


[HOME](#) [TOP](#) [CATALOG](#) [CONTESTS](#) [GYM](#) [PROBLEMSET](#) [GROUPS](#) [RATING](#) [EDU](#) [API](#) [CALENDAR](#) [HELP](#)
[PROBLEMS](#) [SUBMIT](#) [STATUS](#) [STANDINGS](#) [CUSTOM TEST](#)

A. Array Coloring

 time limit per test: 1 second
 memory limit per test: 256 megabytes

You are given an array consisting of n integers. Your task is to determine whether it is possible to color all its elements in two colors in such a way that the sums of the elements of both colors have the same parity and each color has at least one element colored.

For example, if the array is $[1, 2, 4, 3, 2, 3, 5, 4]$, we can color it as follows: $[1, 2, 4, 3, 2, 3, 5, 4]$, where the sum of the blue elements is 6 and the sum of the red elements is 18.

Input

The first line contains an integer t ($1 \leq t \leq 1000$) — the number of test cases.

Each test case begins with a line containing an integer n ($2 \leq n \leq 50$) — the length of the array a .

The next line contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 50$) — the elements of the array a .

Output

For each test case, output "YES" (without quotes) if it is possible to color the array in two colors in such a way that the sums of the elements of both colors have the same parity and each color has at least one element colored, and "NO" otherwise.

You can output "Yes" and "No" in any case (for example, the strings "yES", "yes", and "Yes" will be recognized as correct answers).

Example

input	Copy
7 8 1 2 4 3 2 3 5 4 2 4 7 3 3 9 8 2 1 7 5 5 4 3 2 1 4 4 3 4 5 2 50 48	
output	Copy
YES NO YES YES NO YES YES	

Note

The first sample is described in the statement.

In the second sample, there are only two colorings $[4, 7]$ and $[4, 7]$, but in both cases the parity of sums is different.

Codeforces Round 891 (Div. 3)

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 Language: GNU G++17 7.3.0

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→ Contest materials

- Announcement (en)
- Tutorial (en)

⬆ In the third sample, you can color [3, 9, 8] and 12 and 8 are both even.

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