Sources

- W3Schools.com
- DataQuest.io

CHEATSHEET















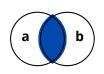


Commands / Clauses

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
LTER TABLE	Add/Remove columns from table
UPDATE	Update table data
CREATE	Create TABLE, DATABASE, INDEX or VIEW
DELETE	Delete rows from table
INSERT	Add single row to table
DROP	Delete TABLE, DATABASE, or INDEX

GROUP BY Group data into logical sets **ORDER BY** Set order of result. Use DESC to reverse order HAVING Same as WHERE but filters groups Count number of rows COUNT Return sum of column **SUM AVG** Return average of column

Joins



a INNER JOIN b



a LEFT JOIN b



a RIGHT JOIN b



Order Of

Execution

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

Return min value of column

Return max value of column

CREATE

MIN

MAX

ALTER

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

SELECT col1, col2 FROM MyTable;

FROM

WHERE

GROUP BY

HAVING

SELECT

ORDER BY

LIMIT