## Homework 2 CSC 116 Fall 2019

Due Wednesday, October 11, 11:45 pm

This assignment includes one Java file and a worksheet, which must be completed and submitted by the due date. The included Java file is incomplete and each block of comment in the file represents a problem to implement and complete. There are tests for each method in main that will help guide your implementation, but do not rely on these as your only resort! Implement more tests that what's given in order to ensure full test coverage and confidence.

<u>IMPORTANT:</u> The limitation for every problem in this assignment is that you are limited to using things we've covered in class (up until the assignment of this homework). This includes if/else statements, String methods, Scanners, Boolean expressions, printf, etc. This does not include importing external packages, arrays, etc. If you are unsure if your implementation breaks these rules, ask a member of the teaching staff.

"Why am I being arbitrarily limited?" Those of you with prior coding experience may be asking. "I know how to solve these problems using techniques we haven't covered yet!" Understand that these are arbitrary programs you're writing. The goal is to prove that you have the knowledge and ability to use what we've covered so far, not to just solve the problem. If you don't use this knowledge, you cannot be assessed on it. Take solace in the fact that, as we progress through the class, you will be allowed to use more and more knowledge from other sources. As it stands now, though, how well you've absorbed the material we have so far is more important to the teaching staff than your ability to solve problems.

## **RUBRIC**

This homework is worth a total of 100 points. There are 5 methods and 5 problems, each of which is worth 10 points. When writing computer programs, there are many ways to do something wrong and many ways to do it right, so there can be no comprehensive rubric which covers every reason for something to gain or lose you points. That said, here are some guidelines which will be followed when determining grades:

- Each method will be tested by a computer program. Passing these tests will result in 5 points. Partial credit may be awarded if the method passes some tests and not others.
- Each method will be inspected by a human being. Passing inspection will result in the remaining 5 points. Partial credit may be awarded, if, for example, the method fails all tests but is mostly correct.
- Points can be taken away for reasons including but not limited to
  - o Not following implementation instructions for certain parts of the assignment
  - o Attempting to falsify program output
  - Attempting to fool tests
  - Compilation errors

## **FILES TO SUBMIT**

HomeworkTwo.java HomeworkTwoWorkSheet.pdf