

## Sources

- W3Schools.com
- DataQuest.io

# SQL CHEATSHEET

CONSIDER  
SUPPORTING ME



@AbzAaron



## Commands / Clauses

<b>SELECT</b>	Select data from database
<b>FROM</b>	Specify table we're pulling from
<b>WHERE</b>	Filter query to match a condition
<b>AS</b>	Rename column or table with alias
<b>JOIN</b>	Combine rows from 2 or more tables
<b>AND</b>	Combine query conditions. All must be met
<b>OR</b>	Combine query conditions. One must be met
<b>LIMIT</b>	Limit rows returned. See also FETCH & TOP
<b>IN</b>	Specify multiple values when using WHERE
<b>CASE</b>	Return value on a specified condition
<b>IS NULL</b>	Return only rows with a NULL value
<b>LIKE</b>	Search for patterns in column
<b>COMMIT</b>	Write transaction to database
<b>ROLLBACK</b>	Undo a transaction block
<b>ALTER TABLE</b>	Add/Remove columns from table
<b>UPDATE</b>	Update table data
<b>CREATE</b>	Create TABLE, DATABASE, INDEX or VIEW
<b>DELETE</b>	Delete rows from table
<b>INSERT</b>	Add single row to table
<b>DROP</b>	Delete TABLE, DATABASE, or INDEX
<b>GROUP BY</b>	Group data into logical sets
<b>ORDER BY</b>	Set order of result. Use DESC to reverse order
<b>HAVING</b>	Same as WHERE but filters groups
<b>COUNT</b>	Count number of rows
<b>SUM</b>	Return sum of column
<b>AVG</b>	Return average of column
<b>MIN</b>	Return min value of column
<b>MAX</b>	Return max value of column

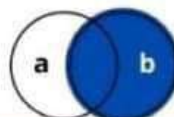
## Joins



**a INNER JOIN b**



**a LEFT JOIN b**



**a RIGHT JOIN b**



**a FULL OUTER JOIN b**

## 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

```
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

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

### DELETE

```
DELETE FROM MyTable  
WHERE col1 = 'something';
```

### SELECT

```
SELECT col1, col2  
FROM MyTable;
```

## Order Of Execution

- 1 FROM
- 2 WHERE
- 3 GROUP BY
- 4 HAVING
- 5 SELECT
- 6 ORDER BY
- 7 LIMIT