Finding Max

There is a list and it is empty. You are given some number. Your task is simple: add the given numbers to the list and print the maximum number from the list.

Input

First line contains **T** ($0 < T <= 10^6$) which is the number of queries.
Second line contains **T** numbers n_i ($0 <= n_i <= 10^7$) which have to be inserted into the list.

Output

Print a maximum number that presents in the list in one line.

Example

Input:
5
1 2 3 5 4

Output:
5