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

- SQL Server database
- Excel files
- Web data (e.g., REST APIs or web pages)

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

Click Home > Get Data and select your desired data source.

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

Click **"Refresh"** on the **Home** tab to update tables with the latest source data.

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

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

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

It displays **available tables, sheets, or queries** within the selected data source for preview and selection.

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

Steps:

1. Click Get Data > Text/CSV and select **Sales_Data.csv**.
2. In the **Navigator**, click **Transform Data**.
3. In Power Query, select only **"Product"** and **"Price"** columns (right-click others > Remove).
4. Click **Close & Load** to load them into your model.

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

In **Power Query Editor**, select **OrderDate column**, go to the **Transform tab > Data Type** dropdown, and choose **Date**.

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

- **Load:** Directly imports data as-is into the model.
- **Transform Data:** Opens Power Query Editor to clean, filter, or modify 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, click **Change Source**, and update the file path, server, or database details.

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

```powerquery
КопироватьРедактировать
let
    Source = Csv.Document(File.Contents("Sales_Data.csv"),[Delimiter=",", Columns=4, 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?

In **Power Query**, go to **Home > Data source settings**, select **Sales_Data.csv**, click **Change Source**, and update to 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**, manually set the **column data type** (e.g., text or number) to ensure consistency, using **Transform > Data Type**.

---

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

1. Create a **Parameter** in Power Query for the year.
2. Use Get Data > SQL Server, enter server and database.
3. In advanced options, write a query using the parameter:

```sql
КопироватьРедактировать
SELECT * FROM Sales WHERE Year = @YearParam
```

4. Pass the parameter value during connection.

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

- **Publish** your Power BI dataset to the **Power BI Service**.
- Use **Power Automate** to create a flow that **triggers dataset refresh** on schedule or based on events (e.g., when a file is updated in OneDrive).