

## Home Assignment: Understanding Methods and Objects in Java

### Learning Objective:

To understand the creation and usage of methods and objects in Java.

### Expected Completion Time:

Best Case: 15 minutes

Average Case: 20 minutes

### Assignment Details:

Create a class named **Library** with methods to manage book details. Execute these methods using objects from the `main` method.

### Requirements:

#### 1. Create a Java class named **Library**:

- Define a method `addBook(String bookTitle)` with one input argument.
  - ✓ Print the statement "Book added successfully"
  - ✓ Add a return statement to return the `bookTitle`.
- Define a method `issueBook()`.
  - ✓ Print the statement "Book issued successfully".

#### 2. Create an object for the **Library** class in the main method:

- Call both methods using the object.
- Run the code to confirm the methods are executed.

#### 3. Create another Class **LibraryManagement**:

- Create an object for the **Library** class in the main method of **LibraryManagement**.
- Call both methods of the **Library** class from **LibraryManagement** and execute.

### Hints to Solve:

- **Method Declaration:** Define the methods `addBook` and `issueBook` within the **Library** class, specifying their return types (if any) and parameters.
- **Object Creation:** Class objects can be created within the main method of the same class as well as in a different class.

## **Expected Outcome:**

Upon completion of this assignment, you should be able to understand:

- How to create a Java class with methods.
- How to define and implement methods with and without parameters.
- How to return values from methods.
- How to create and use objects to call methods within the same class and from a different class.
- How to execute a Java program and observe the results in the console.

