Florida Institute of Technology
Department of Computer and Engineering Sciences
CSE1100 – Intro to Programming Concepts with Python
Lab Exercise 4

For this exercise you will perform the following activities:
1. Create 2 executable scripts in Python that perform operations as described below.
2. Complete the standard homework and lab template report to describe your programs.
3. Submit the complete product as a zip file to the provided drop box for Lab 4.

Program Requirements – Problem 1

The program will extend the user profile code from LAB2 to include disk storage and loading of profile data. The menu will have options to enter, store and print the current data. The file format is up to you and <u>does NOT</u> need to be searchable or sortable. The interaction will look similar to this:

- ➢ (Main Menu) Please select an action:
    - ○ Enter & Save Data
    - ○ Load & Show Data
    - ○ Quit

"Enter & Save Data" would look the same as before except it will ask if you would like to save the profile. The interaction would look something like this.

- ➢ Hello! What is your full name?
- ➢ Jimmy Smith
- ➢ What is your height (in inches)?
- ➢ 67
- ➢ Great to meet you, Jimmy! Here is your profile:

    FIRST NAME: Jimmy
    LAST NAME: Smith
    HEIGHT: 5' 7"
- ➢ Would You like to Save this Profile? (Y/N)
- ➢ (An appropriate response would be given based on the choice.)
- ➢ (The Main Menu would then print at this point.)

"Load & Show Data" would look something like this.

➤ Here are the current stored profiles:

      FIRST NAME: Jimmy
      LAST NAME: Smith
      HEIGHT: 5' 7"

      FIRST NAME: Jenny
      LAST NAME: Parker
      HEIGHT: 5' 3"

      FIRST NAME: Alex
      LAST NAME: Merton
      HEIGHT: 5' 5"

      (… etc.)

➤ (The Main Menu would then print at this point.)

Program Requirements – Problem 2

Select a program that you have submitted previously as part of the Labs or Homework assignments. Using the knowledge that you have gained since then, refactor the software to improve its quality in terms of:

➤ Correctness
➤ Robustness
➤ Extensibility
➤ Clarity & Organization
➤ Elegance.

Submit the new program as the deliverable for Problem 2.