June 6, 2021

Tao Peng

**Documenting my python learning experience in Assignment 09**

**Introduction**

During the past week python class, we learned the concept of modules, I try to apply these python skills to accomplish the task in assignment 09.

**Results**

The assignment09 is as following:

Our teacher has provided three python scripts: DataClasses.py, IOClasses.py and ProcessingClasses.py. The teacher also provided main.py which provides pseudocode. Your task is to import all or part of the functions/classes from the three scripts (DataClasses.py, IOClasses.py and ProcessingClasses.py) as modules and write code in main to accomplish the typical task in the last four classes: “read the file into the program, provide a menu and allow the user to go through the menu. Make sure to **include error handling!**

**Summary**

Writing python codes in PyCharm is fun. Through this assignment, I have learned several things:

1. When coding task is complex, using pseudocodes to guide your thinking process.
2. Loop and conditional statement in python are very useful to get through a menu.
3. A table of data can be viewed as rows of list data. You can access the table data using for loop and access each row of data as a list.
4. A table of data can be also viewed as rows of dictionaries.
5. Testing a portion of your codes when the code gets too long and/or too complicated. This way you can easily correct the mistakes in a small section of coding (TestHarness).
6. Using class and function to simply and organize the coding is great practice to become a better programmer.
7. The key components of class are as follows: fields, attributes, constructor, property and methods.
8. Modules are great ways to organize code and allow users to use them again and again.

**GitHub repository**:

The link:

<https://github.com/taopeng1100/IntroToProg-Python-Mod09>