## Problem C

## Check

Time limit: 1s Memory Limit: 64MB

This problem is even simpler than problem A. Given an array, tell me whether it is non-decreasing.

Note: non-decreasing means for each integer in an array, the integer before it will have value not greater than it.

## Input

The first line consists of an integer N  $(1 \le N \le 100000)$ , size of array.

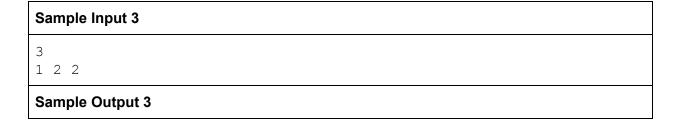
The next line consists N integers, the contents of the array. You can assume the integers in the array do not exceed 100

## Output

Output "VALID" if the array is non-decreasing, or "INVALID" if the array is not non-decreasing.

Sample Input 1
5 1 2 3 4 5
Sample Output 1
VALID

Sample Input 2
5 5 4 3 2 1
Sample Output 2
INVALID



VALID

**Note:** Always print a newline (\n) at the end of the answer.