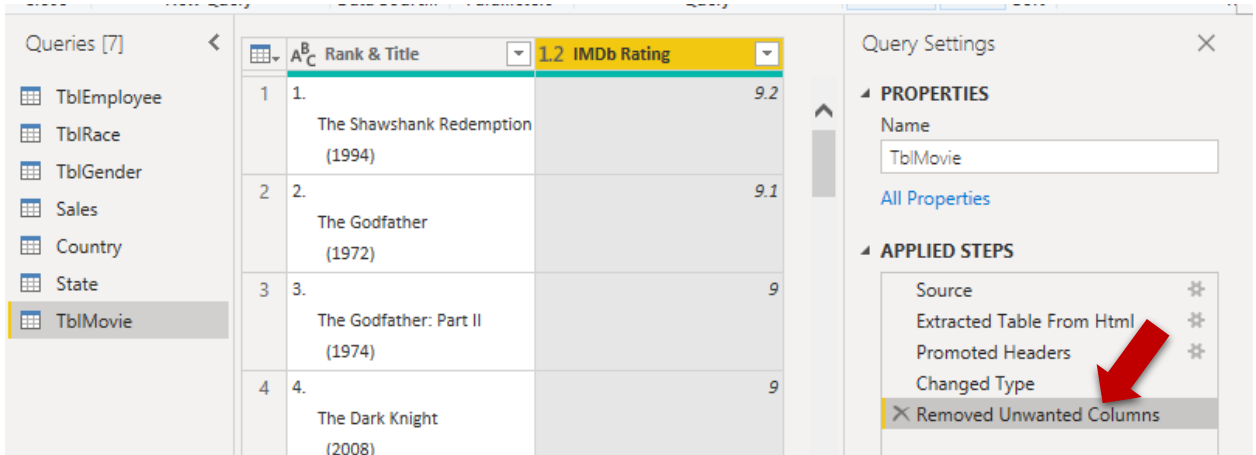
Query Settings

PROPERTIES

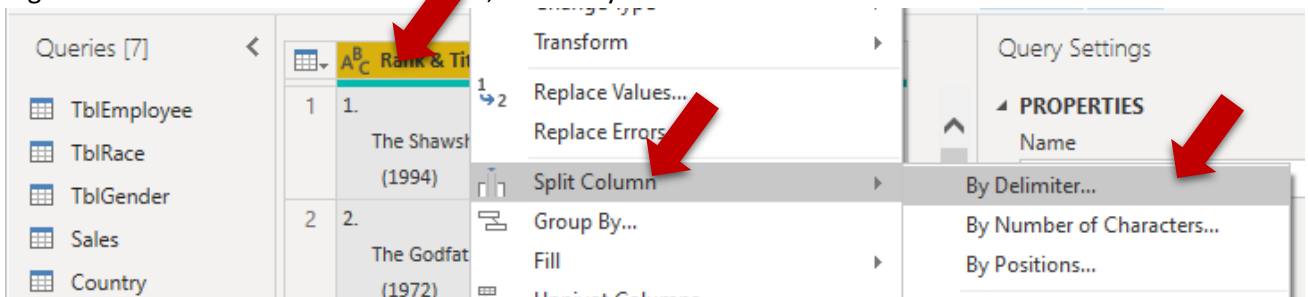
Name

TblMovie

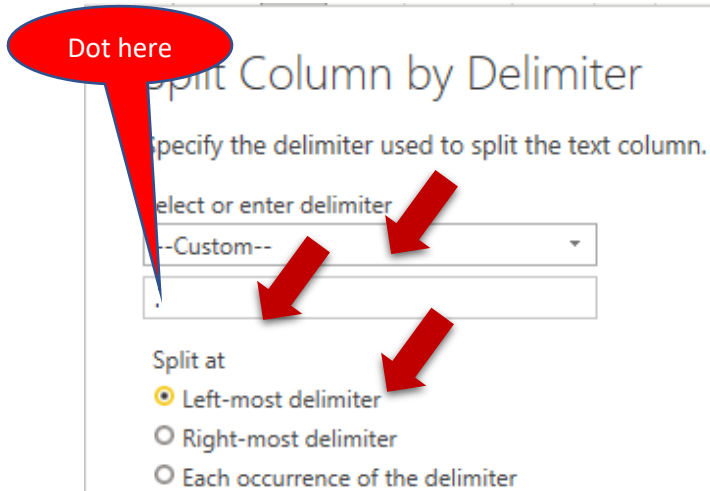
29. Removed Unwanted Columns:



