

### Practical Exercise: 11

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#### Online Store Inventory Management with Sales Tracking and Discount Calculation

**Objective:** Develop a PL/SQL package, triggers, and functions to manage an online store's product inventory, track sales, and calculate discounts.

**Requirements:**

1. **Tables:**

- Products\_studID (columns: product\_id, product\_name, price, stock)
- sales\_studID (columns: sale\_id, product\_id, quantity, sale\_date)
- discounts\_studID (columns: product\_id, discount\_percentage, start\_date, end\_date)

2. **Package (inventory\_pkg):**

- Procedure add\_product\_studID to add a new product.
- Procedure update\_stock\_\_studID to update the stock of a product.
- Procedure record\_sale\_studID to record a sale and update product stock.
- Function get\_product\_info\_studID to retrieve product details by product\_id.
- Procedure display\_products\_studID to display all products and their details.
- Function calculate\_discounted\_price\_\_studID to calculate the price after discount for a given product.

3. **Triggers:**

- Trigger to update the stock in the products table when a sale is recorded.
- Trigger to ensure the stock does not drop below zero when recording a sale.
- Trigger to apply discount using calculate\_discounted\_price\_studID function whenever a sale is recorded.