**E-commerce Order Management**

**Problem Statement:**

Create an order management system for an e-commerce platform. The system should manage product inventory, customer orders, and order processing, sales per customer

Requirements:

1. Product Inventory:
2. Product ID
3. Product Name
4. Category
5. Price
6. Stock Quantity
7. Discount
8. Supplier
9. Use appropriate collections to manage inventory.
10. Update the product details
11. Add/Remove the product from the inventory
12. Update the stock quantity
13. Update the price details
14. Update the discount offered on the product

1. Customer Orders:
2. Customer:
3. Customer Id
4. Customer name
5. Customer email
6. Customer phone no
7. Customer Address
8. Use appropriate collections to store orders for each user.
9. Each order should contain a list of products.
10. Update the Customer details such as name, email, phone no, address
11. Delete the Customer account.
12. Order Processing:
13. Order:
14. Order Id
15. Customer Id
16. Products
17. Status
18. Order Date
19. Implement methods to place an order, view order details and update order status.
20. E-commerce engine:
21. Calculate the total revenues generated from each customer,
22. How many orders were cancelled after placing an order
23. Show all the order details as per the sales of each day.
24. Which are the top 5 products which are bought by the costumers
25. Implement a search functionality that should return the list of the users who all bought a particular product.
26. Implement the functionality of search to find all the three consecutive orders which are of same price.
27. Implement the functionality of order search to find consecutive 5 order details with a price pattern of **M**: e.g: Order3: 5000 RS, Order4: 10000Rs, Order5: 6000Rs, Order6: 9000Rs, and Order7: 5000Rs (/\/\)
28. Implement the functionality which gives the details of the top 3 sold products.
29. Implement the functionality that will give the customer details about the customer who has placed the most orders.

1. Implement the custom data structure to store the list of orders to see back and forth what all orders are placed each at a time with options to go forward and backward.