

LAB #2

A METHOD TO MY MADNESS

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This lab should be completed during the scheduled lab sessions. In order to complete this lab you must demonstrate programs to your lab TA. The technical knowledge on how to accomplish these tasks is found in the assigned reading or the lecture notes, but the lab TA will help as well.

Using "notepad", "javac", and "java" on one of the lab computers. Start with the simple JAVA program that prints out a message similar to the "Hello CSC171" demonstrated in lecture. The lab document that you hand in to your TA should answer the following questions. Repeat the questions in your lab document, and cut and paste your output for the answers.

1. What is the output of the following code segment?

```
int a = 5;
int b = -6;
System.out.println(Math.max((Math.abs((b)), a));
```

2. What is the output of the following code segment?

```
int a = -6;
System.out.println(Math.sqrt(Math.pow(Math.abs(a), 2)));
a = 6;
System.out.println(Math.sqrt(Math.pow(Math.abs(a), 2)));
```

Use the following method declaration to answer the next two questions.

```
public static int method1(int x) {
    if (x <= 10)
        x += 10;
    else
        x -= 10;
    return x;
}
```

3. What is the output of the following code segment?

```
int a = 6;
System.out.println(method1(a));
```

```
a = 15;
System.out.println(method1(a));
a = 10;
System.out.println(method1(a));
a = -10;
System.out.println(method1(a));
```

4. What is the output of the following code segment?

```
int a = 15;
int b = 5;
System.out.println(method1(method1(a))+method1(b));
a = 0;
b = 0;
System.out.println(method1(method1(a))+method1(b));
a = 5;
b = 15;
System.out.println(method1(method1(a))+method1(b));
a = -10;
b = 10;
System.out.println(method1(method1(a))+method1(b));
```

5. Write a method that takes two integers as input and returns the sum of the integers. Demonstrate this method working with 3 different pairs of numbers.
6. Write a method that takes a string (intended to be a name) as a parameter and returns a greeting string such that if the string "Ted" is passed in the String "Hello Ted, how are you" is returned. Demonstrate this method working with 3 different names.