SQL Documentation

Selecting from a table.

```
SELECT * FROM Table;
```

Selecting only certain fields from a table.

```
SELECT field1, field2 FROM Table;
```

WHERE clauses.

```
-- Basic WHERE clause

SELECT * FROM Table

WHERE condition;

-- Compound WHERE clauses

SELECT * FROM Table

WHERE condition1

AND condition2;
```

Condition operators

```
equal
less than
preater than
not equal
IN (a, b, c) Value is in a list
BETWEEN x AND y Value is between x and y
LIKE "%" String matches a pattern
```

String patterns.

```
"A%" (words starting with "A")
"%a" (words ending with "a")
"%a%" (words with "a" in it)
```

Ordering / Sorting queries.

```
// Sort by a field name
ORDER BY field_name;
-- Sort by a field name in reverse
ORDER BY field_name DESC;
-- Sort by a field and then sort by a 2nd field when the 1st field is equal
ORDER BY field_1, field_2;
```

Renaming fields in results

1 of 3 7/26/2021, 11:15 AM

```
SELECT field_name AS "Field Name"

SELECT first_name AS "First Name"
```

Joining Tables.

```
-- Select all fields in both tables combined.

SELECT *
FROM TableA JOIN TableB;

-- Select only the rows in the joined table where the ids match
SELECT *
FROM TableA JOIN TableB
WHERE TableA.id = TableB.id;

-- Select only the relevant columns from each table
-- Where their ids match
SELECT TableA.value, TableB.value
FROM TableA JOIN TableB
WHERE TableA.id = TableB.id;
```

The COUNT Function

```
-- Return the number of rows in Table

SELECT COUNT(*) FROM Table;

-- Return the number of houses and name
-- the column "Num Houses"

SELECT COUNT(*) As "Num Houses" FROM House;
```

Grouping

```
-- Syntax for grouping and counting
SELECT field_name, COUNT(*)
FROM Table
GROUP BY field_name;
```

Filtering with HAVING

```
-- You use HAVING instead of WHERE if you are
-- filtering after a GROUP BY

SELECT field_name, COUNT(*)

FROM Table

GROUP BY field_name

HAVING condition;
```

Limiting results

2 of 3 7/26/2021, 11:15 AM

```
-- Use LIMIT after any query to limit the number of results

SELECT * FROM Table LIMIT 10;

-- Ex) Show the 5 highest values only

SELECT field_name, COUNT(*)

FROM Table

GROUP BY field_name

ORDER BY COUNT(*) DESC

LIMIT 5;
```

3 of 3