

## HW 4

- The goal of this coding exercise is to create two classes **BookstoreBook** and **LibraryBook**. Both classes have these attributes:
  - author: String
  - title: String
  - isbn : String
- The **BookstoreBook** has an additional data member to store the price of the book, and whether the book is on sale or not. If a bookstore book is on sale, we need to add the reduction percentage (like 20% off...etc). For a **LibraryBook**, we add the call number (that tells you where the book is in the library) as a string. The call number is automatically generated by the following procedure:

The call number is a string with the format xx.yyy.c, where xx is the floor number that is randomly assigned (our library has 99 floors), yyy are the first three letters of the author's name (we assume that all names are at least three letters long), and c is the last character of the isbn.
- In each of the classes, add the setters, the getters, at least three constructors (of your choosing) and override the toString method (see sample run below). Also, add a static variable in each of the classes to keep track of the number of books objects being created in your program.
- Your code should handle up to 100 bookstore books and up to 200 library books. Use arrays to store your objects.
- Your code should display the list of all books keyed in by the user

## Sample Run

The user's entry is marked in boldface

Welcome to the book program!

Would you like to create a book object? (yes/no): **yEs**

Please enter the author, title and the isbn of the book separated by /: **Ericka Jones/Java made Easy/458792132**

Got it!

Now, tell me if it is a bookstore book or a library book (enter BB for bookstore book or LB for library book): **BLB**

Oops! That's not a valid entry. Please try again: **Bookstore**

Oops! That's not a valid entry. Please try again: **bB**

Got it!

Please enter the list price of JAVA MADE EASY by ERICKA JONES: **14.99**

Is it on sale? (y/n): **y**

Deduction percentage: **15%**

Got it!

Here is your bookstore book information

[458792132-JAVA MADE EASY by ERICKA JONES, \$14.99 listed for \$12.74]

Would you like to create a book object? (yes/no): **yeah**

I'm sorry but yeah isn't a valid answer. Please enter either yes or no: **yes**

Please enter the author, title and the isbn of the book separated by /: **Eric Jones/Java made Difficult/958792130**

Got it!

Now, tell me if it is a bookstore book or a library book (enter BB for bookstore book or LB for library book): **LB**

Got it!

Here is your library book information

[958792130-JAVA MADE DIFFICULT by ERIC JONES-09.ERI.0]

Would you like to create a book object? (yes/no): **yes**

Please enter the author, title and the isbn of the book separated by /: **Erica Jone/Java made too Difficult/958792139**

Got it!

Now, tell me if it is a bookstore book or a library book (enter BB for bookstore book or LB for library book): **LB**

Got it!

Here is your library book information

[958792139-JAVA MADE TOO DIFFICULT by ERICA JONE-86.ERI.9]

Would you like to create a book object? (yes/no): **no**

Sure!

Here are all your books...

Library Books (2)

[958792130-JAVA MADE DIFFICULT by ERIC JONES-09.ERI.0]

[958792139-JAVA MADE TOO DIFFICULT by ERICA JONE-86.ERI.9]

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Bookstore Books (1)

[458792132-JAVA MADE EASY by ERICKA JONES, \$14.99 listed for \$12.74]

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Take care now!