Noah Sandvig
2/23/2024
IT FDN 110 A Wi 24: Foundations Of Programming: Python
Assignment 06
https://github.com/noah-sandvig/IntroToProg-Python-Mod06.git

Assignment 06 - Functions

Introduction
The base of this week's code was the repeated option menu loop from the last few weeks, in which the user is presented four options- register a student, show current data, save data to a file, and exit the program.
Functionality that had previously been in the main code was moved to two classes of functions, based on separation of concerns.

Data Processing
Two classes were created to store the necessary functions.

IO was created to contain functions related to input and output of data and error messages. This class contained a method for custom error handling, a method used to output the repeated menu, a method for taking menu choice options from the user, a method for outputting the data about students, and a method for taking manual data entry from the user.

FileProcessor was created to contain a method that opens, reads, and closes a JSON file, and a method that opens, writes to, and closes a JSON file. Both these methods incorporate custom error handling and display error messages using methods defined in the IO class.

The main body of the script uses the methods from the above classes to accomplish the same task as last week's assignment but is more streamlined due to the use of the methods.

Summary
Classes and methods allowed simplification of the main body of the script and reduced repeated code.