

VSU COPP

B - 'Sort by Height'



Problem description

Some people are standing in a row in a park. There are trees between them which cannot be moved. Your task is to rearrange the people by their heights in a non-descending order without moving the trees. People can be very tall!

Basically, you just need to sort the height of the people without including the trees, that is classified as -1 .

Input

First line of input is n number of people and trees standing in a row.

Second line of input is the array a of elements of the height of people and trees.

If $a[i] = -1$, then the i th position is occupied by a tree. Otherwise, $a[i]$ is the height of a person standing in the i th position.

Output

Sorted array a with all the trees untouched.

Constraints

- $1 \leq n \leq 1000$,
- $-1 \leq a[i] \leq 1000$

Sample input/output

Sample input and output for this problem:

Input	Output
8 -1 150 190 170 -1 -1 160 180	-1 150 160 170 -1 -1 180 190
8 -1 -1 1 1 1 0 -1 2	-1 -1 0 1 1 1 -1 2

Problem Credits

- **Code Signal**
- <https://app.codesignal.com/arcade/intro/level-3/D6qmdBL2NYz49XHwM>