

List three data sources Power BI can connect to.

SQL Server

Excel files

Web data (URLs, APIs)

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

Click Home → Get Data and choose your data source.

How do you refresh imported data in Power BI?

Click the Refresh button in Power BI Desktop or schedule refreshes in Power BI Service.

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

Excel files (.xlsx)

CSV files (.csv)

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

It displays available tables, sheets, or objects to preview and choose for import.

How to Do It in Power BI Desktop

Open Power BI Desktop

Go to Home → Get Data → Text/CSV

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

In Power BI Desktop (Power Query Editor)

When you import data (e.g. from CSV):

Go to Home → Get Data → Text/CSV and load your file

Click Transform Data (this opens Power Query Editor)

Find the OrderDate column

Click the column header

Go to Transform → Data Type → Date

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

Load:

Imports data immediately into Power BI

No changes or cleaning applied

Transform Data:

Opens Power Query Editor

Lets you filter, clean, or transform data before loading it

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

Incorrect credentials (e.g. wrong username or password)

Other possible reasons:

Network/firewall block

Database server down

Missing drivers

How do you replace a data source after importing it?

Go to Home → Transform data → Data source settings

Select your old data source

Click Change Source...

Enter the new file path, server name, or database details

Click OK and refresh

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

```
Source = Csv.Document(File.Contents("C:\Path\To\Sales_Data.csv"), [Delimiter=";",  
Encoding=65001]),  
PromoteHeaders = Table.PromoteHeaders(Source, [PromoteAllScalars=true]),  
ChangedTypes = Table.TransformColumnTypes(PromoteHeaders,{"Quantity", Int64.Type}),  
FilteredRows = Table.SelectRows(ChangedTypes, each [Quantity] > 1)  
in  
FilteredRows
```

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

Go to Transform Data → Advanced Editor

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

A mixed data type error happens when a column has both text and numbers (e.g. "123" and "N/A").

How to fix it in Power Query:

Check the column data:

Look for non-numeric values like "N/A", "-", empty strings.

Replace or remove problematic values:

Replace errors with nulls:

Transform → Replace Errors → null

Use Replace Values to change text like "N/A" to null.

Change the column type afterward:

Right-click column → Change Type → e.g. Decimal Number.

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

Steps:

Go to Home → Get Data → SQL Server

Enter your server and database name

Click Advanced options

Enter your SQL query, e.g.:

sql

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```
SELECT * FROM Sales
```

```
WHERE YEAR(OrderDate) = 2024
```

Or in Power Query:

Add a parameter called e.g. YearParam

Use it in a native SQL query:

sql

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```
SELECT * FROM Sales
```

```
WHERE YEAR(OrderDate) = @YearParam
```

Or filter after importing:

Add a filter step:

m

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```
Table.SelectRows(Source, each Date.Year([OrderDate]) = 2024)
```

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

Power Automate can trigger data refreshes automatically in Power BI.

Example automation:

Trigger: new data file arrives in SharePoint or OneDrive

Action:

Use the Power BI connector in Power Automate

Choose Refresh a dataset

Select your workspace and dataset

This way, Power BI:

Refreshes data automatically

Removes manual refresh steps

Keeps reports up to date