LAB 6: OOP EXERCISES

Exercise 1: Library Management System
Design a library management system using OOP principles. The system should include classes for books, library members, and a library itself. Implement functionalities such as adding and removing books, borrowing and returning books, and displaying available books.

Exercise 2: Banking System
Create a banking system with classes representing accounts (e.g., savings account, checking account) and customers. Implement features like deposit, withdrawal, account balance inquiry, and transferring funds between accounts.

Exercise 3: Online Shopping System
Develop an online shopping system with classes for products, customers, and a shopping cart. Allow customers to add products to their cart, remove products, view their cart, and proceed to checkout.

Exercise 4: School Management System
Design a school management system with classes representing students, teachers, courses, and classrooms. Implement functionalities such as enrolling students in courses, assigning teachers to courses, and generating class schedules.

Exercise 5: Inventory Management System
Create an inventory management system for a store with classes for products, suppliers, and orders. Implement features like adding new products, updating product quantities, placing orders with suppliers, and managing inventory levels.

Exercise 6: Social Networking System
Develop a social networking system with classes for users, posts, comments, and friendships. Implement functionalities such as creating posts, commenting on posts, adding friends, and viewing a user's timeline.