

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

- SQL Server Database
- TXT/CSV files
- Excel files

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

In the Home tab, there is a button called Get_data where you can choose the source from which you can import data

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

In the Home tab, there is button called Refresh. If you press it, it will automatically update the data and starts using the latest data

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

The first one is csv format and the second one is txt and one more is xlsx

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

After selecting, it shows the list of available tables, sheets or objects and also the preview of the data in selected table or sheet.

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

After importing data with get_data and selecting file, instead of choosing load, we go to transform data, we find the OrderDate column. Near the name, there is a small icon. After pressing it, you can change the data type of your column from txt or smth to date.

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

- Load directly loads the table to PowerBI without changes
- Transform data opens Power Query editor where it is possible to clean, filter and reshape the data at first

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

SQL Server not running – this error can happen when the sever is offline or stopped

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

Go to Home → Transform Data → Data Source Settings.

Select the data source you want to replace.

Click Change Source....

Enter the new connection details (e.g., new file path, server name, or database).

Click OK and refresh the data.

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

let

```
Source = Excel.Workbook(File.Contents("C:\Data\Sales_Data.xlsx"), null, true),
```

```
SalesTable = Source{[Name="Sales_Data"]}[Content],
```

```
FilteredRows = Table.SelectRows(SalesTable, each [Quantity] > 1)
```

in

```
FilteredRows
```

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

If Sales_Data.csv changes location, name, or path, you can update it in Power BI Desktop like this:

Go to Home → Transform Data → Data Source Settings.

In the list, select your current CSV data source.

Click Change Source....

Browse to the new file or update the file path.

Click OK, then Close.

Refresh the dataset to load data from the new file.

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

If we have this kind issue, we should go to Power Query by going to "Transform Data". We find the problematic column by finding the yellow alert sign near the necessary column. This issue usually happens because there are different type of date types in one column. In this case, the rows should be transferred to the same data type or wrong data type rows should be deleted.

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

Create a parameter

Home → Manage Parameters → New Parameter.

Name it YearParam.

Type: Decimal Number or Text (depending on your database column).

Set a default value (e.g., 2024).

Connect to SQL Server

Home → Get Data → SQL Server Database.

Enter your Server and Database name.

Click Advanced Options.

In the SQL statement box, write something like:

SELECT *

FROM Sales

WHERE YEAR(OrderDate) = @Year

In Power Query, replace @Year with your YearParam parameter by clicking in the formula bar and inserting:

```
Sql.Database("ServerName", "DatabaseName", [Query=Text.Format("SELECT * FROM Sales WHERE YEAR(OrderDate) = {0}", {YearParam})])
```

The data will now only load rows for the year you set in the parameter.

You can change the parameter value anytime to refresh with a different year.

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

Prepare your Power BI dataset

Publish your Power BI report (with your data model) to the Power BI Service.

Make sure the dataset is in a workspace that supports scheduled refresh.

Create a Power Automate flow

Go to Power Automate → Create → Automated cloud flow.

Choose a trigger, for example:

When a file is created or modified in OneDrive/SharePoint (for CSV/Excel uploads).

At a scheduled time (e.g., every day at 8 AM).

Add the Power BI refresh action

Add Power BI → Refresh a dataset.

Select your Workspace and Dataset.

Save and test

Upload or change the source file, or wait for the schedule.

Power Automate will trigger a dataset refresh in Power BI automatically.