# Sales Analytics Using SQL CASE Statements and Conditional Logic

Project Title:

Sales Analytics Using SQL CASE Statements and Conditional Logic

Overview:

This project showcases advanced use of SQL CASE statements in real-world business reporting scenarios, applied on a comprehensive sales dataset. From classification and binning to performance scoring and bonus calculations, this project simulates problems commonly faced in dashboards, business rules, and KPI logic implementation.

Skills Demonstrated:

- CASE in SELECT, ORDER BY, WHERE, and JOIN clauses

- Conditional value labeling (High/Medium/Low Sales)

- Custom product categorization using multi-level CASE

- Bonus calculation and adjusted sale value using math + CASE

- Target vs actual performance analysis using conditional joins

- Use of `FORMAT`, `ISNULL`, `COALESCE`, and nesting

- Classification and ranking logic for product and salesperson

- Efficient CASE logic reuse with CTEs for performance tuning

Key Highlights:

1. Classify sales as High, Medium, or Low based on amount.

2. Map products into broader categories like Electronics, Furniture, Accessories.

3. Rank salespeople based on regional sales and average performance.

4. Evaluate whether each salesperson met, missed, or exceeded monthly sales targets.

5. Calculate bonus-adjusted sale value using multiple CASE layers.

6. Apply performance labels to products and employees.

7. Use `CASE + JOIN` to compare actuals with targets and handle NULLs gracefully.

8. Add custom sorting and ranking based on business-defined priority.

Ideal For:

Clients who need business logic implementation, reporting automation, or performance evaluation using SQL CASE logic in dashboards, ETL pipelines, or analytics queries.