

## Task 7

---

Create three classes

- **Book** with fields **author**, **title** and **body** (of type **String**);
- **Shelf** with fields **id** (**String**) and **books** – array of **Books**;
- **Library** with only one field **shelves** – array of shelves.

All fields must be **private**. Provide necessary constructors and getters.

In class **Library** add a method **countAuthor** which counts (and returns as an **int**) the number of books in the library written by author whose name (**String**) is passed as an argument to the method. In a separate class define function **main**

```
public static void main (String[] args) {
    Shelf shelf1 = new Shelf("Shelf1",
        new Book[]{
            new Book("Babel", "Odessa Tales", "babelode"),
            new Book("Joyce", "Ulisses", "joyceuli")
        });
    Shelf shelf2 = new Shelf("Shelf2",
        new Book[]{
            new Book("Mann", "Dr Faustus", "mannfau"),
            new Book("Babel", "Red Cavalry", "babelred")
        });
    Library lib = new Library(
        new Shelf[]{shelf1, shelf2});
    System.out.println("# of books by this author: " +
        lib.countAuthor("Babel"));
}
```

download *Obj3III1Lib.java*

which, for this example, should print

```
No of book by this author: 2
```

---

*Deadline: May 23 (inclusive)*

---

Put your Java file(s), and only Java files, in a directory the name of which is your surname (without Polish or any other non-ASCII characters). Names of Java files are arbitrary, although of course they should correspond to names of classes you created. Zip the whole directory (“from above” — not just the files inside it). Then drop the zip file created in this way into folder “Tasks / Task\_XX” of the GAKKO system (where ‘XX’ is the task number).