

SQL Fundamentals Cheat Sheet

CRUD Operations

SELECT * FROM table;

- Read all data from a table.

INSERT INTO table (col1, col2) VALUES (val1, val2);

- Insert new data.

UPDATE table SET col1 = val1 WHERE condition;

- Update existing data.

DELETE FROM table WHERE condition;

- Delete data.

Basic Commands

SHOW DATABASES;

- List all databases.

USE database;

- Select a database.

SHOW TABLES;

- List all tables in the current database.

DESCRIBE table;

- Show the structure of a table.

Filtering Data

SELECT * FROM table WHERE col = value;

- Filter rows by exact value.

SELECT * FROM table WHERE col > value;

- Filter rows greater than a value.

SELECT * FROM table WHERE col LIKE 'A%';

- Filter rows starting with 'A'.

SELECT * FROM table WHERE col IN (val1, val2);

- Filter rows by multiple values.

Clauses

ORDER BY col ASC;

- Sort rows in ascending order.

ORDER BY col DESC;

- Sort rows in descending order.

SQL Fundamentals Cheat Sheet (cont.)

Clauses (cont.)

GROUP BY col;

- Group rows sharing the same value.

HAVING COUNT(*) > 1;

- Filter groups by conditions.

LIMIT 10;

- Limit the number of rows returned.

Operators

=

- Equal to.

<> or !=

- Not equal to.

>, <

- Greater or less than.

AND / OR

- Combine multiple conditions.

BETWEEN val1 AND val2

- Filter within a range.

IS NULL

- Check for NULL values.

Functions

COUNT(col)

- Count rows.

AVG(col)

- Average value of a column.

SUM(col)

- Sum of values.

MAX(col)

- Maximum value.

MIN(col)

- Minimum value.

NOW()

- Return current date/time.

SQL Fundamentals Cheat Sheet (cont.)

Functions (cont.)

UPPER(col)

- Convert text to uppercase.

LOWER(col)

- Convert text to lowercase.