

Problem E -- Square

Problem

Given a set of sticks of various lengths, is it possible to join them end-to-end to form a square?

Input

The first line of input contains N, the number of test cases. Each test case begins with an integer $4 \leq M \leq 20$, the number of sticks. M integers follow; each gives the length of a stick - an integer between 1 and 10,000.

Output

For each case, output a line "Case #X: Y", where X is the case number, starting from 1. Y is "yes" if it is possible to form a square; otherwise output "no".

Sample Input

```
3
4 1 1 1 1
5 10 20 30 40 50
8 1 7 2 6 4 4 3 5
```

Sample Output

```
Case #1: yes
Case #2: no
Case #3: yes
```