Assignment 1
Book Inventory

Before attempting this project, be sure you have completed all of the reading assignments, non-graded exercises, discussions, and assignments to date.

Design and implement Java program as follows:
(1) There will be a Book Java class with following attributes: id, title, and price.
(2) There will be an Inventory Java class which stores and manages a list of Book objects
(3) Inventory class will provide the following functionality:

a. **Add:** Prompts user for book data and add to the inventory list. If the book already exists (based on id value), the add request will fail and an error message will be printed to the console
b. **Remove.** Prompts user for book id, finds the id in the inventory list and removes it. If the book matching the id is not in the inventory, remove request will fail and an error message will be printed to the console
c. **Find:** Prompts user for book id, finds the id in the inventory list and print all the data for the book (id, title, and price). If the book matching the id is not in the inventory, find request will fail and an error message will be printed to the console
d. Display: Print all the book information for each book to the console

(4) Implement RunInventory class with main method that will provide the menu with selection for each above functionality.

Style and Documentation:
Make sure your Java program is using the recommended style such as:

- Javadoc comment up front with your name as author, date, and brief purpose of the program
- Comments for variables and blocks of code to describe major functionality
- Meaningful variable names and prompts
- Class names are written in upper CamelCase
- Constants are written in All Capitals
- Use proper spacing and empty lines to make code human readable

Capture execution:
You should capture and label screen captures associated with compiling your code, and running the a passing and failing scenario for each functionality

Sample run 1:

```
   MENU
1: Add book
2: Remove book
3: Find book
4: Display all books
9: Exit program
```

```
Enter your selection : 4

The inventory has no books

    MENU
1: Add book
2: Remove book
3: Find book
4: Display all books
9: Exit program

Enter your selection : 9

Thank you for using the program. Goodbye!
```

Sample run 2:

```
   MENU
1: Add book
2: Remove book
3: Find book
4: Display all books
9: Exit program

Enter your selection : 1

What is the book id (integer value)? 12345
What is the book price (double value)? 19.98
What is the book title? The end of the civilization

    MENU
1: Add book
2: Remove book
3: Find book
4: Display all books
9: Exit program

Enter your selection : 4

Book id=   12345
Book title=The end of the civilization
Book price=19.98

    MENU
1: Add book
2: Remove book
3: Find book
4: Display all books
9: Exit program

Enter your selection : 9

Thank you for using the program. Goodbye!
```

Submission requirements

Deliverables include Java program (.java) and a single Word (or PDF) document. The Java and Word/PDF files should be named appropriately for the assignment (as indicated in the SubmissionRequirements document.

The word (or PDF) document should include screen captures showing the successful compiling and running of each of the test scenario. Each screen capture should be properly labeled clearly indicated what the screen capture represents.
Submit your files to Assignment 1 submission area no later than the due date listed in your online classroom.

Grading Rubric:
The following grading rubric will be used to determine your grade:

Attribute	**Level (15-20 points)**	**Level (5-15 points)**	**Level 0 (0 - 5 points)**
Add	Correct or almost correct code to meet required functionality	Mistakes in implementation	Missing or significantly incorrect implementation
Remove	Correct or almost correct code to meet required functionality	Mistakes in implementation	Missing or significantly incorrect implementation
Find	Correct or almost correct code to meet required functionality	Mistakes in implementation	Missing or significantly incorrect implementation
Display	Correct or almost correct code to meet required functionality	Mistakes in implementation	Missing or significantly incorrect implementation
Menu, program documentation and style, screen captures	Correct or almost correct menu, program comments, identifiers, and screen captures	Mistakes or incomplete menu, documentation and/or style, and screen captures	Missing or significantly incorrect menu, documentation and/or style, or screen captures