

Homework 00

1 General Instructions

Homework should be submitted to Desire2Learn (D2L), as either a plain-text file or a PDF file. For parts of homework that are writing code you may wish to type your answers into an Eclipse projects so that you can test them, then copy and paste them into the document you are submitting.

Homework will be graded for completion – whether or not it looks like you have tried to answer all of the questions to the best of your ability – rather than correctness. In fact, you won't get much feedback about your homework submissions at all. Instead, I will be posting a solution after the due date. You are strongly encouraged to compare that solution to your own work, and ask questions on Piazza or in person if you do not understand any parts of the solution.

The purpose of homework is to help you figure out how well you understand the concepts that you can expect to see on the exams.

2 Assignment

1. Write a static method that calculates and returns the total amount, including a tip, for a bill. It should have two parameters: one for the amount without the tip, and one for the tip percent. Express a tip percent like 15% as 0.15.
2. Write a Javadoc comment for the previous method.
3. Write a static method that multiplies all of the integers in an array together and returns the result. The array of integers should be a parameter.
4. Explain why the program below will not work.

```
1 import java.util.Scanner;
2 /**
3  * Prints the absolute value of an integer.
4  * @author Chad Hogg
5  */
6 public class Homework00Example {
7
8     /**
9     * Converts a number to its absolute value.
10    *
11    * @param The number to convert.
12    */
13    public static void absoluteValue(int number) {
14        if(number < 0) {
15            number = number * -1;
16        }
17    }
18
19    /**
20    * Runs the program.
21    *
22    * @param args Not used.
23    */
24    public static void main(String[] args) {
25        Scanner console = new Scanner(System.in);
26        System.out.print("Enter an integer: ");
27        int integer = console.nextInt();
28        absoluteValue(integer);
29        System.out.println("It's absolute value is " + integer);
30    }
31 }
```

3 Submitting Your Work

If your document is not already plain-text or PDF, convert it to one of those formats. Then upload it to D2L under this assignment.