

Finding Majority

Given an array A of N integers in which the most frequent item appears more than $n / 2$ times, calculate this value.

Input

The first line contains N ($1 \leq N \leq 3000000$) then N 32-bit integers per line.

Output

The output consists of one number: the most frequent item on A.

Example

Input:

5
2
3
2
2
4

Output:

2