The most common number

Given an array of integers with values between 0 and 10^6. Find the most occurring number.

Input

The first line is the number of elements in the array N ($N <= 10^6$).

The second line contains N integers a_i are the elements in the array ($0 <= a_i < 10^6$)

Output

Output the value and the number of times occur in the array. If there are many number have the same frequency, output minimum number.

Example

Input:
4
4 3 4 3

Output:
3 2