

Annika Simovart Critical Thinking Task – Lab 6

One of the biggest tradeoffs in coding that which type of loop to use. I tend to use while loops when I can because they're much easier for me to comprehend in C++. However, I know other people will go straight to for loops when possible. There are a couple things to consider when deciding though.

A big one would be complexity, would doing one loop be much easier than the other. Meaning, does one loop reduce the amount of line of code? If yes, then that's one sign to go with a certain type of loop.

Another metric would be readability. This sort of goes hand in hand with complexity because if it's too complex to read, how can you debug it easily? This will become especially import if you're working on a team and you need other people to look at it. You want other programmer to be able to understand your code and predict what it can do. This can become much harder than necessary if you choose to use the wrong loop.

The final metric would be ease of future changes. If you want to alter the program in some way, which loop is going to agree with the changes more? You don't always know what's going to change about your code in the future, but it's always a good idea to set yourself up for anything. That way you're prepared to make changes easily as needed.

All of these things are really great things to consider when you have the option between a while and for loop. Using these metrics, you can better deduce which type of loop is right for you, your program, and your needs.