



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

A. Shifting Stacks

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

You have n stacks of blocks. The i-th stack contains h_i blocks and it's height is the number of blocks in it. In one move you can take a block from the i-th stack (if there is at least one block) and put it to the i+1-th stack. Can you make the sequence of heights strictly increasing?

Note that the number of stacks always remains n: stacks don't disappear when they have 0 blocks.

Input

First line contains a single integer t $(1 \le t \le 10^4)$ — the number of test cases.

The first line of each test case contains a single integer n $(1 \le n \le 100)$. The second line of each test case contains n integers h_i $(0 \le h_i \le 10^9)$ — starting heights of the stacks.

It's guaranteed that the sum of all n does not exceed 10^4 .

Output

For each test case output YES if you can make the sequence of heights strictly increasing and NO otherwise.

You may print each letter in any case (for example, YES, Yes, yes, yEs will all be recognized as positive answer).

Example



Note

In the first test case there is no need to make any moves, the sequence of heights is already increasing.

In the second test case we need to move one block from the first stack to the second. Then the heights become $0\ 1$.

In the third test case we could move one block from the first stack to the second and then from the second to the third, which would make the heights $3\ 4\ 5$.

In the fourth test case we can't make a move, but the sequence is not increasing, so the answer is NO.

Codeforces Round #703 (Div. 2)

Finished

Practice



→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Practice

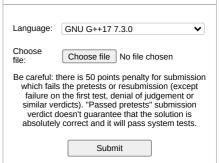
You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?



→ Last submissions

Submission	Time	Verdict
107804044	Feb/18/2021 17:58	Wrong answer on pretest 2
107802658	Feb/18/2021 17:57	Wrong answer on pretest 2
107791827	Feb/18/2021 17:45	Wrong answer on pretest 2

→ Problem tags

greedy implementation *900
No tag edit access

→ Contest materials

Announcement

In the fifth test case we can only make one move (from the second to the third stack), which would make the heights $0\ 0\ 1$. Both $0\ 1\ 0$ and $0\ 0\ 1$ are not increasing sequences, so the answer is NO.

Tutorial (en)

Codeforces (c) Copyright 2010-2021 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Mar/23/2021 12:24:11^{UTC+5.5} (j1).
Desktop version, switch to mobile version.
Privacy Policy

Supported by



