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Chef and Rainbow Array

Problem Code: **RAINBOWA**

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Chef likes all arrays equally. But he likes some arrays more equally than others. In particular, he loves Rainbow Arrays.

An array is Rainbow if it has the following structure:

- First a_1 elements equal 1.
- Next a_2 elements equal 2.
- Next a_3 elements equal 3.
- Next a_4 elements equal 4.
- Next a_5 elements equal 5.
- Next a_6 elements equal 6.
- Next a_7 elements equal 7.
- Next a_6 elements equal 6.
- Next a_5 elements equal 5.
- Next a_4 elements equal 4.
- Next a_3 elements equal 3.
- Next a_2 elements equal 2.
- Next a_1 elements equal 1.
- a_i can be any non-zero positive integer.
- There are no other elements in array.

Help Chef in finding out if the given array is a Rainbow Array or not.

Input

- The first line of the input contains an integer T denoting the number of test cases.
- The first line of each test case contains an integer N , denoting the number of elements in the given array.
- The second line contains N space-separated integers A_1, A_2, \dots, A_N denoting the elements of array.

Output

- For each test case, output a line containing "yes" or "no" (without quotes) corresponding to the case if the array is rainbow array or not.

Constraints

- $1 \leq T \leq 100$
- $7 \leq N \leq 100$
- $1 \leq A_i \leq 10$

Subtasks

- **Subtask 1** (100 points) : Original constraints

Example

[My Submissions](/AUG17/status/RAINBOWA,asprazz2658/)

[All Submissions](/AUG17/status/RAINBOWA,asprazz2658/)

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Input

```
3
19
1 2 3 4 4 5 6 6 6 7 6 6 6 5 4 4 3 2 1
14
1 2 3 4 5 6 7 6 5 4 3 2 1 1
13
1 2 3 4 5 6 8 6 5 4 3 2 1
```

Output

```
yes
no
no
```

Explanation

The first example satisfies all the conditions.

The second example has **1** element of value **1** at the beginning and **2** elements of value **1** at the end.

The third one has no elements with value **7** after elements with value **6**.

Author: [berezin \(/users/berezin\)](/users/berezin)

Date Added: 15-03-2014

Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: ADA, ASM, BASH, BF, C, C99 strict, CAML, CLOJ, CLPS, CPP 4.3.2, CPP 6.3, CPP14, CS2, D, ERL, FORT, FS, GO, HASK, ICK, ICON, JAVA, JS, LISP clisp, LISP sbcl, LUA, NEM, NICE, NODEJS, PAS fpc, PAS gpc, PERL, PERL6, PHP, PIKE, PRLG, PYTH, PYTH 3.5, RUBY, SCALA, SCM guile, SCM qobi, ST, TCL, TEXT, WSPC

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3★ [rohit5840 \(/users/rohit5840\)](/users/rohit5840) 19 hours ago

can array elements be swapped in order to make it rainbow? if possible.

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4★ [dpraveen \(/users/dpraveen\)](/users/dpraveen) 19 hours ago

@rohit5840 (<https://www.codechef.com/users/rohit5840>): No, they can't be swapped.

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