

Reporting with SQL Part 3 Notes

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1 Counting Results

- **Syntax 1:** `SELECT COUNT(column name) FROM table name;`
 - Counts all non-null values
- **Syntax 2:** `SELECT COUNT(*) FROM table name;`
 - counts all rows in a table
- **Syntax 2:** `SELECT COUNT(DISTINCT column name) FROM table;`
 - Counts all items with distinct value in a column

Example:

```
1  SELECT COUNT(DISTINCT category) FROM products;  
2  
3  
4  SELECT COUNT(*) FROM customers ORDER BY id DESC LIMIT 1;  
5
```

2 Exercise 1

- Solution included in *exercise_1.sql*

3 Counting Groups of Rows

- **Syntax:** `SELECT COUNT(column name) FROM table name GROUP BY column name with common value;`
- is almost like using keyword `distinct`
 - `SELECT COUNT(DISTINCT column name) FROM table;`
- but, group by allows to add additional columns

Example:

```
1  SELECT category, COUNT(*) AS product_count FROM products GROUP BY
2  category;
```

```
1  -- SELECT <column> FROM <table> GROUP BY <column>;
2
3  SELECT category, COUNT(*) AS product_count FROM products GROUP BY category;
4
```

category	product_count
Books	20
Clothing	6
Electronics	3

4 Exercise 2

- Solution included in *exercise_2.sql*