



Problem F. Seconded

Input file: standard input
Output file: standard output
Time limit: 1s
Balloon color: Orange

Given an array A , that contains a collection of average marks of students, find the mark of the students that scored the second lowest and second highest.

Input

The input contains two lines. The first line is a single integer N , the number of elements in the array, $2 < N < 10000$. The second line contains N number of integers separated with a single space, average marks of the students.

Output

The mark of the students with the second lowest score and second highest score, separated with a single space.

Example

Sample Input 1	Sample Output 1
5 84 74 92 72 90	74 90