

## Assignment 6

### Introduction

Assignment 6 is an extension of our CD inventory script, replacing much of the code with functions inside classes. We were provided a starter file with several “TODO’s” to complete and change to “Todone’s”. I was able to move code from the lower “TODO” portions of the starter code up into one of 3 provided classes: DataProcessor, FileProcessor, and IO (‘input/output’). I was unable to get the code to work, however. The program runs without ‘breaking,’ however nothing can be saved to the text file. I spent hours troubleshooting and learned the following:

- It is helpful to review the entire code line by line. I made an excel spreadsheet with each new variable, class, function, etc., as they were encountered, with a description of each.
- After spending hours not doing any coding but just reviewing the code, then it is time to attempt to code.
- Per the office hours instruction, I started with the “add” functionality in the while loop.
- The provided pseudocode of “TODO’s” provides clues as to which class the function will belong.
- Create a function in the appropriate class, write the docstring, then cut the code from the “TODO,” and paste into the function at the correct indentation. Add what you want the function to return, if anything.
- Back at the location the code was cut, you need to call the function. There may be more to do at that location, however I was unable to determine what was necessary.
- By constantly running the code at each step and much troubleshooting, I was able to get the program to ‘run’ through all of the menu options without crashing. When I typed simple text into my text file, I see that the script will ‘load’ and ‘display’ what is in my text file, though admittedly those functions were provided in the starter file.

The function syntax still eludes me. It is hard to determine where to write *‘a function =’* vs. *‘these things = the function’*. Furthermore, I get lost as to what ‘table’ means in the code.

Below is a screenshot of the program working (well, at least not crashing) in Spyder.

```
Console 1/A X
File "C:\Users\gleque\Anaconda3\lib\site-packages\ipykernel\kernelbase.py", line 1219, in _input_request
    raise KeyboardInterrupt("Interrupted by user") from None
KeyboardInterrupt: Interrupted by user

In [10]: runfile('C:/_FDNProgramming/Assignment06/CDInventory.py', wdir='C:/_FDNProgramming/Assignment06')
Menu

[1] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [1, a, i, d, s or x]: a

Enter ID: 1

What is the CD's title? hail

What is the Artist's name? mary
===== The Current Inventory: =====
ID  CD Title (by: Artist)
5   6 (by:7)
=====
Menu

[1] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [1, a, i, d, s or x]: s
```

Figure 1. Screenshot of program 'running' in Spyder. It's not working correctly, but not crashing either.

Below is a screenshot of the user using 'l' and 'i' in the Anaconda prompt.

```
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, d, s or x]: l

WARNING: If you continue, all unsaved data will be lost and the Inventory re-loaded from file.
type 'yes' to continue and reload from file. otherwise reload will be canceledyes
reloading...
===== The Current Inventory: =====
ID      CD Title (by: Artist)

5        6 (by:7)
=====
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, d, s or x]: i

===== The Current Inventory: =====
ID      CD Title (by: Artist)

5        6 (by:7)
=====
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, d, s or x]: x

(base) C:\_FDNProgramming\Assignment06>_
```

## GitHub

For this assignment we are required to upload our python file and this knowledge document to GitHub. The link for my assignment is:

<https://github.com/rolflekve/Assignment06>

## Summary

Assignment 6 was a challenging one. I'm not following the function syntax very well. Using the starter file, I'm able to move some code around and I'm learning about writing doc strings and troubleshooting, however I need to play around more with function basics before I'll be able to progress.