

JAVA Assignment



Java Assignment 1: Basic Console Applications

Ver **3.1** Last Updated: **8/11/2021 6:15 PM**

Your first assignment in java is to create 3 console applications. Complete the following tasks. Each one will feature interaction with the user via keyboard input.

1. **Square Feet to Square Meters:**

Take as a input the number of square feet for a building or floorplan. Convert the square feet to square meters. Test using a test plan. Don't worry about input that is out of range or alpha-numeric input.

2. **Free throw percent finder**

Allow the user to enter in the results of 5 different free throws from a basketball game. Have them enter in a 1 if they make the free throw and a zero if they miss. Print out the percentage of successful free throws when they are finished. The percentage should be from 0-100.

Example,

Please enter in ft1, 1 if made, 0 if missed

0

Please enter in ft2, 1 if made, 0 if missed

1

Please enter in ft3, 1 if made, 0 if missed

0

Please enter in ft4, 1 if made, 0 if missed

0

Please enter in ft5, 1 if made, 0 if missed

1

You made 40% of your free throws, better practice!

Don't worry about inputs out of range or alpha-numeric input

3. Number analyzer

Have the user enter in 3 numbers.

Give the sum of the numbers on one line.

Give the product of the numbers on another line.

Give the result of the formula $3a + 2/b + c - 5$ on another line

Print out the largest number on the 4th line

BONUS: Find the GCF of the three numbers.

Do NOT use Euclid's algorithm for GCF, only looping!!!!

Example:

Please enter in value for a:

13

Please enter in value for b:

-6.5

Please enter in value for c:

1

SUM = 7.5

PRODUCT = -84.5

FORMULA = 34.69230769230769

LARGEST = 13.0

If there are more than one highest number, just print out the highest value. Don't worry about inputs where b is 0 (this will

create a divide by 0 error for the formula from 3c.)

Don't worry about alpha-numeric input.

4. Make a typed test plan for Problem #3.
Your test plan MUST include 5 possible different sets of 3 values including;
Some with positives and negatives
Some with decimals and some where there are two values that are the largest

For the bonus, here are some test values...

100

80

15

GCF: 5

12

28

100

GCF: 4



Project Name	Assign 1 – Basic Console Apps
Class 1 Name	SquareFeet
Class 2 Name	FreeThrow
Class 3 Name	Calculations

Rubric	
AlgoPract1-1	35
AlgoPract1-2	35
AlgoPract1-3	35
Test Plan for 1-3	20
TOTAL	125