# Day 24 – SQL Practice: E-Commerce Order Analytics

## 🛒 Dataset Overview

This dataset simulates an e-commerce environment with orders, products, customers, and returns. The goal is to extract key business metrics, understand customer behavior, monitor sales performance, and identify areas of concern such as high return rates.

## 📁 Tables and Sample Data

1. Customers

|  |  |  |  |
| --- | --- | --- | --- |
| CustomerID | CustomerName | Email | Country |
| 1 | Aarav Patel | aarav@example.com | India |
| 2 | Sara Khan | sara@example.com | India |
| 3 | John Doe | john@example.com | USA |
| 4 | Emma Watson | emma@example.com | UK |

2. Products

|  |  |  |  |
| --- | --- | --- | --- |
| ProductID | ProductName | Category | Price |
| 101 | Wireless Mouse | Electronics | 499.00 |
| 102 | Yoga Mat | Fitness | 899.00 |
| 103 | Bluetooth Speaker | Electronics | 1599.00 |
| 104 | Running Shoes | Footwear | 2499.00 |

3. Orders

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| OrderID | CustomerID | ProductID | Quantity | OrderDate |
| 1001 | 1 | 101 | 2 | 2023-06-01 |
| 1002 | 2 | 102 | 1 | 2023-06-03 |
| 1003 | 3 | 103 | 1 | 2023-06-05 |
| 1004 | 3 | 101 | 3 | 2023-06-06 |
| 1005 | 4 | 104 | 1 | 2023-06-10 |

4. Returns

|  |  |  |  |
| --- | --- | --- | --- |
| ReturnID | OrderID | ReturnDate | Reason |
| 1 | 1002 | 2023-06-08 | Wrong Item |
| 2 | 1004 | 2023-06-10 | Damaged Product |

## 🧠 Practice Questions

1) List all customers along with their total number of orders and total amount spent.

2) Display the most sold product and its total quantity sold.

3) Show the average order value per customer.

4) List customers who have returned at least one product.

5) Identify the category with the highest return rate.

6) Find the top 2 products with the highest total revenue.

7) For each country, display the total number of customers and their total order value.

8) Display orders that were not returned.

9) Show products that have never been ordered.

10) For each product, display its return percentage (returned qty / ordered qty \* 100).

🎯 Bonus:

Rank customers by their net spending (total spent - value of returned items).