Reporting with SQL Part 2 Notes

Team Treehouse

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1 What Are Functions?

- Prsents data differently through manipulation
- **Syntax:** *function name(value or column)*
- e.g. LENGTH(), UPPER("Andrew Chalkley"), SUM()

2 Adding Text Columns Together

- **Snytax:** SELECT *value or column* ||*value or column* ||*value or column* FROM *table name*;
- ||→ concat operator

Example:

```
SELECT first_name || " " || last_name AS "Full Name",
       email AS "Email", phone AS "Phone"
       FROM customers;
```

Full Name	Email	Phone
Lauren Chalkley	Lauren.Chalkley@example.com	(601)-555-8510
Dave McFarland	Dave.McFarland@example.com	(675)-555-4108
Pasan Premaratne	pdawg@example.com	(898)-555-3719
Andrew Chalkley	Andrew@teamtreehouse.com	(798)-555-8112
Rachael Hinkley	Rachael.Hinkley@example.com	(645)-555-2397

3 Single vs Double Quotes

- Exists difference in use

- Single Quote → for string literlas (e.g. 'lbs')

- Double Quote → for column aliases (e.g. "Max Weight")

Example:

```
1    SELECT maximum_weight || 'lbs' AS "Max Weight" FROM ELEVATOR_DATA;
2
```

4 Exercise 1

- Solution included in *exercise_1.sql*

5 Finding the Length of Text

- **Syntax:** SELECT LENGTH(*value or column*) FROM *table name*;

- Returns length of a value or value in each row of a column

- Can also be used in WHERE

  - **Syntax:** SELECT *columns* FROM *table name* WHERE LENGTH(*column name*) *operator value*;

Example:

```
1    SELECT username, LENGTH(username) AS "length" from customers ORDER
     BY length DESC LIMIT 1;
2
3
4    SELECT username FROM customers WHERE LENGTH(username) < 7;
5
6
7    SELECT username LENGTH(username) AS "length" FROM customers WHERE
     length < 7;
8
```

username	length
poley_hands	11