



Majority

Also in mouseland, there were elections today. Each mouse can cast a single vote and votes for a single cheese party. Is there a party that got the absolute majority? (strictly more than half of all the votes)

Input

The first line contains N , the number of mice. The second line contains the N votes of the N mice, each as an integer between 1 and 10^9 .

Output

Check if there is a majority vote among these numbers, so a number x that appears more than $\lfloor N/2 \rfloor$ many times in the list of numbers. If there is a majority vote, output the number of this mouse party, otherwise output "NO".

Limits

The input consists of 4 test groups, each worth 25 points.

- For 25 Points we have $N \leq 10^3$
- For 50 Points we have $N \leq 10^4$
- For 75 Points we have $N \leq 10^5$
- For 100 Points we have $N \leq 10^6$

Examples

Input	Output
7 4 2 4 1 3 4 4	4

Input	Output
6 4 2 4 1 3 4	NO