Check Max-Heap

Given an array of integers, check whether it represents max-heap or not. Return true if the given array represents max-heap, else return false.

Input Format:

The first line of input contains an integer, that denotes the value of the size of the array. Let us denote it with the symbol N.
The following line contains N space separated integers, that denote the value of the elements of the array.

Output Format :

The first and only line of output contains true if it represents max-heap and false if it is not a max-heap.

Constraints:

$1 <= N <= 10^5$
$1 <= Ai <= 10^5$
Time Limit: 1 sec

Sample Input 1:

8
42 20 18 6 14 11 9 4

Sample Output 1:

true