<u>Assignment 2</u>
Total Marks : 10
Submission deadline : **10:00 pm, Friday, July 24**

i.   Create a class **Book** having three **private** data members, int **id**, String **name** and int **quantity**.

ii. Create 3 constructors
   - with no parameter
   - with two parameters(id,quantity)
   - with three parameters(id,name,quantity)

iii. Create a method in **Book** class, **sellBooks(int count)** which takes an integer as parameter and decrements the quantity of the book by this value. You must check whether it is allowed to sell the amount of books compared to the quantity. For example, if you have only 3 books and you want to sell 5 books, it will not be allowed.

iv. Create another method named **buyBooks(int count)** which takes an integer as parameter and increments the quantity of the book by this value.

v.   Create another method named **printInfo()** which prints the information of the books as follows: BOOK_ID : BOOK_NAME, BOOK_QUANTITY pieces are available. [Replace the CAPITALIZED words with the values of the instance variables]

vi. Create an array of 4 **Book** objects, named **bookStore**. One of the four objects should be initialized using parameter-less constructor, one should be initialized using two parameters constructor and the other two objects should be initialized using three parameters constructor. Later, you must assign values to the objects having initialized with default values in one or more instance variables. [**No need to take user input, assign value as per your choice]**

vii. You have to print the information of all the books in the **bookStore** array. (use **printInfo** method)

viii.
   Now, sell some books from the second and third object. After selling, you must check whether the **quantity** of that **Book** object has reached **zero**. If any object has reached 0 books, then delete this object from the array. [**Hint:** reference→null]

ix. Now, buy some books for the second and fourth object.

x.   Now, you again have to print the information of all the books in the **bookStore** array (use **printInfo** method).
   [While printing, do not forget to check whether any object of the array has been deleted due to selling all the books or not]

xi. Finally print the total count of books present in the **bookStore** array. [sum of all the **quantity** variables of all the **Book** objects]

The name of the **public class** containing the **main** method should be **BookStore.java**. Complete the entire assignment in a single Java file named **BookStore.java**. After completing it, **submit the**

java file only.
No need to submit the entire project or any zipped file.