Same data, another tool

Getting data with Power BI Desktop

Names _____

Power BI Desktop on the Windows PC. You bring in the Pokémon you already know: the file `pokemon_df.csv`, and the tables `generations` and `pokemon_by_generation` (schema `public`) from the class database. Monday's kitchen is still open: recipe or tupperware? Pairs, one clicks, the other reads and writes here; swap at Task 2.

> Reference A **connector** is the piece of a tool that knows how to talk to one kind of source: a driver with a form in front of it. Power BI has no server in the middle: it runs on your PC and saves your work in a file on your PC, a **`.pbix`** file. That file is today's fridge.

Task 1 · From a file (7 min)

Step	Do this	You should see / write
1.1	**Home → Get data → Text/CSV**, choose `pokemon_df.csv`, **Open**.	A preview opens. Press nothing yet.
1.2	Read the three boxes at the top of the preview.	**File Origin** _____ **Delimiter** _____ **Data Type Detection** _____
1.3	**Load**.	The **Data** pane lists `pokemon_df`.
1.4	Open the **Table view** (icon on the left bar) and find `charmander`.	Rows _____ Its `type_2` cell says _____ Superset showed, for the same cell: _____
1.5	Look at the column `generation_id`, and at any error or message Power BI gives about it.	What do you see? _____ Why? _____

Task 2 · From the database, as a copy (9 min)

Step	Do this	You should see / write
2.1	**Home → Get data → More... → Database → PostgreSQL database → Connect**.	A window asks for **Server** and **Database**.
2.2	**Server**: your VM's address (no `http://`, no `:8088`). **Database**: the name on the board. **Data Connectivity mode**: **Import**. **OK**.	Superset asked for host, port, database, user, password. Which went here? _____
2.3	On the left choose **Database** (not Windows). User name and password: the ones on the board. **Connect**.	Which settings went here? _____ Did it ask for a driver? _____
2.4	Power BI warns that the connection is not encrypted. Read the message, then **OK**.	What is not protected? _____
2.5	In **Navigator** tick `public.generations` and `public.pokemon_by_generation`. **Load**.	`pokemon_by_generation` in the table view: rows ____
2.6	**File → Save as** `pokemon_import.pbix`.	The fridge now holds a copy.

Task 3 · From the database, live (6 min)

Step	Do this	You should see / write
3.1	**File → New** (a second, empty report). Repeat steps 2.1–2.4, but choose **DirectQuery**. In **Navigator** tick only `public.pokemon_by_generation`. **Load**.	Nothing to write yet.
3.2	In the **Data** pane tick `region` and `n_pokemon`.	Power BI draws a chart. Each change now sends a query to your VM. Regions _____ Tallest bar _____
3.3	Compare with Task 2. Look at the left bar and at the bottom-right corner of the window.	Is the **Table view** still there? _____ Storage mode, it says: _____

Task 4 · An API in one window (6 min)

On Monday, getting 20 Pokémon from PokéAPI into Superset took a Python script, a CSV and an upload. Predict **before** you start: how many steps will Power BI need? _____

Step	Do this	You should see / write
4.1	**Get data → Web**, keep **Basic**, paste `https://pokeapi.co/api/v2/pokemon?limit=20`, **OK**. First time: **Anonymous → Connect**.	The **Power Query Editor** opens with the JSON already read.
4.2	Read the names it shows.	Names _____ Which one is a **List**? _____
4.3	Click into `results`, convert it to a table and expand it.	Rows _____ Columns _____
4.4	Compare your rows with `count`.	Every Pokémon of the API? Why? _____

Task 5 · Power BI vs Superset: where is the data? (4 min)

Fill in what you saw today and on previous days. We complete it together at the end.

	Superset	Power BI Desktop
Where it runs		
PostgreSQL		
A CSV file		
Data ends up		
An API (JSON)		

Recipe or tupperware? **Import** _____ **DirectQuery** _____ Superset resembles _____

Done when Every blank is filled · `pokemon_import.pbix` is saved.

Stuck?

- **Cannot connect**: the **Server** box takes your VM's address only, no `http://`, no `:8088`. The credentials window must be on **Database**, not **Windows**.
- **`pokemon_by_generation` is not in Navigator**: Monday's table was not created. Load `pokemon` instead.