SQL Group BY and ORDER BY, HAVING

Key takeaways:

- You can GROUP BY multiple columns at once, as we showed here. This is often useful to aggregate across a number of different segments.
- The order of columns listed in the ORDER BY clause does make a difference. You are ordering
 the columns from left to right.

GROUP BY - Expert Tips

- The order of column names in your GROUP BY clause doesn't matter—the results will be the same regardless. If we run the same query and reverse the order in the GROUP BY clause, you can see we get the same results.
- As with ORDER BY, you can substitute numbers for column names in the GROUP BY clause. It's
 generally recommended to do this only when you're grouping many columns, or if something
 else is causing the text in the GROUP BY clause to be excessively long.
- A reminder here that any column that is not within an aggregation must show up in your GROUP BY statement. If you forget, you will likely get an error. However, in the off chance that your query does work, you might not like the results!
- 3. Determine the number of times a particular channel was used in the web_events table for each sales rep. Your final table should have three columns the name of the sales rep, the channel, and the number of occurrences. Order your table with the highest number of occurrences first.

```
SELECT s.name, w.channel, COUNT(*) num_events
FROM accounts a
JOIN web_events w
ON a.id = w.account_id
JOIN sales_reps s
ON s.id = a.sales_rep_id
GROUP BY s.name, w.channel
ORDER BY num_events DESC;
```

4. Determine the number of times a particular **channel** was used in the **web_events** table for each **region**. Your final table should have three columns - the **region name**, the **channel**, and the number of occurrences. Order your table with the highest number of occurrences first.

```
SELECT r.name, w.channel, COUNT(*) num_events
FROM accounts a
JOIN web_events w
ON a.id = w.account_id
JOIN sales_reps s
ON s.id = a.sales_rep_id
JOIN region r
ON r.id = s.region_id
GROUP BY r.name, w.channel
ORDER BY num_events DESC;
```