**Case Study: E-Commerce Management System**

**Objective:**

Develop a simple E-Commerce Management System to manage products, customers, and orders using core Java concepts such as classes, objects, inheritance, polymorphism, collections, exception handling, and file I/O.

**Requirements:**

1. **Products**:
   * Each product has an ID, name, description, price, and stock quantity.
   * Implement functionalities to add new products, view available products, update product details, and manage stock levels.
2. **Customers**:
   * Each customer has an ID, name, email, and a list of orders.
   * Implement functionalities to add new customers, view customer details, and manage customer orders.
3. **Orders**:
   * Each order has an ID, customer, list of ordered products, total amount, and order status (e.g., pending, shipped, delivered).
   * Implement functionalities to create new orders, view order details, update order status, and manage order history.

**Core Java Concepts to Use:**

1. **Classes and Objects**
2. **Inheritance and Polymorphism**
3. **Collections (e.g., Array List, HashMap)**
4. **Exception Handling**
5. **File I/O for data persistence**