Day 3 SQL Practice – Customers & Orders Dataset

Day 3 was definitely a step up in terms of difficulty. Today I worked with a Customers & Orders dataset and practiced more advanced SQL concepts like conditional logic, date functions, and grouped filtering. Some queries took multiple attempts to get right, and I had to revisit how HAVING works compared to WHERE. Despite the challenge, it felt great to break through and see the correct results.

Reflections & Query Breakdown

1. List all customers with their city and join date

This was straightforward — I used SELECT to pull the relevant columns. Simple start to warm up.

2. Show total order amount per customer

I joined Orders with Customers and used SUM and GROUP BY to total amounts. Felt comfortable with this.

3. Customers with more than 1 order (HAVING)

This was one of the trickier ones. I initially used WHERE instead of HAVING, but corrected it after remembering that aggregate filters need HAVING.

4. Customers who joined in or after 2020

A simple filter using a WHERE clause and date comparison. Good refresher on date filtering.

5. Classify order as 'High' or 'Low' (CASE WHEN)

First time using CASE in this series — felt intuitive and powerful. Love how readable this logic is.

6. Month-wise total orders

Had to look up MONTH() function. It worked well, and I grouped the totals by month number.

7. Customers who haven't placed any order

Used LEFT JOIN with IS NULL — happy to recognize this pattern from Day 2 and apply it correctly again.

8. Average order amount for customers who joined before 2020

Required joining and filtering on JoinDate before aggregating. Took me a couple tries but got there.

9. Days since first order

This was tough! Figuring out that I needed MIN(OrderDate) and DATEDIFF from current date made me really think. Happy it worked.

Bonus: Rank customers by total spending

Used DENSE_RANK with SUM and ORDER BY — felt satisfying to pull this off. This kind of query feels real-world useful.

Yey Takeaways from Day 3

- Today felt harder, but it also showed me how much I've grown in just a few day
- HAVING vs WHERE really clicked today after some trial and error
- CASE WHEN and DATEDIFF were fun to learn and feel very applicable
- Even when I struggled, I kept going and that's what matters most