

Doremy's Paint 3

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

An array b_1, b_2, \dots, b_n of positive integers is good if all the sums of two adjacent elements are equal to the same value. More formally, the array is good if there exists a k such that $b_1 + b_2 = b_2 + b_3 = \dots = b_{n-1} + b_n = k$.

Doremy has an array a of length n . Now Doremy can permute its elements (change their order) however she wants. Determine if she can make the array good.

Input

The input consists of multiple test cases. The first line contains a single integer t ($1 \leq t \leq 100$) — the number of test cases. The description of the test cases follows.

The first line of each test case contains a single integer n ($2 \leq n \leq 100$) — the length of the array a .

The second line of each test case contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^5$).

There are no constraints on the sum of n over all test cases.

Output

For each test case, print “Yes” (without quotes), if it is possible to make the array good, and “No” (without quotes) otherwise.

You can output the answer in any case (upper or lower). For example, the strings “yEs”, “yes”, “Yes”, and “YES” will be recognized as positive responses.

Example

standard input	standard output
5	Yes
2	Yes
8 9	No
3	No
1 1 2	Yes
4	
1 1 4 5	
5	
2 3 3 3 3	
4	
100000 100000 100000 100000	

Note

In the first test case, $[8, 9]$ and $[9, 8]$ are good.

In the second test case, $[1, 2, 1]$ is good because $a_1 + a_2 = a_2 + a_3 = 3$.

In the third test case, it can be shown that no permutation is good.