1. Using the Book class developed in HW 5, write an application, BookLibrary, that creates a library (array) of up to 10 books and gives the user three options: to add a book, to delete a book from the library or to change a book’s information (i.e. number of pages and/or title) in the library.
   a. If the user selects the add option, issue an error message if the library is full. Otherwise, prompt the user for a book title. If the book with that title exists, issue an error message (no duplicated books titles are allowed). Otherwise, prompt the user for the number of pages and add the book.
   b. If the user selects the delete option, issue an error message if the library is empty. Otherwise, prompt the user for a book title. If the book with that title does not exist, issue an error message. Otherwise, “delete” (do not access the book for any future processing).
   c. If the user selects the change option, issue an error message if the library is empty. Otherwise, prompt the user for a book title. If the requested book title does not exist, issue an error message. Otherwise, prompt the user for a new title and/or number of pages and change the book information.

After each option executes, display the updated library in ascending order of the book title and prompt the user to select the next action.

2. Design and implement a class called MonetaryCoin that is derived from the Coin class presented in Chapter 5 (see below). Store a value in the monetary coin that represents its value, add getter and setter methods for the monetary value as well as a toString method.

```java
public class Coin
{
    private final int HEADS = 0;
    private final int TAILS = 1;
    private int face;

    // Sets up the coin by flipping it initially.
    public Coin ()
    {
        flip();
    }

    // Flips the coin by randomly choosing a face value.
    public void flip ()
    {
        face = (int) (Math.random() * 2);
    }
}
```
public boolean isHeads ()
{
    return (face == HEADS);
}

public String toString()
{
    String faceName;
    if (face == HEADS)
        faceName = "Heads";
    else
        faceName = "Tails";
    return faceName;
}

3. Create a main driver class to instantiate 25 monetary coins (use an array for this) with random monetary values. The driver flips all the coins, computes and prints to the screen the average monetary value of all coins with TAILS face.