Assignment Case	
DS using CH1	
Periode Berlaku Semester Ganjil 2024/2025 ***Valid on*** *Odd Year 2024/2025*	**Software Laboratory Center** **Assistant Recruitment 25-1**

Soal

Case

Misnor Issue

In the country of letters, there exists a theme park which contains a ride called Tagada. On the ride, people will sit in bowls with seats on the sides making it **cyclic**. This ride is one of the most popular ride in the park, but there is a minor issue. Since the ride is quite dangerous and people can thrown to other seats, the theme park decided that to ensure its safety letters that of lowercase should be grouped to reduce the chance of capital letters accidentally hurting them. Given that each ride there will be **N** passengers and how the letters sit will be represented in string **S**. What is the minimum number swaps needed to group the lowercase letters together?

Input

- The first line will consists of **N** which represents the capcity of the ride.
- The second line will consist of string **S** which represents the sitting order.

Constraint

$1 \leq N \leq 100000$

Output

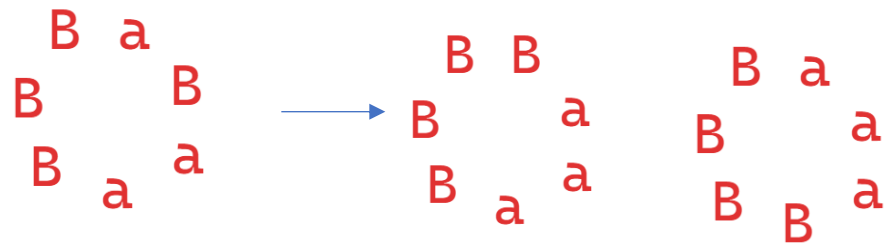
Output the minimum number of swaps needed to group all the non-capital letters together.

Example

Input	Output
7 BaBaaBB	1
7 aNNNNaa	0

Explanation

In the first test case, at the start the seat will be like this



we can convert the original sitting position into BBaaaBB or BaaaBBB, with one swap.

While in the second test case since it is cyclic all the non-capital letters are already grouped together.

Note 1: Use scanf**("%d", &A)** to do the input, and use **printf("%d\n", ……)** to output the answer. Pay attention to the extra newline character at the end (See Note 2)!

Note 2: Always print a newline **(\n)** at the end of the answer