Sources

- W3Schools.com
- DataQuest.io

















Commands / Clauses

SELECT	Select data from database
FROM	Specify table we're pulling from
WHERE	Filter query to match a condition
AS	Rename column or table with alias
JOIN	Combine rows from 2 or more tables
AND	Combine query conditions. All must be met
OR	Combine query conditions. One must be met
LIMIT	Limit rows returned. See also FETCH & TOP
IN	Specify multiple values when using WHERE
CASE	Return value on a specified condition
IS NULL	Return only rows with a NULL value
LIKE	Search for patterns in column
COMMIT	Write transaction to database
ROLLBACK	Undo a transaction block
ALTER TABLE	Add/Remove columns from table
UPDATE	Update table data
CREATE	Create TABLE, DATABASE, INDEX or VIEW
DELETE	Delete rows from table

DROP GROUP BY Group data into logical sets

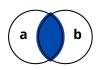
Add single row to table

ORDER BY Set order of result. Use DESC to reverse order **HAVING** Same as WHERE but filters groups

Delete TABLE, DATABASE, or INDEX

Count number of rows COUNT Return sum of column **SUM AVG** Return average of column MIN Return min value of column MAX Return max value of column

Joins



a INNER JOIN b



a LEFT JOIN b



a RIGHT JOIN b



Order Of

Execution

FROM

WHERE

GROUP BY

HAVING

SELECT

LIMIT

ORDER BY

Examples

Select all columns with filter applied

SELECT * FROM tbl WHERE col > 5;

Select first 10 rows for two columns

SELECT col1, col2 FROM tbl LIMIT 10;

Select all columns with multiple filters

SELECT * FROM tbl WHERE col1 > 5 OR col2 < 2;

Select all rows from col1 & col2 ordering by col1

SELECT col1, col2 FROM tbl ORDER BY 1;

Return count of rows in table

SELECT COUNT(*) FROM tbl;

Return sum of col1

SELECT SUM(col1) FROM tbl;

Return max value for col1

SELECT MAX(col1) FROM tbl;

Compute summary stats by grouping col2

SELECT AVG(col1) FROM tbl **GROUP BY col2**;

Combine data from 2 tables using left join

SELECT * FROM tbl1 AS t1 LEFT JOIN tbl2 AS t2 ON t2.col1 = t1.col1;

Aggregate and filter result

SELECT col1, COUNT(*) AS total FROM tbl **GROUP BY col1** HAVING COUNT(*) > 10;

Implementation of CASE statement

SELECT col1, **CASE** WHEN col1 > 10 THEN 'more than 10' WHEN col1 < 10 THEN 'less than 10' ELSE '10' END AS NewColumnName FROM tbl;

Data Definition Language

CREATE

INSERT

CREATE DATABASE MyDatabase;

CREATE TABLE MyTable (id int. name varchar(10));

CREATE INDEX IndexName ON TableName(col1);

ALTER

ALTER TABLE MyTable DROP COLUMN col5;

ALTER TABLE MyTable ADD col5 int;

DROP

DROP DATABASE MyDatabase; DROP TABLE MyTable;

Data Manipulation Language

UPDATE

UPDATE MyTable SET col1 = 56
WHERE col2 = 'something';

INSERT INTO MyTable (col1, col2) VALUES ('value1', 'value2');

INSERT

DELETE

DELETE FROM MyTable WHERE col1 = 'something'; SELECT col1, col2 FROM MyTable;

SELECT