Summary of My SQL Project

Online Bookstore Data Management System – SQL End-to-End Project

Designed and implemented a relational database for an online bookstore using PostgreSQL. Created normalized tables for Books, Customers, and Orders with proper primary and foreign key relationships. Loaded external dataset using COPY commands, performed data validation, and executed analytical SQL queries including joins, aggregations, subqueries, and advanced insights such as customer spending trends, genre-wise sales performance, revenue generation, and inventory stock remaining. Demonstrated practical database management skills and real-world e-commerce data analytics.

Key Business Insights

These are insights uncovered through queries –:

- 📈 Identified the **most profitable genres** and top 3 highest-priced Fantasy books
- 🧱 Calculated **total revenue** generated from all customer orders
- 🛍️ Found **high-value customers** who placed multiple orders and spent the most
- 📦 Determined **remaining inventory** after fulfilling customer demand
- 🌆 Analyzed customer distribution by country & cities
- ✍️ Measured **book sales by authors** to highlight top contributors
- 🔁 Identified the **most frequently purchased book**
- 🕛 Tracked sales behavior in specific time periods (November 2023)

Skills Learned

Through this project, I learned how to design and manage a relational database using PostgreSQL, import real datasets, and ensure data integrity with proper keys and constraints. I strengthened my SQL querying skills using filtering, sorting, joins, grouping, and aggregate functions to generate business insights. I also practiced analyzing sales and customer data to produce meaningful KPIs, improving my ability to think like a data analyst and solve real business problems with data.