

## Day 6 SQL Practice – Books, Authors & Sales Dataset

Today felt like an average day — not too easy, not too tough. The queries were slightly more advanced and required deeper joins, window functions, and logic interpretation. I took more time than usual, but I was able to work through every query methodically and felt more confident with CTEs and subqueries by the end.

### Reflections & Query Breakdown

#### 1. List all book titles along with their author names and country

This was a straightforward triple JOIN that warmed me up for the rest of the set.

#### 2. Show total sales (revenue) per book

Learned the importance of understanding the business context — whether to include unsold books or not determines JOIN type.

#### 3. Find the total quantity sold per genre

Originally used COUNT(), but realized SUM() was the correct approach to get actual quantity sold.

#### 4. List authors who have more than one book listed

Got to practice HAVING clause with COUNT() — great for filtering groups.

#### 5. Identify the highest selling book by quantity

Used TOP 1 along with GROUP BY and SUM — got the hang of identifying top records per aggregation.

#### 6. Display author-wise total sales revenue

This was a clean multi-level join and COALESCE helped display 0 for unsold authors.

#### 7. Find books that have never been sold

Enjoyed this one — LEFT JOIN + NULL filter felt intuitive after previous days' practice.

#### 8. List books priced above the average price of their genre

Used both subquery and join method. Good reinforcement of multi-step filtering logic.

#### 9. Show rank of books within each genre by price

Used RANK() with PARTITION BY genre — clear and powerful use of window functions.

#### 10. Show total quantity and revenue earned per author (including zero sales)

Learned to use double LEFT JOIN with COALESCE. Reinforced how to report on all entities, even when sales are missing.

#### Bonus: Top 2 bestselling books per genre using window functions

CTE + RANK() — tricky at first, but finally felt intuitive. A satisfying way to close the session.

## Key Takeaways from Day 6

- Query complexity is increasing, but my comfort with joins and aggregations is growing as well.
- Took more time today but didn't feel stuck just more focused on logic.
- Refined my understanding of when to use LEFT JOIN vs INNER JOIN.
- COALESCE and HAVING are becoming second nature.
- Ranking functions and genre-based aggregations were great practice.
- I'm starting to think in terms of the business logic behind the queries which is exciting.