Mock CCC '20 Contest 2 S1 - Arithmetic Hybercube

Time limit: 2.0s **Memory limit:** 128M

Arithmetic Square, everyone's favourite problem. Welcome to the better problem, Arithmetic Line!

You are given N integers, which are guaranteed to form an arithmetic sequence. However, they appear scrambled! Can you recreate the arithmetic sequence given the N integers?

Recall that an arithmetic sequence of length N is a sequence of integers of the form

$$a, a+d, a+2d, \ldots, a+(N-1)d$$

for integer values of a and d. **For the purposes of this problem, d is a non-negative integer.**

Input Specification

The first line will contain the integer N $(1 \leq N \leq 100)$, the number of integers.

The second line will contain N integers, $a_1, a_2, \ldots, a_N$ $(1 \leq a_i \leq 10^9)$, the integers you are given. It is guaranteed that these integers form an arithmetic sequence in some permutation of them.

Output Specification

Output the recreated arithmetic sequence.

Sample Input

```
3
7 3 5
```

Sample Output

```
3 5 7
```

Explanation For Sample

The arithmetic sequence of $N = 3$ integers that is built has $a = 3$ and $d = 2$.