

B. "Maya Treasure"

Statement

Finally ! After surviving countless traps, you are standing in front of the legendary treasure room of the Lost Temple ! Only one door is now standing between you and eternal glory and wealth.

Unfortunately, Maya people layed one last trap in the temple : a riddle to solve. The walls of the room are covered in number, with no apparent consistency. There are three dials on the door, allowing you to choose three numbers. As you begin to lose hope, you notice an inscription above the door : "allpa hanaqpacha hatun warmi runa"

Granted, it does not mean much at first, but fortunately, thanks to your ancient language skills, you were able to translate this to "The 3 first closest numbers will open the door"

Given your incredible knowledge in ancient algorithms, there's no doubt you will be able to find these 3 integers among all those written on the room's walls.



The lost temple

Input

- The first line comprises an integer $3 \leq N \leq 10^4$: the number of integers written on the walls of the room ;
- The second line contains N integers $0 \leq N_i \leq 10^6$ separated by spaces : all the integers written on the walls.

Output

- On a single line, you will write the solution to the riddle, that is to say the 3 closest integers (ie: such that the difference between the smallest and the greatest integer is as small as possible), sorted in ascending order and separated by spaces.

NB : If there are many solutions, print the one with the smallest lower bound, as suggested by the inscription.

Examples

Example 1

Input	Output
6 7 4 14 1 5 10	4 5 7

In this first example, the 3 closest integers are *4, 5 and 7*, with a difference of 3 between the smallest and the largest numbers. There is no other interval such that this difference is lower or equal to 3.

Example 2

Input	Output
5 3 2 5 2 1	1 2 2

In this second example, the 3 closest integers are *1, 2 and 2* with a difference of 1 between the smallest and the largest numbers. *2, 2 and 3* are equally close, but it is not the combination with the smallest lower bound, as requested by the inscription.