Tyler Grewal

Comp Sci 20

CRT Chapter 5

1. A loop allows you to run certain lines of code multiple times without wasting space or making unnecessary code.
2. A while loop checks the condition and then executes the statements, but a do while checks the condition after it runs through the instructions. If the condition is met, the code runs again, and if it isn’t it stops. With a do while, it’s confirmed that the code will run at least once even when the condition isn’t met.
3. Prompter, Account set up.
   1. An infinite loop is a sequence that will continue endlessly.
   2. Syntax errors can cause infinite loops to happen; forgetting curly brackets, or a semicolon after a condition in some cases.
   3. An overflow happens when a program receives a number it’s unable to handle, for example, infinity.
4. 59 times; it won’t happen on 120 because of the less than symbol.
5. Anything less than or equal to 122, which would cause x to equal anything less than or equal to 119, which fits the range.
6. A counter *(anything with += or -=, it adds numbers until a certain point: ex: numberssum)* runs through a counting sequence, while an accumulator *(finding the average, or adding up numbers: ex: finding a sum)* adds up the values provided.
7. for (int i=3; i <=10; i++)

{

sum = sum +i

}

System.***out***.println(sum);

1. Whether or not you’re aware of the range, whether or not it’s a fixed value, when the loop should stop, whether or not you want it to execute at least once.