CRT: Chapter 5

Youdis

1. To run specific code repeatedly until a given condition proves true
2. While loops will check if the given condition is true before running and if it isn't then the loop will be skipped. Do-while loops are guaranteed to run the loop at least once then will check the given condition at the end of loop to see if it should be repeated or to move onto the next line of code.
3. Guessing Game
4. A loop that will continue to repeat infinitely
    a. A loop that will continue to repeat infinitely
    b. Using a boolean value of true in a while loop for condition with no break. When the for loop states the i(counter value) continues as long as it is bigger than a number and the i value starts at a higher value than the number used and it stays the same or keeps adding. EX: for (int i = 10; i > 2; i++) {}
    c. When a storing more data than a variable can handle, value that is too big for the assigned data type to store
5. Will run 60 times
6. Anything that is 120 or under
7. Counter goes through a sequence of data or numbers while accumulators store all the numbers or data in a sequence and adds them up.
8.

```
int sum = 0;
for (int i = 3; i <= 10; i++) {
  sum += i;
}
```

9. The factors being if you know how many times you need the loop to run, and the other being if you need the loop to stop after a certain condition is met so you don't know how many times it needs to loop. Another being if you don't know how many iterations the loop will go through but you need to run it at least once.