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

- Microsoft Excel
 - SQL Server Database
 - Web APIs (e.g., JSON or REST services)
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2. What is the first step to import data into Power BI Desktop?

Click **"Home"** → **"Get Data"**, then choose the data source (e.g., Excel, CSV, SQL Server).

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

Click **"Home"** → **"Refresh"** to reload the latest data from the original sources.

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

- .csv (Comma Separated Values)
 - .xlsx (Excel Workbook)
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5. What does the "Navigator" window show after selecting a data source?

It displays a **preview of tables or sheets** found in the source so you can select which ones to load.

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

Steps:

1. Go to **Home** → **Get Data** → **Text/CSV**, select **Sales_Data.csv**.
 2. In Navigator, click **Transform Data**.
 3. In Power Query Editor, **select only the "Product" and "Price" columns**, then click **Close & Load**.
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7. How would you change OrderDate to a date format during import?

In Power Query Editor:

1. Select the **OrderDate** column.
 2. Click **Data Type** → **Date** on the toolbar.
 3. Apply changes with **Close & Load**.
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8. What is the difference between "Load" and "Transform Data" in the import dialog?

- **Load:** Imports the selected data directly as-is.
 - **Transform Data:** Opens Power Query Editor to clean or shape the data before loading.
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9. Why might you see an error when connecting to a SQL database? (Name one reason.)

- **Invalid credentials** or lack of permission to access the database.
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10. How do you replace a data source after importing it?

Go to **Home** → **Transform Data** → **Data Source Settings**, select the source, then click **Change Source**.

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

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

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

- Open **Power Query Editor** → **Home** → **Data Source Settings**.
 - Select the existing file and click **Change Source**, then choose the new file path.
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13. Troubleshoot: Your CSV import fails due to a "mixed data type" error—how do you fix it?

- In Power Query Editor, **change the column's data type** manually to the most appropriate type (e.g., Text, Number).
 - Alternatively, use **"Detect Data Type"** or apply **Table.TransformColumnTypes** in M-code.
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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 the server and database name.
3. Click **Advanced options**, write a SQL query like:

```
sql
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SELECT * FROM Sales WHERE YEAR(OrderDate) = @Year
```

4. Define a **parameter in Power Query** named Year and use it in the query.
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15. How would you automate data imports using Power BI and Power Automate?

1. Use **Power BI Dataflows** or scheduled refreshes in Power BI Service.
2. In **Power Automate**, create a flow that:
 - Triggers on a new file in OneDrive/SharePoint/etc.
 - Runs a **Power BI dataset refresh** using **Power BI connector**.
3. Optional: Add notification or email actions upon completion.