# Day 27 – SQL Practice: E-Commerce Sales & Inventory Analytics

## 🛒 Dataset Overview

This dataset simulates an E-Commerce system with products, categories, customers, orders, and inventory. The tasks are designed to improve skills in joins, aggregations, subqueries, date functions, and inventory management analytics.

## 📁 Tables and Sample Data

1. Categories

|  |  |
| --- | --- |
| CategoryID | CategoryName |
| 1 | Electronics |
| 2 | Clothing |
| 3 | Books |

2. Products

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ProductID | ProductName | CategoryID | Price | Stock |
| 101 | Smartphone | 1 | 25000 | 50 |
| 102 | Laptop | 1 | 55000 | 30 |
| 103 | T-Shirt | 2 | 800 | 100 |
| 104 | Novel | 3 | 400 | 200 |

3. Customers

|  |  |  |
| --- | --- | --- |
| CustomerID | CustomerName | City |
| 1 | Amit Sharma | Delhi |
| 2 | Priya Singh | Mumbai |
| 3 | Rahul Verma | Bangalore |

4. Orders

|  |  |  |
| --- | --- | --- |
| OrderID | CustomerID | OrderDate |
| 1001 | 1 | 2024-01-15 |
| 1002 | 2 | 2024-02-10 |
| 1003 | 1 | 2024-02-12 |
| 1004 | 3 | 2024-03-05 |

5. OrderDetails

|  |  |  |  |
| --- | --- | --- | --- |
| OrderDetailID | OrderID | ProductID | Quantity |
| 1 | 1001 | 101 | 1 |
| 2 | 1001 | 103 | 2 |
| 3 | 1002 | 102 | 1 |
| 4 | 1003 | 104 | 3 |
| 5 | 1004 | 101 | 2 |

## 🧠 Practice Questions

1) List all products with their category names.

2) Show all orders with customer names and order dates.

3) Find total sales amount (Price \* Quantity) per product.

4) Display customers who have placed more than 1 order.

5) Find the category with the highest total sales.

6) List products that are out of stock.

7) Show top 2 selling products by quantity.

8) Display total quantity sold per category.

9) Find customers who have not placed any orders.

10) List products that were never sold.

🎯 Bonus:

Identify the month with the highest total sales amount.