Problem A - Attack and Split

There are slimes live in a peace world. Sometimes they split: a slime with size x can split into two slimes of positive integral sizes y and z with x = y + z. Sometimes they attack each other, two slimes of sizes p and q will become $r = p \oplus q$, where \oplus denotes an xor operation.

Given sizes of the slimes in this world, is it possible for them to disappear after several attacks and/or splits?

Input

The first line contains an integer T $(1 \le T \le 100)$, indicating the number of test cases.

For each test case, the first line contains an integer n $(1 \le n \le 100)$, indicating the number of slimes, followed by n positive integers a_1, a_2, \dots, a_n denoting the sizes of slimes. $(1 \le a_i \le 10^9)$.

Output

For each test case, output Yes or No for answering the question.

Sample Input

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3
1 1
2 9 17
3 12 15 19
```

Sample Output

No Yes Yes

Useless Note

When you split a slime with some upper bounds, you'll get a sublime.

If you reverse a slime toward some limit, it will smile.