**📘 SQL 100 Days Challenge – Day 39**

**Dataset Theme:** E-commerce Customer Behaviour & Purchases

**Tables & Sample Data**

1. **Customers**

|  |  |  |  |
| --- | --- | --- | --- |
| **CustomerID** | **Name** | **Country** | **JoinDate** |
| 1 | Alice | USA | 2021-01-15 |
| 2 | Bob | Canada | 2021-03-20 |
| 3 | Charlie | USA | 2022-07-10 |
| 4 | David | UK | 2022-08-25 |
| 5 | Emma | USA | 2023-01-05 |

1. **Orders**

|  |  |  |  |
| --- | --- | --- | --- |
| **OrderID** | **CustomerID** | **OrderDate** | **TotalAmount** |
| 101 | 1 | 2023-03-15 | 250.00 |
| 102 | 2 | 2023-03-17 | 120.00 |
| 103 | 3 | 2023-04-01 | 320.00 |
| 104 | 1 | 2023-05-10 | 150.00 |
| 105 | 5 | 2023-06-12 | 500.00 |
| 106 | 4 | 2023-06-25 | 220.00 |
| 107 | 2 | 2023-07-01 | 100.00 |
| 108 | 5 | 2023-07-10 | 600.00 |

1. **OrderDetails**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DetailID** | **OrderID** | **ProductName** | **Quantity** | **Price** |
| 1 | 101 | Laptop | 1 | 250.00 |
| 2 | 102 | Headphones | 2 | 60.00 |
| 3 | 103 | Monitor | 2 | 160.00 |
| 4 | 104 | Mouse | 3 | 50.00 |
| 5 | 105 | iPhone | 1 | 500.00 |
| 6 | 106 | Keyboard | 2 | 110.00 |
| 7 | 107 | Charger | 2 | 50.00 |
| 8 | 108 | iPad | 1 | 600.00 |

**Questions**

1. Retrieve all customers who placed **more than 2 orders** in 2023.
2. Find the **total revenue per country** using JOIN.
3. List the **top 3 highest spending customers** (by total order amount).
4. Using a **window function**, calculate the **running total of orders** by each customer.
5. Find customers who **haven’t placed any orders** in 2023.
6. Display the **most sold product** (by total quantity) with its total sales.
7. For each customer, calculate the **average order value** and filter only those with avg > 200.
8. Write a query using a **CTE** to find the **latest order date** for each customer.
9. Rank customers by their **total spending** using RANK() function.
10. Identify customers who spent **above the overall average order amount**.

**Bonus Challenge 💡**

👉 Write a query to find the **customer who made consecutive monthly purchases** in 2023 (March, April, May, etc.).