

Assignment #1

Deadline: Monday 05/02, 23:59

Median & Average calculator: We want to generate a code that computes the median and average of three variables and compares them.

- (1) Define three real-valued variables.
- (2) Initialize them with arbitrary values of your own choices (to be changed by us).
- (3) Compute the average of these three values and call it **'meanValue'**
- (4) Compute the median* of these three values and call it **'medianValue'**.
- (5) Your program must print the following in the console with the **EXACT** same format as shown in the example below:
 - a. The values of the three input variables
 - b. The median
 - c. The average
 - d. Comparing the median and the average and printing one of the following in the console, depending on the values:
 - i. The median and the average are equal
 - ii. The median is larger than the average
 - iii. The median is smaller than the average

Example of the output in the console (when we choose 10.0, 20.0, 30.0 as input values)

```
The three input variables are 10.0, 20.0, and 30.0
*****
The median is 20.0
The average is 20.0
*****
The median and the average are equal
```

NOTE1: The format of your output must be identical to the above example; i.e., include the two star lines and use the same sentences (except that the values must be changed according to the input). Points will be deducted, otherwise.

NOTE2: You must NOT use any pre-defined functions in Java such as sorting.

NOTE3: Please name your files as A1_<st#>.java. For example, for a person with student# 000000 the file name would be A1_000000.java. Submit your files on your dropbox folder on Canvas.

*What is median? In an array of values, when sorted, the median is the element that is in the middle. For example, in the array [1, 4, 8, 3, 2] the median is 3, because once sorted [1, 2, 3, 4, 8] the value 3 comes in the middle of the sorted array. Hint: for an array of size 3 you do not need to sort the array. You should just use if-else conditions to find what value comes in the middle.