In this module, we learned about manipulating `Picture` objects and using loops and arrays. It was quite fun applying filters into pictures knowing it is what most paid software image editors does fundamentally. There are of course some parts of the coding process where I was stuck thinking about overcoming a problem, moments I was really confident and just breezing through lines of codes, but most importantly, I learned that programmers spent most of their time tweaking their codes rather than coding itself.

While I was working on the Tri Effect homework, there was a point where I wasn’t making any progress and could not find the bug that was causing my program to fail. Compared to our previous homework, this was the most challenging so far which took me more time than I had expected it to finish. One particular problem I had been stuck on was figuring out how the heck can I apply all three filters all at once in thirds of the picture object horizontally stacked on top of each other. I realized the problem was that I haven’t even started coding yet but I already made it complicated than it should be.

After about 2 hours of still trying to figure a way to apply three filters in one picture object, I took a step back and I decided, hesitantly, to delete all my progress and start afresh. Although it appears to be a waste of time, given all the progress I had so far, it was the best decision I have made the entire time doing my homework. By having a blank slate to start with, I gave myself another chance to approach the problem differently, as opposed to having all the clutter that I was so sure were necessary but in fact were making things more complex. As a result, it made the coding process easier. Then I realized that sometimes it is best to start over despite of the progress that has been made so far to approach things in a different light. Because having made so much progress does not mean being closer to finishing it.

Finally, I learned that being a programmer does not mean typing 120 words per minute on the keyboard tirelessly – just like in the movies. My time spent on all the homework I have done so far were mostly on refactoring rather than typing away on my keyboard. In spite of being a novice in the programming world, I can imagine professional programmers who does programming for a living, refactoring most of the time as well due to the nature of programming, which is consistently misinterpreted, that is similar to teaching a dog a new trick. As I have understood, programming requires deep understanding of all the pieces into play, a good amount of patience, and the ability to know when to start over. Programming allows no room for mistakes.

Still, programming has never been more interesting as ever.