# Ecommerce Analysis

## Tables:

Orders, Products, Customers, Sellers, Reviews, Order\_Items, Payments

## Hints: Analysis and Approach

### 1 Cumulative Revenue and Trends Overtime

- Extract order and payment details.

- Aggregate revenue over time (daily, weekly, or monthly).

- Identify trends such as peak seasons, sales spikes, or revenue drops.

### 2. Most Favored Product Categories and Sales Comparison

- Categorize products based on sales volume.

- Compare total revenue and the number of orders per category.

- Visualize category-wise sales performance over time.

### 3. Mean Order Value (AOV) Across Categories and Payment Methods

- Calculate average order value for all transactions.

- Analyze variations across different product categories and payment methods.

- Identify high-value categories and preferred payment options.

### 4. Active Sellers and Their Growth Trends

- Count unique sellers who have made sales over time.

- Monitor the fluctuation of seller activity over months/years.

- Detect trends in seller retention and growth.

### 5. Seller Ratings and Impact on Sales Performance

- Analyze seller ratings distribution.

- Correlate seller ratings with total sales.

- Determine if higher-rated sellers generate more revenue.

### 6. Repeat Customer Analysis and Sales Contribution

- Identify customers who made multiple purchases.

- Compute the percentage of repeat customers.

- Evaluate their contribution to total revenue and order volume.

### 6. Mean Customer Ratings and Impact on Sales

- Aggregate customer review scores for each product.

- Compare average ratings with product sales performance.

- Identify whether higher-rated products drive more sales.

### 7. Order Cancellation Rates and Seller Performance Impact

- Compute order cancellation rates for sellers.

- Determine how cancellations affect revenue and seller trust.

- Identify sellers with high cancellation rates and potential issues.

### 8. Top-Selling Products and Sales Evolution

- Rank products based on total sales and order count.

- Monitor their sales trends over time.

- Identify best-performing products and seasonal demand shifts.

### 9. Impact of Customer Reviews on Sales and Product Performance

- Compare review scores with sales performance.

- Identify whether better-reviewed products generate higher sales.

- Detect common review patterns that influence buying decisions.