

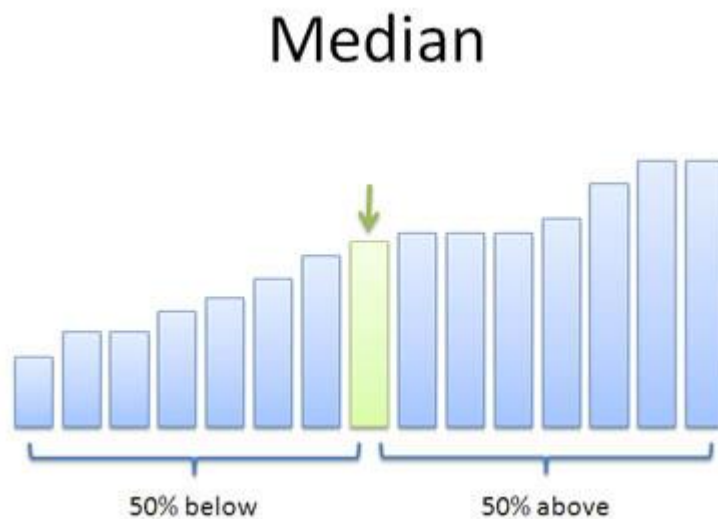
**CSCD110****Assignment -- List  
Traversal and Exception  
Handling****50 points**

See Canvas for due date

Create a menu-driven program that will accept a collection of non-negative integers from the keyboard, calculate the mean and median values and display those values on the screen.

Your menu should have 6 options:

1. Add a number to the list/array
2. Display the mean
3. Display the median
4. Print the list/array to the screen
5. Print the list/array in reverse order (Extra credit – stub out if not attempted)
6. Quit

**Program particulars:**

Use a list of type `int` to store the integers entered by the user. There must be error checking on the input integer. If it is negative, the program will print an error message and re-prompt. This process will continue until a non-negative integer is entered. You must use a `try-except` structure to trap both types of input errors (like letters where numbers should go) and range errors (like -1).

There must be error checking on the menu choice entered. If the user enters a choice not on the menu, the program will print an error message, re-display the menu and re-prompt. This process will continue until a valid option value is entered.

Your solution must be modular. The design of your functions is up to you, but the rules of “highly cohesive” and “loosely coupled” must be followed.

Your program should be well-documented. Explain what you’re doing in your code. Be sure to include the usual name and assignment notes.

Note your program will have to sort your array before you can find the median.

Submit as usual in a `.py` file named with your last name, first initial and `hw4.py`.