

This 2-part homework will give you practice in interactivity, reading in data, and writing output to an external source.

Part 1:

Modify the program you wrote in Homework 1 to:

1. Prompt the user for each patient's weight
2. Write output to a text file titled: "**dosageLog.txt**"

Part 2:

Write a complete Java program for the following problem:

A bank is offering 2.31% interest on a savings account.
Your program will read in:

1. The current principal that is being invested in the savings account.
2. Number of years the money will remain in the savings account.

Your program will use the following formula for annual compound interest to calculate the amount that will be in the account after the number of years passes:

$$amount = p(1 + r)^t$$

Where p stands for the initial principal, r is the rate, and t is the number of years. Finally, your program will display the amount calculated to a text file named: "**interest.txt**" using formatted printing.

Sample input:

Enter current principal being invested in the savings account: 10000
Enter number of years that the money will remain in the savings account: 5

Sample output:

Total amount calculated WITH interest: \$11209.61