Divide the Piles

? Ask Doubt

Time-Limit: 1 sec Score: 100.00/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100 Relevant For: AZ-201

Description

There are N piles of stones in front of you. ith pile contains A_i number of stones.
You want to find whether it is possible to split each pile into *1* or more piles of X (≥ 2) stones such that each splitted-pile has exactly X stones.
Note that X should be the same for each pile.

Input Format

The first line contains T ($1 \leq T \leq 100000$), the number of test cases. The description of each test case is as follows:
The first line contains N, the number of piles ($1 \leq N \leq 100000$).
The second line contains N space-separated positive integers $A_1, A_2, ..., A_N$ ($2 \leq A_i \leq 10^9$).
It is guaranteed that sum of N over all test cases doesn't exceed 10^6.

Output Format

For each test case, print "*Yes*" (without quotes) if it is possible to split. Otherwise, print "*No*" (without quotes).

Sample Input 1

Copy

```
2
5
2 2 6 8 12
4
2 6 3 8
```

Sample Output 1

Copy

```
Yes
No
```

Note

Explanation 1:
For $X = 2$, you can divide each pile into smaller piles of size 2.

Explanation 2:
It is not possible to divide piles into smaller piles with size ≥ 2.

C++14[GCC]

Submit

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1
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Typesetting math: 100%