

7201 Getting your priorities straight

After implementing a newfangled type of priority queue data structure, you now have to write a unit test to ensure that your priority queue is working as advertised. The objective of the priority queue is to arrange a set of elements into non-descending order, such that for the non-negative integers x_i , with $1 \leq i \leq n$, we have that

$$x_1 \leq x_2 \leq x_3 \leq \dots \leq x_{n-1} \leq x_n$$

Your mission, should you choose to accept, is to test the output of the priority queue to ensure that the numbers are arranged in non-descending order.

Input

Your input consists of an arbitrary number of records, but no more than 250. Each record starts with a line containing a single integer n , with $2 \leq n \leq 50$, denoting the number of values to follow. The next line contains n integers x_i separated by spaces, subject to $1 \leq x_i \leq 100$.

The end of input is indicated by a line containing only the value '-1'.

Output

For each input record, output

yes

if the numbers x_i are in non-descending order. If not, your program must output

no

Sample Input

```
5
1 2 3 4 5
7
1 2 4 3 12 99 100
2
2 1
6
2 2 2 2 2 2
-1
```

Sample Output

```
yes
no
no
yes
```