Due date: Today, at the end of the lab period.

Read this entire document before beginning your lab.

If you don't remember how to use the DOMJudge system, the *lab manual* is available on the course's Moodle page.

For this lab you are <u>required to fulfill all requirements exactly as described</u> in this provided document, no less, no more.

<u>Question</u>: Write the Java program for the given pseudocode. Using exactly <u>1 integer constant</u>, <u>3 integer variables</u>, and <u>1 Scanner variable</u> make sure to fulfill the following points:

- 1. Declare 1 constant integer called COST and set it to 25000.
- 2. Declare 1 integer variable called airmiles.
- 3. Declare 1 integer variable called *flights*.
- 4. Declare 1 integer variable called balance.
- 5. Declare 1 Scanner variable that will record keyboard inputs.
- 6. Prompt the user through the console for an integer value for the number of air miles, and store the user's inputs in the variables *airmiles* and *discount* (use the same format and wording as the sample figure below).
- 7. Record the number of flights the user can redeem in the variable as the result of airmiles / COST.
- 8. Record the balance of the user's airmiles in the variable as the results of *airmiles* % *COST*.
- 9. Output in the console a blank line followed by the message

You can redeem <flights> short haul flights. The balance of your air miles will be <balance>.

where <flights>, and <balance> are the values stored in the corresponding variables.

The boxes below illustrate how your program should behave and appear.

```
Enterotheobalanceoofoyouroairomiles?o76876

J

Youocanoredeemo3oshortohauloflights.oTheobalanceoofoyouroairomilesowillobeo

1876.
```

REMEMBER in the output: \circ is a space and \sqcup is a new line. Text in **green** is user input.

Note 1: You are to expect a perfect user who will always enter a positive integer; that is, **do not** verify the validity of user input.

<u>Note 2:</u> The use of libraries other than *java.util.Scanner* is prohibited. Your program must work for any double value entered, not just the one in the sample box above.

Note 3: Final thought, remember that your solution is case-sensitive and space-sensitive, fulfill the above instructions carefully and precisely.

Reminder:

When submitting your solution to the lab system, make sure that if you have a package statement at the top of your .java file it is commented out (has // in front of it) as failing to do so will result in a *Compilation Error* hence a grade of 0 (restriction of the DOMJudge system).