The Pokédex hunt

Asking for less: filters on `pokemon`

Names _____

Superset → **SQL → SQL Lab**, database `Dades classe`, schema `public`, table `pokemon`: a shoebox of 949 cards, one row per card. Pairs, one keyboard; swap who types after question 5. Write results here.

Reference

Line	With the shoebox
`SELECT`	Which lines of the card you read. `*` = all of them.
`FROM`	Which box.
`WHERE`	Which cards you take out.
`ORDER BY`	How you sort the pile (`DESC`: big first).
`LIMIT`	How many cards you keep from the top.

Filter	Keeps the cards...
`LIKE 'pika%'`	whose text looks like a pattern. `%` = any text, also none.
`IN ('a', 'b')`	whose value is on the list.
`BETWEEN 1 AND 9`	inside the range, both ends included.
`IS NULL`	where that line is blank.
`NOT ...`	the opposite: `NOT IN`, `NOT LIKE`, `IS NOT NULL`.

The lines always go in this order. `SELECT DISTINCT x` lists each value of `x` once. `AND`: both conditions must be true; `OR`: one is enough. Text goes in single quotes and capital letters matter: `'fire'`. To count: `SELECT COUNT(*) FROM pokemon WHERE ...`

The hunt (20 min)

One query per question, only with the tools of the two tables.

1 How many Pokémon have `fire` as their first type?

_____

2 Name and weight of the three heaviest.

_____

3 Name and speed of the five slowest. Compare your five names with another pair.

The same names? _____ Why can two correct answers differ? _____

4 How many different values does `egg_group_1` have? List them and count the rows.

_____

5 How many Mega evolutions are there? Their name contains `-mega`.

With the hyphen _____ Without it _____ Who sneaked in? _____

6 How many have a first type that is **not** fire, water or grass?

_____

7 How many have a speed from 100 to 120? Count twice.

With `BETWEEN` _____ With `>=` and `<=` _____ The same number? _____

8 How many have a second type? And how many have no generation (`generation_id`)?

Second type _____ No generation _____

9 Electric, single-type, speed from 100 to 120: names, fastest first.

Rows _____ First _____ Last _____

10 Count with `WHERE type_1 = 'fire' OR type_1 = 'water' AND attack > 100`. Then put brackets around the `OR` part and count again.

Without brackets _____ With brackets _____ Why? _____

_____

Stuck?

- **0 rows**: check capital letters and quotes before anything else.
- **`can't seem to resolve the column "fire"`**: text needs single quotes, `'fire'`.
- **`Error parsing near '...'`**: look just before the word it names for a misspelt keyword or a quote left open.
- **Several queries in the editor**: you only see the result of the last one. Run one query at a time.
- Still stuck after two tries? Ask your neighbours, then the teacher.

Done when Every blank is filled · 3 and 10 have their sentence. **Fast pair?** On your own open dataset: write three questions a filter can answer, one of them with `LIKE` or `IS NULL`, and answer them.

At home A friend runs `SELECT * FROM pokemon WHERE generation_id = NULL`, gets 0 rows and concludes that every Pokémon has a generation. One paragraph: what is wrong, what should they write, and how many rows will they get?