Assignment Case	
COMP6047 Algorithm and Programming	
Computer Science	**<Case Code>**
***Valid on** Compact Semester Year 2019/2020*	**Revision 00**

Soal
Case

Decoration Lights

Jojo is currently working in an office as a security. Every night, after everyone returned home, he needs to make sure all decoration lights in the office is turned off. The decoration lights are unique: each of them has a timer that will switch the light on or off every two seconds. The lights are also arranged so well that each two neighboring lights will have different state (on/off). As long as the timer is on, the lamp will continue to be switched on/off. Jojo can shut down a timer in one second. However, if the light is currently switched on, he will need another second to switch it off before he can shut its timer down. Assuming he can only work on a lamp before moving to the next lamp, help Jojo's wife to determine how many seconds Jojo need to do his work before he can return home.

Format Input

The first line in the input is an integer T, the number test case. Each test case consists of two lines. The first line consists of integer N, denoting the number of decoration light in the office. The next line consists of N integers denoting the state of the lamps when Jojo is trying to turn them off. The lamp state is guaranteed to be between "0" or "1", representing whether the light is off or on respectively.

Format Output

For each test case, output "Case X: " followed by how many seconds Jojo need to turn off all the decoration lights.

Constraints

$1 \leq T \leq 30$

$1 \leq N \leq 50000$

Sample Input	Sample Output
2 3 1 0 1 6 0 1 0 1 0 1	Case 1: 6s Case 2: 6s

Explanation

On the first case, Jojo need two seconds to turn off both light and timer for the first lamp. By the time he finished it, the second lamp already switched on by its timer. Jojo spend another two seconds on the second lamp, and four seconds passed before he can lay hand on the third lamp, which should be switched on by that time. Jojo spend two final seconds and by the time all lamps turned off, he has already spent 6 seconds.

Note:
Don't forget to add the newline character after printing the output.