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Foundations of Python Programming

Assignment 06

https://github.com/mandubble/Python100-Spring-2025

## Learning about: functions, parameters, classes, Separations of Concerns, and some other things as well.

In this module we studied how functions are implemented and why you would want to use them. The next lab after the first one we worked on parameters and it was discussed how and why to use them. Thirdly in the lab we worked on the SoC method. Actually the SoC method – which stands for: separartion of concerns – I found not only interesting but possibly having OCD, this is already my credo! It's about organizing to the point where a person's code (every person's code) is SoCed to the point where you know what you are looking at and if there is a problem you know where to look to fix it! I suppose that classes, functions, parameters, arguments and return values are a general 'folding in' logically to minimize overly verbose code that is repeated in many places where other code that is out of place but 'Jerry-rigged' to work somehow is replaced by elegant code that makes more sense.

As far as this assignment (went) I DID get my hands dirtier than the last assignment but still I didn't complete it on my own to my own satisfaction. All the labs I did I was able to complete and I DID get to the point (with the help of my friend Claude 3.7) where I understood primarily the indentation. Unfortunately I ran out of time on this assignment, as I have gotten so far behind. What happened was I was getting to inserting the def output\_error\_messages function and somehow I nested or inserted it into another function. Before that everything was working. As I am so late I am stopping there and providing the cleaned-up code.

As far as arguments and local variables I don't understand how to use those. I know what they look like and I understand how you can use variables within a function, and once you do that you call them 'parameters'. I do not understand how classes work (very much though a little as I did C++ from a book ages ago) It's a container that holds things and related to objects. I think. In the labs and assignments it seems like you could take the classes out, and the whole thing would work fine. I don't get why they are there really.

There was a part in a lab that correlates with this assignment using the output\_error\_messages function and I needed help and the AI helped me make that work. In the error message with I think it was the call with the IO class attached you could put that in and

then take out a few of the error messages. I think the class as in: IO.output\_error\_messages eliminates part of the error message verbage. Why did it do that and how did it do that? I didn't get that.

Again like in the last four assignments I feel like I can grasp the concepts mostly however I know there is no way I could write a program like this out of my head, without looking at many pages of code. I feel that I am learning but that there is too much information, and it is too much complex information to grasp. If you asked me I can't really tell you what I have learned however I can identify a lot of things and if you wanted an explanation I could explain maybe half of what has been presented: on a good day. Dictionaries, check, lists, pretty much, lists of lists, sort of, classes not really, .format and f-string (I can identify and get how they are used but I would have to look some things up to implement them.)

I am enclosing the pathetic code that will not run (the best I could do) along with the cleaned-up code.