Problem F. Hunt Numbers

Time limit 1000 ms
Mem limit 262144 kB

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	Output
3 6 5 4	2 1 3

Input	Output
40 40 40 60	20 20 20

Input	Output
201 101 101 200	1 100 100