

Second-highest Number

Given a sequence of n integers a_1, a_2, \dots, a_n . Find the second-highest item of a_i ($i = 1 \dots n$).

Input

Line 1: contains the integer n ($1 \leq n \leq 10^6$).

Line 2 to $n + 1$: $(i + 1)$ -th line contains the integer a_i ($|a_i| \leq 10^9$)

Output

Only one line contains the second-highest item of a_i .

Example

Input:

3
1
2
3

Output:

2