



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Restoring Three Numbers

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

Polycarp has guessed three positive integers a,b and c. He keeps these numbers in secret, but he writes down four numbers on a board in arbitrary order — their pairwise sums (three numbers) and sum of all three numbers (one number). So, there are four numbers on a board in random order: a+b, a+c, b+c and a+b+c.

You have to guess three numbers a, b and c using given numbers. Print three guessed integers in any order.

Pay attention that some given numbers a,b and c can be equal (it is also possible that a=b=c).

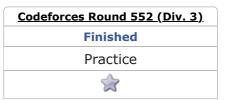
Input

The only line of the input contains four positive integers x_1, x_2, x_3, x_4 ($2 \le x_i \le 10^9$) — numbers written on a board in random order. It is guaranteed that the answer exists for the given number x_1, x_2, x_3, x_4 .

Output

Print such positive integers a, b and c that four numbers written on a board are values a+b, a+c, b+c and a+b+c written in some order. Print a, b and c in any order. If there are several answers, you can print any. It is guaranteed that the answer exists.

Examples input Сору 3 6 5 4 output Сору 2 1 3 input Сору 40 40 40 60 output Сору 20 20 20 input Copy 201 101 101 200 output Copy 1 100 100



→ Virtual participation Virtual contest is a way to take part in past contest, as close as possible to participation

contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

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(math) (*800)	No tag edit access

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