**Video #16 Homework**

1. Download and unzip the folder “CityTextFiles”.
2. Here is a picture of the “.csv” files:
   1. A screenshot of a cell phone

      Description automatically generated
3. Examine the City “.csv” files to see what Fact Date data is in each file. A picture of one of the tables look like this:
   1. A screenshot of a cell phone

      Description automatically generated
4. Open a blank Power BI Desktop file.
5. Save Power BI File.
6. Using Power Query import the “.csv” files into a single Fact Table.
7. During the Fact import and transformation, using Power Query (and what we learned earlier in our class) extract and create a City Dimension Table. The Finished Fact Table and City Table should look like picture below:
   1. Hints:
      1. In the Fact Table create a new column to create the CityID (First Letter of City Name & StoreID)
      2. Do not delete City & StoreID columns until later).
      3. Duplicate Fact Table Query.
      4. Now go back and delete City & StoreID columns.
      5. For City Table, delete Date and Sales columns, then Remove Duplicates.
      6. Close and Load to Data Model.

A screenshot of a cell phone

Description automatically generated A screenshot of a cell phone

Description automatically generated

Fact Table

City Table

1. Create a Date Table using DAX Formulas. The start date for the Fiscal Year is July 1.
2. The Date Table should look like this:

A screenshot of a cell phone

Description automatically generated

1. The Relationships should look like this:

A screenshot of a cell phone

Description automatically generated

1. Create Measures for Total Sales, Average Transactional Sales, Average Daily Sales, and a Rolling 12-month Average for Transactional Sales.
2. Create a Measure to count the number of Transactions for a given set of criteria with the DAX formula **=COUNTROWS(fSales)**
3. Create a Hierarchy for StoreID and City.
4. Hide any columns you do not need in report view.
5. Data Model should look something like:

A screenshot of a cell phone

Description automatically generated

1. Create a Dashboard that shows:
   1. The three averages in a Line chart by Fiscal period
   2. A column chart that shows Total Sales by the Hierarchy City and Store.
   3. Bar Chart that shows the Number of Transactions by the Hierarchy City and Store.
   4. Add a slicer for City. The Slicer should only control the Bar Chart.
2. The picture of the dashboard is here:

A close up of a map

Description automatically generated