Round A 2020 - Kick Start 2020

Allocation

PROBLEM

ANALYSIS

Problem

There are $\bf N$ houses for sale. The i-th house costs $\bf A_i$ dollars to buy. You have a budget of $\bf B$ dollars to spend.

What is the maximum number of houses you can buy?

Input

The first line of the input gives the number of test cases, T. T test cases follow. Each test case begins with a single line containing the two integers N and D. The second line contains D integers. The i-th integer is D, the cost of the i-th house.

Output

For each test case, output one line containing Case #x: y, where x is the test case number (starting from 1) and y is the maximum number of houses you can buy.

Limits

Time limit: 15 seconds.

Memory limit: 1 GB.

 $1 \le T \le 100$.

 $1 \le \mathbf{B} \le 10^5$.

 $1 \le \mathbf{A_i} \le 1000$, for all i.

Test Set 1

 $1 \le N \le 100$.

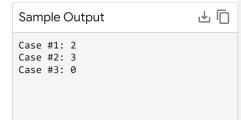
Test Set 2

 $1 \le N \le 10^5$.

^{2/2/2022} Sample

999 999 999





In Sample Case #1, you have a budget of 100 dollars. You can buy the 1st and 3rd houses for 20 + 40 = 60 dollars.

In Sample Case #2, you have a budget of 50 dollars. You can buy the 1st, 3rd and 4th houses for 30 + 10 + 10 = 50 dollars.

In Sample Case #3, you have a budget of 300 dollars. You cannot buy any houses (so the answer is 0).

Note: Unlike previous editions, in Kick Start 2020, all test sets are visible verdict test sets, meaning you receive instant feedback upon submission.

https://codingcompetitions.withgoogle.com/kickstart/round/0000000019ffc7/0000000001d3f56