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

- Microsoft Excel
- SQL Server
- Web APIs (e.g., JSON from a website)

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

- Click **"Home" > "Get Data"**, then select your desired data source.

3. How do you refresh imported data in Power BI?

- Click **"Home" > "Refresh"** to reload data from the original source.

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

- **CSV (.csv)**
- **Excel (.xlsx)**

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

- It displays **available tables, sheets, or named ranges** from the selected data source, allowing you to preview and choose what to load.

6. Import Sales_Data.csv and load only the "Product" and "Price" columns.

1. Click **Get Data > Text/CSV**, select `Sales_Data.csv`.
2. In the **Navigator** or **Power Query Editor**, uncheck other columns.
3. Keep only "Product" and "Price".
4. Click **"Close & Load"**.

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

- In **Power Query Editor**, select the `OrderDate` column > click **"Data Type" > "Date"** in the ribbon.

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

- **Load**: Directly loads the data into Power BI as-is.
- **Transform Data**: Opens the **Power Query Editor** to clean or filter the data before loading.

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

- **Incorrect server or database credentials**, or the **SQL Server is not reachable**.

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

- Go to **Home > Transform Data > Data source settings**, then click **Change Source** to update the file path or server connection.

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

```
let
    Source = Csv.Document(File.Contents("C:\Path\Sales_Data.csv"),
[Delimiter=",", Columns=5, Encoding=1252, QuoteStyle=QuoteStyle.None]),
    PromotedHeaders = Table.PromoteHeaders(Source),
    FilteredRows = Table.SelectRows(PromotedHeaders, each [Quantity] > 1)
in
    FilteredRows
```

---

12. How would you change the data source if Sales_Data.csv changed?

- Go to **Home > Transform Data > Data source settings**, select the CSV path, click **Change Source**, and browse to the new file.

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

- Open the **Power Query Editor**, and **explicitly set the column data type** (e.g., change to "Text" or "Number" manually).

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

1. Go to **Home > Get Data > SQL Server**.
2. Enter server/database info.
3. In **Power Query**, create a **parameter for Year**.
4. Apply a filter in the query using that parameter (e.g., `Year = 2024`).
5. Click **Close & Apply**.

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

- Use **Power Automate flows** to:
  1. Detect when a file is updated (e.g., in OneDrive or SharePoint).
  2. Trigger a **Power BI Dataset Refresh**.
  3. Optionally notify users of updated reports via email or Teams.