

Exact Step

Lili is in a running race, but the running race has different rules. The first rule is Lili can step one time forward, and the second rule is she can move Ai step. Ai here is a number given on Lili's position. The race *must* finish in N+1 step, so if its stops in N+2 step, it is not finished because the judges would not be able to see her there. As a friend of Lili, you are asked by Lili to find the fastest way so that Lili can win the race.

Note: Lili has to stop at position N+1 to win the race.

For this problem please make a function:

"int getFastestStep(int numbermap[], int position, int counterstep, int destination)". Which gives results, about the fastest step Bibi can achieve. You are encouraged to use recursive techniques to solve this problem. An iterative solution may behave slower than usual and may cause a TIME-LIMIT verdict.

DO NOT include any built-in C/C++ function, except for "stdio.h" function.

Format Input

The first line contains T, the number of test cases.

Each test case consists of 2 lines:

The first line is N the number of position.

The second line contains N number A_1 , A_2 , A_3 , ..., A_N , the number in every position.

Format Output

Output "Case #X: Y" for each test case, where X is test case number, and Y the minimum steps that should be taken by Lili.

Constraints

 $1 \le T \le 100$

 $1 \le N \le 20$

 $1 \le Ai \le 20$

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Sample Input	Sample Output
3	Case #1: 1
3	Case #2: 5
3 1 1	Case #3: 2
5	
1 1 1 1 1	
3	
4 2 2	

Explanation for test case 3:

Lili can't move 4 times forward from the first step because she would pass the N+1th step. Thus, she move 1 time to the second position, then taking 2 move forward to reach 4th step.

