

Day 8 SQL Practice – Customers, Orders & Payments Dataset

Day 8 brought a fair amount of struggle — the questions were not only more logic-heavy but also trickier to validate. While I was able to solve them all in the end, it involved a mix of initial mistakes, corrections, and learning new techniques. This was a classic reminder that SQL is not just about writing queries, but refining them and understanding the impact of each clause.

What I Practiced Today:

- Aggregation with SUM and COUNT in different scenarios.
- Applying COALESCE to handle NULLs and make reports more user-friendly.
- Distinguishing between INNER JOIN and LEFT JOIN — and using each appropriately.
- Writing CASE WHEN logic to identify unpaid orders.
- Using COUNT with DISTINCT vs regular COUNT — and the mistakes that helped clarify the difference.
- Structuring queries that combine payments and orders to check full/partial amounts.
- Handling ranking within groups using ROW_NUMBER() for the bonus challenge.

Small Errors That Taught Big Lessons:

- I used SUM instead of COUNT at first — fixed it later by understanding what exactly needed to be measured.
- Initially missed COALESCE, which led to NULL outputs — later corrected to show zeros clearly.
- Could not figure out the fourth query alone and needed to take help — which led to learning a clean CASE structure.
- Tried LEFT JOIN for Q6 initially, but INNER JOIN turned out to be more accurate for counting payments.
- 7th query was especially challenging — required deeper logic around comparing sums of payments vs order totals.
- Bonus challenge pushed me to learn how to rank spenders within their country.

Key Takeaway from Day 8:

Today was all about resilience. Even when I got stuck, I tried, corrected, and re-tried. Every mistake helped clarify the logic a bit more. As I move ahead, I realize it's these slightly frustrating days that actually help solidify concepts.