B. Cows and Poker Game

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

There are n cows playing poker at a table. For the current betting phase, each player's status is either "ALLIN", "IN", or "FOLDED", and does not change throughout the phase. To increase the suspense, a player whose current status is not "FOLDED" may show his/her hand to the table. However, so as not to affect any betting decisions, he/she may only do so if all other players have a status of either "ALLIN" or "FOLDED". The player's own status may be either "ALLIN" or "IN".

Find the number of cows that can currently show their hands without affecting any betting decisions.

Input

The first line contains a single integer, n ($2 \le n \le 2 \cdot 10^5$). The second line contains n characters, each either "A", "I", or "F". The i-th character is "A" if the i-th player's status is "ALLIN", "I" if the i-th player's status is "IN", or "F" if the i-th player's status is "FOLDED".

Output

The first line should contain a single integer denoting the number of players that can currently show their hands.

Examples

input
6 AFFAAA
output
4

input
3 AFI
output
1

Note

In the first sample, cows 1, 4, 5, and 6 can show their hands. In the second sample, only cow 3 can show her hand.

Codeforces Round #174 (Div. 2)
Finished

→ **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 ACM-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]

→ **Problem tags**

[brute force] [implementation]

No tag edit access

→ **Contest materials**

- Announcement   ✕
- Tutorial #1   ✕
- Tutorial #2   ✕