**Lesson 2: Importing Data into Power BI**

**Topic:** Importing Data into Power BI  
**Prerequisites:** Download Sales\_Data.csv file

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

* Excel files
* SQL Server databases
* Web data (URL/API)

**2. What is the first step to import data into Power BI Desktop?**  
Open **Power BI Desktop**, then click **Home → Get Data → Choose Data Source** (e.g., CSV, Excel, SQL, Web).

**3. How do you refresh imported data in Power BI?**  
Click **Home → Refresh** or use **Scheduled refresh** in Power BI Service to update the data automatically.

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

* .xlsx (Excel Workbook)
* .csv (Comma-Separated Values)

**5. What does the "Navigator" window show after selecting a data source?**  
It displays available tables, sheets, or data objects inside the data source for preview and selection.

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

* Go to **Home → Get Data → Text/CSV → Sales\_Data.csv**
* Click **Transform Data**
* In Power Query, select only the **Product** and **Price** columns
* Click **Close & Load**

**7. How would you change OrderDate to a date format during import?**  
In Power Query Editor:

* Select **OrderDate** column → **Transform tab → Data Type → Date**

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

* **Load:** Imports data directly into Power BI without changes.
* **Transform Data:** Opens Power Query Editor to clean, shape, or filter data before loading.

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

* Wrong server name or database credentials.
* Firewall blocking access.
* SQL Server not running or network unavailable.

**10. How do you replace a data source after importing it?**  
Go to **Home → Data Source Settings → Change Source → Browse/Enter new path or connection string → Apply Changes**.

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

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

**12. How would you change the data source if Sales\_Data.csv changed?**  
Go to **Home → Data Source Settings → Change Source → Browse new Sales\_Data.csv file → Apply & Refresh.**

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

* In **Power Query**, set column data types manually (e.g., “Whole Number” or “Text”).
* Use **Transform → Detect Data Type** or **Change Type with Locale** to standardize values.

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

* Create a **parameter** in Power Query (e.g., “YearParam”).
* Use a query like:

= Sql.Database("ServerName", "DatabaseName", [Query="SELECT \* FROM Sales WHERE YEAR(OrderDate)=" & Text.From(YearParam)])

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

Use **Power Automate flow** to trigger dataset refresh in Power BI Service whenever new data (like a new CSV file) is added to OneDrive, SharePoint, or SQL database.

**Sample Data (Sales\_Data.csv)**

| **OrderID** | **Product** | **Quantity** | **Price** | **OrderDate** |
| --- | --- | --- | --- | --- |
| 1001 | Laptop | 2 | 1200 | 1/5/2023 |
| 1002 | Mouse | 5 | 25 | 2/5/2023 |
| 1003 | Keyboard | 1 | 80 | 2/5/2023 |
| 1004 | Monitor | 1 | 300 | 3/5/2023 |
| 1005 | Laptop | 1 | 1200 | 3/5/2023 |