# Chapter 4 Homework

1. What is the difference between a syntax error and a logic error?
   1. **A syntax error is caught by the compiler. Code with a logical error will run with unintended consequences.**
2. What is displayed after the following Java statements are executed?

int a = 5;

int b = 10 \* a++;

int c = b \* ++a;

System.out.printf("c = %d%n", c);

* 1. **350**

1. What is the difference between a counter-controlled iteration and sentinel-controlled Iteration?
   1. **Counter control uses a variable to set an iteration interval and a limit. Sentinel controlled operates on an enumerated number of items in a iterable data type.**
2. What is a block of code?
   1. **A statement contained in a pair of braces.**
3. When should you use pseudocode?
   1. **You can always use pseudocode to help layout the flow of a program.**