Maximum Perimeter Triangle



Given n sticks of lengths $l_0, l_1, \ldots l_{n-1}$, use 3 of the sticks to construct a non-degenerate triangle with the maximum possible perimeter. Then print the lengths of its sides as 3 space-separated integers in non-decreasing order.

If there are several valid triangles having the maximum perimeter:

- 1. Choose the one with the *longest maximum side* (i.e., the largest value for the longest side of any valid triangle having the maximum perimeter).
- 2. If more than one such triangle meets the first criterion, choose the one with the *longest minimum side* (i.e., the largest value for the shortest side of any valid triangle having the maximum perimeter).
- 3. If more than one such triangle meets the second criterion, print any one of the qualifying triangles.

If no non-degenerate triangle exists, print -1.

Input Format

The first line contains single integer, n, denoting the number of sticks.

The second line contains n space-separated integers, $l_0, l_1, \ldots, l_{n-1}$, describing the respective stick lengths.

Constraints

- $3 \le n \le 50$
- $1 \le l_i \le 10^9$

Output Format

Print 3 non-decreasing space-separated integers, a, b, and c (where $a \le b \le c$) describing the respective lengths of a triangle meeting the criteria in the above *Problem Statement*.

If no non-degenerate triangle can be constructed, print -1.

Sample Input 0

5 11133

Sample Output 0

133

Explanation 0

There are **2** possible unique triangles:

- 1. (1,1,1)
- 2. (1, 3, 3)

The second triangle has the largest perimeter, so we print its side lengths on a new line in non-decreasing order.

Sample Input 1

```
3
123
```

Sample Output 1

```
-1
```

Explanation 1

The triangle (1,2,3) is degenerate and thus can't be constructed, so we print -1 on a new line.

Sample Input 2

```
6
111235
```

Sample Output 2

```
111
```

Explanation 2

The triangle (1,1,1) is the only valid triangle.