

A. It's Time To Duel

time limit per test: 1 second
memory limit per test: 256 megabytes

Something you may not know about Mouf is that he is a big fan of the Yu-Gi-Oh! card game. He loves to duel with anyone he meets. To gather all fans who love to play as well, he decided to organize a big Yu-Gi-Oh! tournament and invited n players.

Mouf arranged the n players in a line, numbered from 1 to n . They then held $n - 1$ consecutive duels: for each i from 1 to $n - 1$, player i faced player $i + 1$, producing one winner and one loser per match. Afterward, each player reports a value a_i ($0 \leq a_i \leq 1$):

- 0 indicating they won no duels;
- 1 indicating they won at least one duel.

Since some may lie about their results (e.g., reporting a 1 instead of a 0, or vice versa) to influence prize outcomes, Mouf will cancel the tournament if he can prove any report to be false.

Given the array a , determine whether at least one player must be lying.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \leq t \leq 100$). The description of the test cases follows.

The first line of each test case contains one integer n ($2 \leq n \leq 100$) — the number of players in the tournament.

The second line of each test case contains n integers a_1, a_2, \dots, a_n ($0 \leq a_i \leq 1$) — denoting the report of the i -th player.

Output

For each test case, print "YES" (without quotes) if there is at least one liar among the players, and "NO" (without quotes) otherwise.

You can output the answer in any case (upper or lower). For example, the strings "yEs", "yes", "Yes", and "YES" will be recognized as positive responses.

Example

input	Copy
6 3 0 1 0 2 0 0 2 1 1 4 0 1 1 1 4 1 0 0 1 7 0 1 0 1 0 1 0	
output	Copy
NO YES YES NO YES NO	

Note


In the first test case, it is consistent if player 2 defeats both players 1 and 3, so nobody's report is necessarily false.

Codeforces Round 1025 (Div. 2)

Contest is running

01:42:23

Contestant



→ **Submit?**

Language: GNU G++23 14.2 (64 bit, ms)

Choose file:

Choose File

No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

→ **Last submissions**

Submission	Time	Verdict
320070060	May/17/2025 18:05	Pretests passed

→ **Score table**

	Score
Problem A	440
Problem B	880
Problem C1	1100
Problem C2	660
Problem C3	440
Problem D	1540
Problem E	2200
Problem F	2640
Successful hack	100
Unsuccessful hack	-50
Unsuccessful submission	-50
Resubmission	-50

* If you solve problem on 00:30 from the first attempt

In the second test case, in the only match between players 1 and 2, one must win — but both claimed zero wins, so someone must be lying.

In the third test case, the tournament consists of exactly one duel between players 1 and 2 — but it's impossible for both to win, concluding that at least one report is false.

In the fourth test case, a possible scenario is that player 2 won against player 1, then 3 won against 2, and then 4 won against 3. All reports align, so there is no evidence that someone lied.

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