OOP Lab Assignment 9

Collections

Date: 26-10-2021

Write a program to implement a Library application. It should have the following:

    a. Class Book - attributes: SerialNumber, Title, Author, Category(fiction, non-fiction, etc)

    b. Class Library
- attributes: Collection of Books (books must be unique)
- Methods:

        addBook(Book b) - adds book 'b' to the collection. If the given book is already existing, increase its count.

        printBooks() - print book title along with count

        printBooks(String category) - prints all books from that category

        sortBooks() - by SerialNumber. use Comparable, Comparator or Lambdas

        searchBookByTitle - searches for a book by Title and returns result

        searchBookByAuthor - searches for a book by Author and returns result

    c. Class CollectionTest
- driver class with the main method
- create a library and demonstrate the operations supported.

Note: You can choose any type of collection that satisfies all the above requirements. But think carefully, we want you to choose the correct collection that does the trick

    Use getter/setter or additional methods as necessary
    Don't take input from users. Give all the inputs in your code

Turn in the following:

1. java file with the name **S2020xxxxroll_CollectionTest.java**
2. One or two PNG/JPG file(s) of the output