

Software Development Report
for
CSC 121: Programming I: Spring 2021
First Demonstration
by
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Problem Summary

The program is to output three numbers inputted by the user in decreasing order.

Problem Requirements

- ★ Allow for equality
- ★ Numbers are to be inputted on a separate line each.
- ★ Output is to display the numbers as shown in this example: 3 >= 2 >= 1

System Design

1. Get three numbers
2. Determine the order and output the result

Testing Report

Case	Input (separate lines for each number)	Expected Output	Generated Output	Pas s?
S1	5 10 15	15 >= 10 >= 5	15 >= 10 >= 5	yes
S2	5 15 10	15 >= 10 >= 5	15 >= 10 >= 5	yes
S3	10 5 15	15 >= 10 >= 5	15 >= 10 >= 5	yes
S4	10 15 5	15 >= 10 >= 5	15 >= 10 >= 5	yes
S5	15 5 10	15 >= 10 >= 5	15 >= 10 >= 5	yes
S6	15 10 5	15 >= 10 >= 5	15 >= 10 >= 5	yes
Eq1	5 5 15	15 >= 5 >= 5	15 >= 5 >= 5	yes
Eq2	5 15 5	15 >= 5 >= 5	15 >= 5 >= 5	yes
Eq3	5 10 10	10 >= 10 >= 5	10 >= 10 >= 5	yes
Eq4	5 5 5	5 >= 5 >= 5	5 >= 5 >= 5	yes
Eq5	20 10 10	20 >= 10 >= 10	20 >= 10 >= 10	yes
Eq6	20 20 10	20 >= 20 >= 10	20 >= 20 >= 10	yes
Er1	a b c	bad data, please try again	system crashed	no

Er2	10 20 30 (all on one line)	bad data, please try again	system crashed	no
Sp1	-4 0 10000	10000 >= 0 >= -4	10000 >= 0 >= -4	yes
Sp2	657487 0 -874757	657487 >= 0 >= -874757	657487 >= 0 >= -874757	yes

Time Spent

This program and development report took one hour.

Outside resources used

Examples from the textbook were used to confirm correct syntax

Security report

- Only possible security problem is the failure to validate correct input. The system crashes

Ethical report

- There are no ethical issues with this software since it only output the values in order

Future Improvements

- Fix the program so that when bad data is inputted, it will be handled gracefully

Lessons learned

- Proper syntax for commenting
- Proper syntax of if/else statement