## 1. Create a Student Class with Multiple Constructors

#### Problem:

Create a Student class with three constructors:

- No-argument constructor that sets name = "Unknown" and age = 18.
- Constructor with one parameter (name) and sets age to 18.
- Constructor with two parameters (name and age).

Write a main method to create objects using different constructors and print the values.

## 2. Bank Account Constructor with Initial Balance

#### Problem:

Create a class BankAccount with:

- A constructor that takes accountNumber and initialBalance as parameters.
- A method displayBalance() to show account details.
- Create an object of BankAccount in main and display the details.

# 3. Employee Constructor Overloading

### Problem:

Create an Employee class with constructor overloading:

- Constructor with name and salary.
- Constructor with name, salary, and department.
- A method displayEmployeeDetails() to print the details.
- In main, create objects using different constructors and display employee details.

## 4. Copy Constructor in Java

#### **Problem:**

Create a Book class with:

- A constructor that takes title and author as parameters.
- A **copy constructor** that creates a new book object from an existing one.

- A method display() to print book details.
- Create an object, copy it using the copy constructor, and display both objects' details.

# 5. Vehicle Constructor with Default and Parameterized Versions

### **Problem:**

Create a Vehicle class with:

- A default constructor that sets brand = "Unknown" and year = 2000.
- A parameterized constructor that sets brand and year.
- A method display() to print vehicle details.
- In main(), create objects using both constructors and display their details.