



College of Engineering

Department Of software Engineering

Exercise 1:-

Create a class called "Rectangle" that represents a rectangle shape. The class should have private member variables for width and height. Implement public member functions to set the width and height, calculate the area of the rectangle, and display the width, height, and area.

Exercise 2:-

Create a class called "BankAccount" that represents a simple bank account. The class should have private member variables for the account number, account holder name, and account balance. Implement public member functions to deposit money into the account, withdraw money from the account (if sufficient balance is available), and display the account information.

Exercise 3:-

Create a class called "Student" that represents a student. The class should have private member variables for the student's name, age, and grade. Implement public member functions to set the student's information, display the student's information, and calculate the average grade for a group of students.

Exercise 4:-

Create a class called "Car" that represents a car. The class should have private member variables for the car's make, model, and year. Implement public member functions to set the car's information, display the car's



information, and calculate the age of the car (current year minus the car's manufacturing year).

Exercise 5:-

Create a class called "Employee" that represents an employee. The class should have private member variables for the employee's name, ID number, and hourly wage. Implement public member functions to set the employee's information, calculate the weekly salary based on the number of hours worked, and display the employee's information.

These exercises should help you practice implementing classes, member variables, and member functions in C++ using the object-oriented programming paradigm. Feel free to modify and expand upon these exercises as you see fit.