**Homework**

1. **List three data sources Power BI can connect to**

Excel Files, SQL Server, Web pages

1. **What is the first step to import data into Power BI Desktop?**

**“Get Data” button** on the Home tab then choose the source like Text/CSV, Excel, or SQL

1. **How do you refresh imported data in Power BI?**

By clicking “**Refresh”** button in the Home tab. This updates our visuals with the latest data from the source

1. **What file formats can Power BI import directly? (Name two.)**

.csv (comma-separated values) and .xlsx (excel workbook)

1. **What does the "Navigator" window show after selecting a data source?**

It shows the **preview of the data** and the list of tables or sheets available for import

1. **Import Sales\_Data.csv and load only the "Product" and "Price" columns**

Click **Get Data then Text/CSV and then Load** and then click **“Transform Data”** and Remove unwanted columns, keep only Product and Price columns and finally click **Close & Apply button**

1. **How would you change OrderDate to a date format during import?**

In Power Query Editor, select the OrderDate column, “Transform” tab, click on **Data Type and Date button**

1. **What is the difference between "Load" and "Transform Data" in the import dialog?**

**Load:** Immediately loads the full data into Power BI, it will be loaded data exactly as it appears in the preview

**Transform Data:** Opens the Power Query Editor, where we can clean or modify the data before loading

1. **Why might you see an error when connecting to a SQL database? (Name one reason.)**

Because if we put square brackets [] around the database name when referring to the database

1. **How do you replace a data source after importing it?**

**Transform Data, Data Source Settings**, select the old source, and click **“Change Source”** to update the file path or connection

1. **Write the M-code to import only rows where Quantity > 1**

= Table.SelectRows(Source, each [Quantity] > 1)

1. **How would you change the data source if Sales\_Data.csv changed?**

By clicking the **Refresh** button on the Home tab, it will load the updated data from the same Sales\_Data.csv file

1. **Troubleshoot: Your CSV import fails due to a "mixed data type" error-how do you fix it?**

Power Query and Change column data types manually using **Transform > Data Type** to make sure each column has only one type

1. **Connect to a live SQL database with parameters (e.g, filter by year)**

Create a parameter in Power Query: New Parameter > Year = 2023

In SQL query or filter step, use that parameter to limit data by year

1. **How would you automate data imports using Power BI and Power Automate?**

Set up a **Power Automate flow** to trigger when a new file is added and refresh the Power BI dataset automatically