

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

When submitting a solution in C++, please select either C++14 (GCC 6-32) or C++17 (GCC 7-32) as your compiler.

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

B. Array Fix

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given an integer array a of length n .

You can perform the following operation any number of times (possibly zero): take any element of the array a , which is at least 10, delete it, and instead insert the digits that element consisted of in the same position, in order they appear in that element.

For example:

- if we apply this operation to the 3-rd element of the array $[12, 3, 45, 67]$, then the array becomes $[12, 3, 4, 5, 67]$.
- if we apply this operation to the 2-nd element of the array $[2, 10]$, then the array becomes $[2, 1, 0]$.

Your task is to determine whether it is possible to make a sorted in non-descending order using the aforementioned operation **any number of times (possibly zero)**. In other words, you have to determine if it is possible to transform the array a in such a way that $a_1 \leq a_2 \leq \dots \leq a_k$, where k is the current length of the array a .

Input

The first line contains a single integer t ($1 \leq t \leq 10^3$) — the number of test cases.

Each test case consists of two lines:

- the first line contains a single integer n ($2 \leq n \leq 50$).
- the second line contains n integers a_1, a_2, \dots, a_n ($0 \leq a_i \leq 99$).

Output

For each test case, print YES if it is possible to make a sorted in non-decreasing order using the aforementioned operation; otherwise, print NO.

You can print each letter in any case. For example, yes, Yes, YeS will all be recognized as a positive answer.

Example

input	Copy
3	
4	
12 3 45 67	
3	
12 28 5	
2	
0 0	
output	Copy
YES	
NO	
YES	

Note

In the first example, you can split the first element, then the array becomes $[1, 2, 3, 45, 67]$.

In the second example, there is no way to get a sorted array.

Educational Codeforces Round 163 (Rated for Div. 2)

Finished

Practice

→ Virtual participation

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: PyPy 3.9.10 (7.3.9, 64bit)

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
251492391	Mar/15/2024 18:32	Accepted
251490442	Mar/15/2024 18:30	Wrong answer on test 1
251479477	Mar/15/2024 18:19	Wrong answer on test 2
251475026	Mar/15/2024 18:15	Wrong answer on test 2

→ Problem tags

brute force dp greedy implementation

No tag edit access

→ Contest materials

- Announcement
- Tutorial

⬆ In the third example, the array is already sorted.

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