Day 4 sql

ReGEX

- REGEXP is the operator used when performing regular expression pattern matches. RLIKE is the synonym.
- It also supports a number of metacharacters which allow more flexibility and control when performing pattern matching.
- Not case sensitive.

Pattern -----------→What the Pattern matches

* ----------------→Zero or more instances of string preceding it

+--------------------→ One or more instances of strings preceding it

. ----------------→Any single character

? --------------→Match zero or one instances of the strings preceding it.

● Beginning of String: '^sa' matches names starting with "sa".

- Word Boundaries: '^n' matches names starting with "n".

 ● End of String: 'on$' matches names ending in "on".

● Character Classes: '[:alpha:]' for alphabetic characters, [a-z] for lowercase.

● Word Boundaries: '^n' matches names starting with "n".

● Pattern Alternation: 'be|ae' matches either "be" or "ae".

- OVER & PARTITION BY Clauses: ○ The PARTITION BY clause is part of the OVER clause, used in SQL window functions like AVG(), MAX(), and RANK()

- Window functions operate on a set of rows (window frames) that can vary based on each record in the query.

- Parttion by() is used to define which records to make part of the window frame associated with each record of the result.

- Compared to window functions, GROUP BY collapses individual records into a group. As a consequence, you cannot refer to any individual record field; that is, only the columns in the GROUP BY clause can be referenced.

Filtering with JOINs and GROUP BY:

● Joins allow grouping by attributes across tables.

● Example: Find average deal values by manager using sales and team data.

FILTER Modifier:

● Applies conditions within aggregate functions to refine results.

● Example: Count deals over a certain value with FILTER(WHERE condition).

 WHERE vs. FILTER:

 ● WHERE limits data before aggregation; FILTER can refine multiple aggregates in the same query.