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CS 161

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Assignment 3 (design)

1.) Understanding:

Take in the following inputs from the user: amount of integers, and integers themselves

Once the number of integers are taken in the amount of integers should be displayed back to the user as the following: Please enter # integers.

A for loop should then run taking in an integer for each time the loop runs, ultimately stopping at the “number of integers” the user specified earlier.

Within the for loop there should be logic (if, if else, else) statements to decide where the inputted integer from the user is a new maximum value or minimum value.

One the for loop is finished running, the user should then be displayed with the minimum value inputted and the maximum value inputted.

2.) Testing plan:

Description	Inputs	Outputs (expected)
Expected input from user	3, 7, 5	Min:3 Max:7
Multiple inputs	3,7,10,10,3	Min:3 Max:10
Negative integers	-10,2,8,4	Min: -10 Max:8
One input	3	Min:3 Max: 3 (Assuming I make a special case for single input)
Only negative integers	-1, -1000, -5	Min: -1000 Max: -1
Extreme max for signed integers	1,2,3,4, 2147483648	Overflow error
Extreme min for signed integers	-1,2,3, -2147483649	Overflow error

3.) Design:
//variables
Count
Min
Max
Temp

Print “How many integers would you like to enter?”

```
Get count from user
Print “Please enter (Count) integers.”

For 1 to count, step once
        Get temp from user // this will temporarily hold the integer for the logic
        if max == NULL && min == NULL
                set max to temp
                set min to temp
        else if temp > max
                set max to temp
        else
                set min to temp
print “Min: (min)”
print “Max: (Max)”
```