A - The Rise of Skywalker

Background

This Christmas, the saga comes to an end!! The epic fight between the dark and the light side of the Force will be decided!

The Skywalkers have prepared a new plan to conquer the universe. But this time, it will be a more peaceful plan: they will participate in the elections for the Galactic Senate, and they expect to have enough votes to be elected the new Emperor of the Universe!

The Problem

Each planet of the Galactic System has a certain number of votes. For example, Coruscant has 10 votes, while the moons of Endor only have 1 vote each.

Your task is to compute the minimum number of planets that are necessary to win the elections for the new Galactic Emperor, that is, to have more than half of the votes. For example, if we have 1 planet with 10 votes, and 10 planets with 1 vote each, we would need 2 planets (the planet with 10 votes, and 1 planet with 1 vote). And if we have 1 planet with 10 votes, and 9 planets with 1 vote each, we would need only 1 planet to win the elections (the planet with 10 votes).

May the Force be with you!

The Input

The first line of the input contains an integer *N*, indicating the number of test cases.

Each test case consists of two lines. The first line of each case indicates the number of planets of the Galactic System, *G*, between 1 and 100. Then, the second line contains *G* integer numbers, between 1 and 1000, indicating the number of votes of each planet.

The Output

For each test case, you should output the line:

`Case X: M planets`

where *X* is the number of the test case, starting from 1, and *M* is the minimum number of planets that are needed.

Sample Input

```
3
11
1 1 1 10 1 1 1 1 1 1 1
10
1 1 1 1 1 1 10 1 1 1
8
2 8 7 3 1 6 5 4
```

Sample Output

```
Case 1: 2 planets
Case 2: 1 planets
Case 3: 3 planets
```

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