# Day 9 – SQL Practice Questions

## 📦 Dataset: Products, Categories & Inventory

Today's dataset simulates an inventory management system. You'll analyze products, their categories, and current stock levels using joins, aggregates, and conditional logic.

### Products Table

|  |  |  |  |
| --- | --- | --- | --- |
| ProductID | ProductName | CategoryID | Price |
| 1 | Laptop | 10 | 800 |
| 2 | Mouse | 11 | 25 |
| 3 | Keyboard | 11 | 40 |
| 4 | Monitor | 10 | 200 |
| 5 | Printer | 12 | 150 |

### Categories Table

|  |  |
| --- | --- |
| CategoryID | CategoryName |
| 10 | Electronics |
| 11 | Accessories |
| 12 | Peripherals |

### Inventory Table

|  |  |  |
| --- | --- | --- |
| InventoryID | ProductID | QuantityInStock |
| 501 | 1 | 20 |
| 502 | 2 | 200 |
| 503 | 3 | 150 |
| 504 | 4 | 35 |

## 📘 Practice Questions

1. List all products with their category names.

2. Show total stock value (Price × QuantityInStock) for each product.

3. Display total quantity in stock per category.

4. Find categories that don’t have any products.

5. Show products with no inventory records.

6. Display the most expensive product in each category.

7. Identify products whose stock value is below $1000.

8. Show the average product price for each category.

9. Rank products by their stock value (high to low).

10. Find the product with the lowest stock across all inventory.

## 🎯 Bonus Challenge

Write a query to list the top 2 products (by stock value) in each category.