1. Assignment 1 Reflections and Lessons

I learnt input, processing and output, decision structures, and repetition structures in assignment 1. Input, and procession and output questions are quite easy for me. On the other hand, decision structures and repetition structures questions are challenging for me. They take a lot of time for me to digest and understand them. However, I can easily code once I understand the question. I did all three parts of assignment 1 relaxingly and without worry. I can overcome them easily and I wrote my best codes of assignment 1. However, the mark of assignment 1 is not the same as I expected. In the feedback, my mark was reduced for repeated print statements, using wrong conditions, not naming variables well, and not spacing extra one space, as shown in the sample output. Therefore, I committed myself not to do like that again. I decided to give a lot of time for checking and reviewing codes after coding so that I may notice there can be a lot of print statements or wrong conditions used. Additionally, I will also give time to think well-named variables. Even though I gave variables, I will brainstorm whether I can give better-named variables or not. Besides, when I get my output, I will check it carefully and exactly with the sample out, given in the question.

2. Work Entries

21/01/2023, 6:25 - 19:10 pm

Work: Read through the assignment 2 instructions and started working on choosing to load existing plants from a text file and menu display.

Challenges: It was difficult to print the print statement for existing plants form a text file as same as the sample print statement in the question. It took some time for me to figure out to print the same output. At the end, I could figure it out by using. join method in Python.

22/01/2023, 10:50 – 11:45 am

Work: Work on "(W)ait" option and "(D)isplay" option

Challenges: For the "(W)ait" option, to print this sentence, "After 0 days, you have 4 plants and your total food is 0," I had trouble calculating the number of days. Later, I noticed that I could do this by using the "count" accumulation method. I wrote codes slowly, line by line, and tested and

checked them as I finished them. As a result, writing codes for rest parts was simple. There was no problem writing codes for the "(D)isplay" option.

24/01/2023, 13:15 – 16:10 pm

Work: Work on "(A)dd" option

Challenges: I wrote an anti while loop pattern for error checking, and I found that infinite outputs were generated when I run the code. Hence, I fixed the code with the default while loop pattern and this time I could execute the code.

24/01/2023, 17:50 – 19:15 pm

Work: Checking the code and analyzing it.

Challenges: I noticed that I wrongly created if, if, if pattern for "(W)ait", "(D)isplay", "(A)dd" options. So, I swiped with if, elif, else pattern. At that time, I forgot to put "else" at the end, and my code could not be executed. The main while loop kept looping because there was no break condition.

25/01/2023, 10:40am – 12:30 pm

Work: Checking the fixed code and testing it again

Challenges: When I tested the code this time, I could only determine whether a new plant already existed or not. The "(W)ait" option did not function as intended after I added a new plant. It kept adding existing plants every time I input W. If I have four existing plants, the four existing plants become double, which means eight plants. Although the number of plants was accumulated, the names of existing plants were repeated. I found that I wrote unnecessary codes to add a new plant, resulting in unintended output. When I was able to identify the issue, I therefore removed extra unnecessary codes. I just simply appended a new plant at this time, and the "(W)ait" and "(D)isplay" options were able to function as expected.

25/01/2023, 16:30am – 17:30 pm

Work: Re-running the code, checking the code with the sample output, as given in the question, and modifying what it is needed to be improved. I double-checked the calculation steps. I read the variable names and brainstormed whether I could change better-named variables or not.

Challenges: There was no big challenge as the code ran smoothly and as exactly as the sample output. However, it was a bit difficult to think about variable names.

3. Summary

In conclusion, I learnt about use of accumulation method and reflection on variable names from assignment 2. I encounter several challenges and difficulties while doing this assignment. However, I was able to resolve them by testing the code line. In addition, I learned about proper use of control structures in the problem-solving process. I used wrong control structures and got unintended outputs. So, I realized the importance of using proper control structures. Finally, I hope myself to be able to write a systematic code.