

IMPLEMENT FOLLOWING PROGRAMS:

Exercise 1: Bank Account Class

Objective: Create a class BankAccount with the following requirements:

- Private members: accountNumber, accountHolderName, and balance.
- A constructor that initializes these members.
- Member functions to deposit and withdraw money, and to display the account details.

Task: Implement the class and create a main function to demonstrate creating an account, depositing and withdrawing money, and displaying account details.

Exercise 2: Complex Number Class

Objective: Create a class ComplexNumber to represent complex numbers with the following requirements:

- Private members: real and imaginary.
- A constructor to initialize these members.
- Member functions to add and subtract two complex numbers.
- A member function to display the complex number in a + bi format.

Task: Implement the class and create a main function to demonstrate adding and subtracting complex numbers.

Exercise 3: Student Class with Default and Parameterized Constructors

Objective: Create a class Student with the following requirements:

- Private members: name, rollNumber, and marks.
- A default constructor that initializes members to default values.
- A parameterized constructor to initialize members with specific values.
- A member function to display student details.

Task: Implement the class and create a main function to demonstrate creating student objects using both constructors and displaying their details.

Exercise 4: Rectangle Class with Copy Constructor

Objective: Create a class Rectangle with the following requirements:

- Private members: length and width.
- A parameterized constructor to initialize these members.
- A copy constructor.
- Member functions to calculate the area and perimeter of the rectangle.

Task: Implement the class and create a main function to demonstrate creating a rectangle object, using the copy constructor to create a new rectangle, and displaying their area and perimeter.