Day 13 – SQL Notes (GROUP BY, HAVING & Errors)

GROUP BY

GROUP BY groups rows that share the same values in specified columns and is used with aggregate functions to produce summarized results.

HAVING

HAVING filters grouped records after aggregation. WHERE filters rows before grouping.

WHERE vs HAVING

WHERE cannot be used with aggregate conditions, whereas HAVING is designed for filtering aggregated results.

Error 1055

Raised when a non-aggregated column is selected without being included in the GROUP BY clause under ONLY_FULL_GROUP_BY mode.

Error 1140

Raised when aggregate functions are used without GROUP BY and non-aggregated columns are selected under ONLY_FULL_GROUP_BY mode.

Error 1231

Raised due to invalid use of GROUP BY or ORDER BY in aggregated or set-based queries.

ONLY_FULL_GROUP_BY

This SQL mode enforces strict grouping rules to avoid ambiguous query results.

String Functions

UPPER() / UCASE() convert text to uppercase, and LOWER() / LCASE() convert text to lowercase.

Key Takeaways

GROUP BY defines result granularity, HAVING filters groups, and ONLY_FULL_GROUP_BY ensures deterministic query results.