

A. Fashion in Berland

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

According to rules of the Berland fashion, a jacket should be fastened by all the buttons except only one, but not necessarily it should be the last one. Also if the jacket has only one button, it should be fastened, so the jacket will not swinging open.

You are given a jacket with n buttons. Determine if it is fastened in a right way.

Input

The first line contains integer n ($1 \leq n \leq 1000$) — the number of buttons on the jacket.

The second line contains n integers a_i ($0 \leq a_i \leq 1$). The number $a_i = 0$ if the i -th button is not fastened. Otherwise $a_i = 1$.

Output

In the only line print the word "YES" if the jacket is fastened in a right way. Otherwise print the word "NO".

Examples

input
3 1 0 1
output
YES
input
3 1 0 0
output
NO

Educational Codeforces Round 14

Finished

→ 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 ACM-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

→ Problem tags

implementation

No tag edit access

→ Contest materials

- Announcement 
- Tutorial 