

Superstore Sales & Profitability Analysis – SQL Portfolio Project

Objective: Analyze a retail superstore dataset using SQL to understand sales trends, profit drivers, customer value, and discount impact. This project demonstrates foundational data analytics skills.

Data Pipeline

- RAW layer: Import CSV into **superstore_raw** with all fields as text for safe loading.
- CLEAN layer: Convert raw text into typed columns (DATE, NUMERIC, INT). Stored in **superstore_clean**.
- ANALYTICS layer: Summary tables for insights (sales by region, customer value, product profitability).

Pipeline Tables

Layer	Table	Purpose
RAW	superstore_raw	Direct import, no data types, ensures no load failures.
CLEAN	superstore_clean	Typed, validated data ready for analysis.
ANALYTICS	superstore_analytics_region	Summary of sales & profit by region.

Business Questions Answered

- Which regions generate highest sales and profit?
- Which products are most profitable or loss-making?
- How do discount levels impact profit margins?
- Who are the top customers by revenue and profit?

Key SQL Techniques Used

- GROUP BY, ORDER BY, LIMIT
- Aggregate functions (SUM, AVG, COUNT)
- CASE statements for discount banding
- Date conversion using TO_DATE()
- Creating analytic summary tables