


[venecoder](#) | [Logout](#)
[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

```
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
```

[Copy](#)

#### output

```
YES
NO
YES
YES
NO
YES
YES
```

[Copy](#)

### Codeforces Round 891 (Div. 3)

[Finished](#)
[Practice](#)


### → Virtual participation

Virtual contest is a way to take part in past contests, as close as possible to participation on time. It is supported only 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](#)

### → Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

### → Submit?

Language: [GNU G++17 7.3.0](#)

Choose file: [Choose File](#) No file chosen

[Submit](#)

### → Problem tags

[greedy](#) [math](#) [\\*800](#)

No tag edit access

### → Contest materials

- Announcement (en) [X](#)

- Tutorial (en) [X](#)

### 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.

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

---

[Codeforces](#) (c) Copyright 2010-2025 Mike Mirzayanov  
The only programming contests Web 2.0 platform  
Server time: Nov/21/2025 14:30:14<sup>UTC-4</sup> (f1).  
Desktop version, switch to [mobile version](#).  
[Privacy Policy](#) | [Terms and Conditions](#)

Supported by

