

## Practice Problem on Class and Objects

### 1. Bank Account Class:

Create a BankAccount class with attributes for account holder's name(string type), account id(string type), and balance(double type). Implement methods for depositing and withdrawing funds. Test your class by creating instances of bank accounts and performing transactions.

### 2. Student Class:

Design a Student class with attributes like name(string type), roll number(string type), and marks(array of double type) in different subjects. Include methods to calculate the total marks and average. Create student objects and compute their total marks and averages.

### 3. Rectangle Class:

Define a Rectangle class with attributes for length and width. Implement methods to calculate the area and perimeter of the rectangle. Create instances of rectangles and compute their area and perimeter.

### 4. Car Class:

Create a Car class with attributes of color, model, and name. Include methods to start the engine, stop the engine, and display car details. Instantiate car objects and test the methods.

### 5. Employee Class:

Design an Employee class with attributes for employee ID, name, and salary. Implement a method to give a salary raise. Create employee objects and apply salary raises.

### 6. Library Book Class:

Build a LibraryBook class with attributes for book title, author, and availability status. Include methods to borrow and return books. Simulate borrowing and returning books using instances of this class.

### 7. Circle Class:

Define a Circle class with a radius attribute. Implement methods to calculate the circumference and area of the circle. Create circle objects and compute their circumference and area.

## **8. Person Class:**

Create a Person class with attributes for name, age, and address. Implement methods to update the address and display person details. Instantiate person objects and test the methods.