

SQL Guidebook

- UPDATE: used to modify existing records in a table
 - Basic syntax:
UPDATE table_name
SET column1 = value1 ...
WHERE condition;
- ALTER: used to modify structure of an existing DB object; allows you to add, delete, or modify columns and constraints
→ as such, only one per table
- Primary Key: column / set of columns that uniquely identify each row in its own table
- Foreign Key: column / set of columns that references the primary key of another table
 - Example: Orders table tracks orders
 - Customer ID is FK
 - Order ID is PK
- CASE WHEN: Basically has the if-then-else logic structure to categorize, transform, or aggregate data
- CTE: temporary, named result set defined w/in the execution scope of a single SQL statement that acts as a temporary view
- Window functions preserve the detail of the individual rows while adding a calculated value alongside them
- RANK(): window function that assigns a sequential rank to each row w/in a result set or a defined partition based on a specific ordering
 - Must be used w/ the OVER clause, which defines the set of rows (the "window") it operates on
- ORDER BY: sorts the results of a query based on one or more columns
- LAG: window function that allows us to access data from a previous row in the result set, making it useful for comparing current values w/ prior ones
 - Commonly used in time series analysis to track changes over time
- COALESCE: used to return the first non-NULL value from a list of expressions