

Fashion in Berland

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 Format

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 Format

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

Sample test

input	copy
3 1 0 0	
output	copy
NO	

input	copy
3 1 0 1	
output	copy
YES	