C. Alice, Bob and Chocolate

time limit per test: 2 seconds

memory limit per test: 64 megabytes

Alice and Bob like games. And now they are ready to start a new game. They have placed n chocolate bars in a line. Alice starts to eat chocolate bars one by one from left to right, and Bob — from right to left. For each chocololate bar the time, needed for the player to consume it, is known (Alice and Bob eat them with equal speed). When the player consumes a chocolate bar, he immediately starts with another. It is not allowed to eat two chocolate bars at the same time, to leave the bar unfinished and to make pauses. If both players start to eat the same bar simultaneously, Bob leaves it to Alice as a true gentleman.
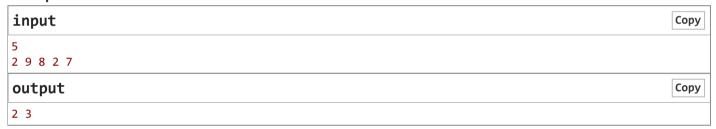
How many bars each of the players will consume?

Input

The first line contains one integer n $(1 \le n \le 10^5)$ — the amount of bars on the table. The second line contains a sequence $t_1, t_2, ..., t_n$ $(1 \le t_i \le 1000)$, where t_i is the time (in seconds) needed to consume the i-th bar (in the order from left to right).

Output

Print two numbers a and b, where a is the amount of bars consumed by Alice, and b is the amount of bars consumed by Bob.

Examples

input	Copy
5 2 9 8 2 7	

output	Copy
2 3	

→ Attention

The package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round 6 (Div. 2 Only)

Finished

Practice

⭐

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win ▾

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
280917025	Sep/13/2024 01:45	Accepted
280916665	Sep/13/2024 01:33	Wrong answer on test 9
280916612	Sep/13/2024 01:31	Wrong answer on test 2
280916410	Sep/13/2024 01:25	Wrong answer on test 7
280916128	Sep/13/2024 01:18	Wrong answer on test 2

→ Problem tags

greedy   two pointers   *1200

No tag edit access

→ Contest materials