Problem C
Are They All Integers?

Time limit: 2 seconds
Memory limit: 1024 megabytes

Problem Description

Computing using integers is a dream for every programmer. That is, you do not have to deal with floating point numbers, estimated errors, and etc. We do not even need any floating point units in our computers for divisions!

Your company claimed there is a brand new computational model that solves integer problems efficiently. As a software engineer in this Integer Computing Processors Company (ICPC), you are going to write a validator that checks the following:

Given a list of positive integers $A[0], \ldots, A[n-1]$. Suppose you pick three different elements arbitrarily of this list, $A[i], A[j], A[k]$ with i, j, k being mutually different. Is it true that $\frac{A[i]-A[j]}{A[k]}$ is always an integer?

Input Format

The first line of the input contains one integer n indicating the number of positive integers in the list. The second line of the input contains n positive integers $A[0], \ldots, A[n-1]$ separated by blanks.

Output Format

If $\frac{A[i]-A[j]}{A[k]}$ is always an integer, then output `yes`. Otherwise output `no`.

Technical Specification

- $3 \leq n \leq 50$
- $1 \leq A[0] \leq A[1] \leq \cdots \leq A[n-1] \leq 100$

Sample Input 1

```
5
1 1 1 1 4
```

Sample Output 1

```
yes
```

Sample Input 2

```
5
1 2 4 8 16
```

Sample Output 2

```
no
```

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