



Practice Arena

Practice problems aimed to improve your coding skills.

- 📁 PRACTICE-02_SCAN-PRINT
- 📁 PRACTICE-03_TYPES
- 📁 LAB-PRAC-02_SCAN-PRINT
- 📁 LAB-PRAC-01
- 📁 PRACTICE-04_COND
- 📁 BONUS-PRAC-02
- 📁 LAB-PRAC-03_TYPES
- 📁 PRACTICE-05_COND-LOOPS
- 📁 LAB-PRAC-04_COND
- 📁 LAB-PRAC-05_CONDLLOOPS
- 📁 PRACTICE-07_LOOPS-ARR
- 📁 LAB-PRAC-06_LOOPS
 - ❓ Fill in the Square
 - ❓ Pretty Numbers
 - ❓ Block Cipher
 - ❓ The Fibonacci Facade
 - ❓ Stream AM GM
 - ❓ Int on Int
 - ❓ Bejewelled Brooch
 - ❓ Mobile Mixup
 - ❓ Primes are in C
 - ❓ Towering Numbers
 - ❓ A Run of One
 - ❓ Where are the primes-
- 📁 LAB-PRAC-07_LOOPS-ARR
- 📁 LABEXAM-PRAC-01_MIDSEM
- 📁 PRACTICE-09_PTR-MAT
- 📁 LAB-PRAC-08_ARR-STR
- 📁 PRACTICE-10_MAT-FUN
- 📁 LAB-PRAC-09_PTR-MAT
- 📁 LAB-PRAC-10_MAT-FUN
- 📁 PRACTICE-11_FUN-PTR
- 📁 LAB-PRAC-11_FUN-PTR
- 📁 LAB-PRAC-12_FUN-STRUC
- 📁 LABEXAM-PRAC-02_ENDSEM
- 📁 LAB-PRAC-13_STRUC-NUM
- 📁 LAB-PRAC-14_SORT-MISC

Stream AM GM

LAB-PRAC-06_LOOPS

Stream AM GM [20 marks]**Problem Statement**

You will be given a stream of integers, **both positive as well as negative**. Your job is to calculate the arithmetic mean and the geometric mean of the numbers in the stream till -1 is encountered (excluding -1). Print the AM and GM **rounded off to 4 decimal places** on **two different lines**.

If the GM of the numbers turns out to be complex number (since the product of the numbers, not including the last -1 is negative) then print the AM as is but in place of GM, print "INVALID INPUT" (without the quotes). If the stream is empty, i.e. the first number is itself -1, then print the following words "EMPTY STREAM" (without the quotes) on both lines.

Caution

1. Be careful about capitalization and spelling errors.
2. Be careful about extra/missing lines and extra/missing spaces.
3. Note that the stream may contain positive as well as negative numbers. However, you only have to calculate AM and GM of the numbers till -1 is encountered (not including the -1).
4. Although the stream input will fit inside int variable, use **double variables and double typecasts** to do all your calculations.
5. Careful: the GM is always a positive number
6. Dont forget to include math.h in your code if you need math functions

EXAMPLE:

INPUT

1 2 3 4 5 6 7 8 9 10 -1

OUTPUT:

5.5000

4.5287

Grading Scheme:

Total marks: **[20 Points]**

There will be partial grading in this question. There are two lines in your output. Printing each line correctly, in the correct order, carries 50% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

 **Start Solving!** (/editor/practice/6114)