Problem A1: Alien Alien

An alien has landed in Duckland, and as Shor the Duck approached it, it offered a test of intellect...

The alien gives Shor an array of N non-negative integers, the ith of which has value A_i, and allows Shor to use a single type of operation as many times as he wishes:

Given an index i, subtract 2 from A_i, then if index $i + 1$ is not outside the bounds of the array add 1 to A_{i+1}.

The alien wishes to know if all elements of the array could eventually reach 0 at the same time. However, the array Shor has been given is too long to do so manually, so Shor has requested that you help him program it instead!

Note: The output is case-sensitive.

Input Format

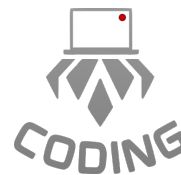Your program must read from standard input.

The input consists of 2 lines.
The first line consists of one integer, N. The second line consists of N integers, A_i.

Output Format

Your program must print to standard output.

The output should consist of one line, containing one string, YES if it is possible for all elements to eventually reach 0 at the same time, or NO otherwise.

Constraints and Subtasks

For all test cases, the input will satisfy the following bounds:

- $1 \leq N \leq 10^4$

- $0 \leq A_i \leq 10^8$

Your program will be tested on input instances that satisfy the following restrictions:

Subtask	Marks	Additional Constraints
1	10	$N = 1, A_i \leq 10$
2	19	$N = 1$
3	46	$A_i \leq 100$
4	25	No additional restrictions

Sample Testcase 1
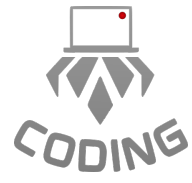
This testcase is valid for all subtasks.

Input:
```
1
8
```

Output:
```
YES
```

Sample Testcase 1 Explanation

Shor can perform the operation on the only element four times, turning it from 8 to 6

Sample Testcase 2

This testcase is valid for all subtasks.
Input:

```
1
5
```

Output:

```
NO
```

Sample Testcase 2 Explanation

It can be shown that no combination of operations will ever lead to all elements being 0 at the same time.

Sample Testcase 3

This testcase is valid for subtask 3 and 4.
Input:

```
3
2 5 3
```

Output:

```
YES
```

Sample Testcase 3 Explanation

One operation can be performed on the first element, three operations can be performed on the second element, and two operations can be performed on the third element.

Sample Testcase 4

This testcase is valid for subtask 3 and 4.
Input:

```
4
10 2 4 2
```

Output:

```
NO
```