

SQL Query

SELECT Queries

Fetch All Rows

- Query: SELECT * FROM [tablename]
- Fetches all rows in a table.

Fetch Specified Columns

- Query: SELECT id, name FROM [tablename]
- Fetches only the specified columns from the table.

Alias a Column

- Query: SELECT id as product_id FROM [tablename]
- Fetches the column with the specified name, using an alias.

Fetch Specific Row

- Query: SELECT * FROM [tablename] WHERE id = x;
- Fetches a specific row based on the condition id = x.

Multiple Conditions (AND)

- Query: SELECT * FROM [tablename] WHERE inventory > 0 AND price < 20;
- Retrieves rows that satisfy both conditions: inventory > 0 and price < 20.

Multiple Conditions (OR)

- Query: SELECT * FROM [tablename] WHERE price > 100 OR price < 20;
- Retrieves rows that satisfy either condition: price > 100 or price < 20.

Filter by Multiple IDs

- Query: SELECT * FROM [tablename] WHERE id IN (1,2,3);
- Retrieves rows where the id matches any of the specified values (1, 2, 3).

Filter by Partial String Match (Starts With)

- Query: SELECT * FROM products WHERE name LIKE 'TV%';
- · Retrieves products whose names start with 'TV'.

Filter by Partial String Match (Ends With)

- Query: SELECT * FROM products WHERE name LIKE '%e';
- Retrieves products whose names end with 'e'.

Filter by String Match (Does Not End With)

- Query: SELECT * FROM products WHERE name NOT LIKE '%e';
- Retrieves products whose names do not end with 'e'.

Filter by String Match (Contains in the Middle)

- Query: SELECT * FROM products WHERE name NOT LIKE '%en%';
- Retrieves products whose names contain 'en' somewhere in the middle.

ORDER BY and LIMIT Queries

Sort by Price (Ascending)

- Query: SELECT * FROM products ORDER BY price;
- Arranges rows in ascending order of price.

Sort by Price (Descending)

- Query: SELECT * FROM products ORDER BY price DESC;
- Arranges rows in descending order of price.

Sort by Inventory (Descending) and Price (Ascending)

- Query: SELECT * FROM products ORDER BY inventory DESC, price ASC;
- Sorts rows first by inventory in descending order and then by price in ascending order as a tiebreaker.

Limit Results

- Query: SELECT * FROM products LIMIT 10;
- Retrieves the first 10 rows from the result set.

Limit Results with a Condition

- Query: SELECT * FROM products WHERE price > 100 LIMIT 2;
- Retrieves the first 2 rows that meet the condition price > 100.

Offset Results

- Query: SELECT * FROM products ORDER BY id LIMIT 5 OFFSET 2;
- Retrieves the first 5 rows, skipping the first 2 rows as specified by the offset clause.

INSERT and UPDATE Queries

Insert a New Row

- Query: INSERT INTO products (name, price, inventory) VALUES ('tortilla', 4, 1000);
- Inserts a new row with specified values into the 'products' table.

Insert with Return

- Query: INSERT INTO products (name, price, inventory) VALUES ('car', 10000, 10) RETURNING *;
- Inserts a new row with specified values into the 'products' table and returns the inserted row.

Delete Rows with Condition

• Query: DELETE FROM products WHERE inventory = 0 RETURNING *;

• Deletes rows from the 'products' table where the <u>inventory</u> is 0 and returns the deleted rows.

Update Rows with Condition

- Query: UPDATE products SET name = 'keyboard RGB', price = 50 WHERE id = 28 RETURNING *;
- Updates rows in the 'products' table with specified values where the id is 28 and returns the updated rows.