Lab Assignment #03

2023 Spring SENG102

Question 01

In this lab, you are going to complete an online shopping application. You are asked to implement the following tasks:

File Seller.java which is available below contains a partial definition for a class representing a seller. Save it to your directory and study it to see what methods it contains. Then complete the Seller class as described below.

```
// ********************************************************************
// Seller.java
//
// A seller class with methods for adding and removing products, changing ratings,
and printing seller information.
// ********************************************************************

public class Seller {

	private String name;
	private double rating;
	private int Numberofproducts;


	// -----------------------------------------------------------
	// Constructor -- initializes name, rating, number of products
	// -----------------------------------------------------------


	// --------------------------------
	// Decrements products number by the given parameter
	// --------------------------------
	public int removeProduct(int num) {
		// add body of removeProduct

	}

	// --------------------------------
	// Increases product number by the given parameter
	// --------------------------------
	public int addProduct(int num) {
		// add body of addProduct
```

```
    }

    // ---------------------------------------------------------------------
    // Returns a string containing the name, number of products.
    // ---------------------------------------------------------------------
    public String toString() {
           // add body of toString

    }
    // -----------------------------------------------
    // Change the rating of the seller by the given parameter
    // -----------------------------------------------
    public double changeRating(double rating) {

    }


}
```

a. Fill in the code for the constructor Seller, which initializes the name, rating and number of products.

b. Fill in the code for the method removeProduct, which takes an integer parameter as the reduce the current product from the seller's stock.

c. Fill in the code for the method addProduct, which takes an integer parameter to add the current product to the seller's stock.

d. Fill in the code for method toString, which should return a string containing the name, rating, number of products information of the seller. The output should be as follows :

```
Seller FRIGIDAIRE has 852 products and the seller rating is 9.5
```

e. Fill in the code for method changeRating which takes a double as a parameter and add it to the seller's rating.

f. Enter the changeRating method code that takes the Double as a parameter and changes it to add to the seller's rating.

Question 02

File OnlineShopping.java which is available below, contains a driver program that uses the Seller class. Save OnlineShopping.java to your directory, and complete it as indicated by the comments defined in the file.

NOTE: In here, you need to keep the values you get from the user in an array and operate on this array.

```
import java.util.Scanner;

public class OnlineShopping {

	public static void main(String[] args)
	{

		//enter a sellerNumber1 name Silonn with a rating of 8,4 and a product count of 1123
		  //enter a sellerNumber2 name FRIGIDAIRE Store with a rating of 9,5 and a product count of 852
		//enter a sellerNumber3 name AGLUCKY Store with a rating of 7 and a product count of 632


		//remove 50 products from The Silonn
		//print The Silonn's current number of products


		  //add 100 products to The AGLUCKY
		 //print The AGLUCKY's current number of products


		//Decrease The FRIGIDAIRE rating by 0.6
		//Increase The AGLUCKY rating by 0.5

		//print summary for all sellers by toString


	}

}
```

Expected Output:

```
Enter the number of sellers:
3
Seller Name:
Silonn
Seller rating:
8,4
Number of products by the seller:
1123
Seller Name:
FRIGIDAIRE
Seller rating:
9,5
Number of products by the seller:
852
Seller Name:
AGLUCKY
Seller rating:
7
Number of products by the seller:
632
Seller Silonn has 1123 products and the seller rating is 8.4
Seller FRIGIDAIRE has 852 products and the seller rating is 9.5
Seller AGLUCKY has 632 products and the seller rating is 7.0
Current number of products: 1073
Current number of products: 732
Seller Silonn has 1073 products and the seller rating is 8.4
Seller FRIGIDAIRE has 852 products and the seller rating is 8.9
Seller AGLUCKY has 732 products and the seller rating is 7.5
```

You need to implement all the answers of the questions as commented in Java files and upload OnlineShopping.java and Seller.java into the available Moodle submission.

GOOD LUCK...