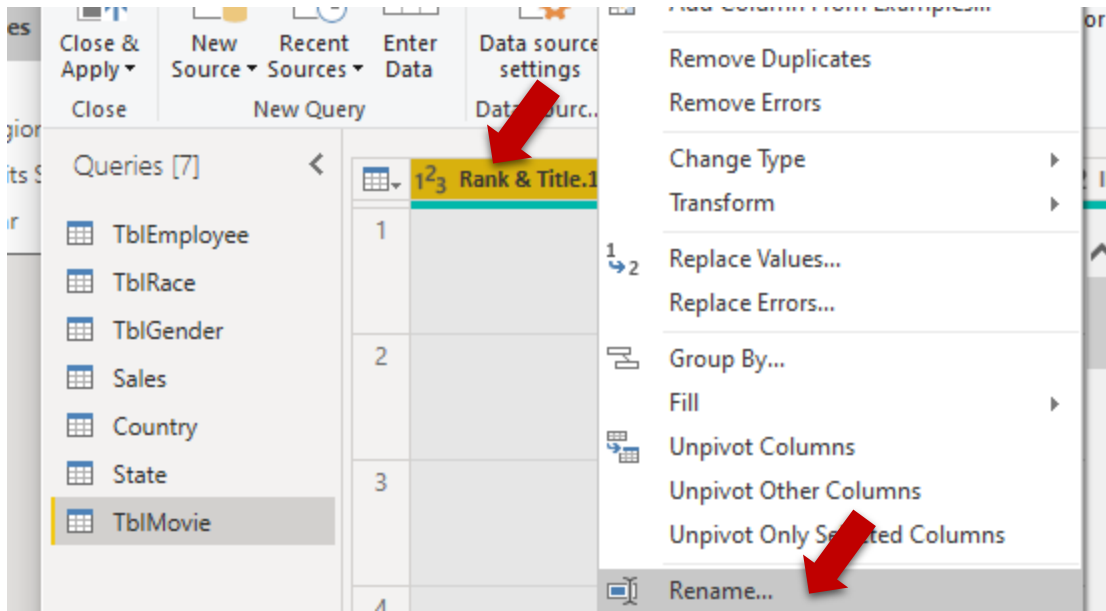
30. Right click column header “Rank & Title”, select “By Delimiter”:



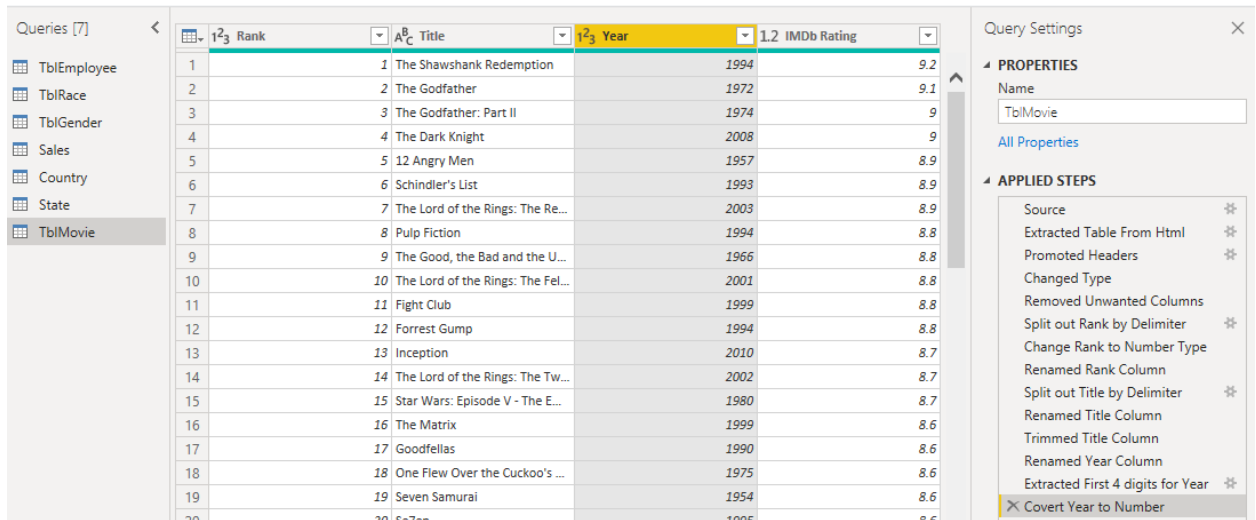
31. In the “Split Column by Delimiter” dialog box, prepare the following and press “OK” to complete :



32. Column 1 now split into 2, right click the first part header to rename as “Rank”:



33. Find out how to split out the Title using the same technique and rename the header as “Title” (You challenge here...):



34. Close & Apply

35. Back to Data Model:

