



Task Nivelle

Original task description has been altered due to excessive violence. The following program is suitable for minors.

Bojan sees N cute little fluffy edible toys (*yaay!*) on a store shelf, ordered from 1 to N . Each fluffy toy is colored in one of 26 different colors. Each color is denoted by a lowercase letter from the English alphabet. Bojan wants to eat some of these toys (*drool*).



For any set of toys, we can define its *colorfulness* as the number of different colors of toys in a set, divided by the total number of toys in a set. Bojan hates colorfulness. Bojan is very hungry. Bojan wants to eat a contiguous subsequence of toys.

Help Bojan find a contiguous subsequence of toys whose colorfulness is as small as possible.

Input

The first line contains an integer N ($1 \leq N \leq 100\,000$), the length of array of toys from task description.

The second line contains a string S of length N . The i -th character of the string represents the color of i -th toy from the shelf.

Output

Output two indices L and R ($1 \leq L \leq R \leq N$), which denote that the sought contiguous subsequence of toys is located at positions $L, L + 1, \dots, R$.

If there exists more than one contiguous subsequence with the same minimal colorfulness, you can output L and R which define any of them.

Scoring

Subtask	Score	Constraints
1	7	$N \leq 100$
2	17	$N \leq 2\,000$
3	13	S contains only letters 'a' and 'b'
4	25	S contains only letters 'a', 'b', 'c', 'd' and 'e'
5	48	No additional constraints.

Examples

input

4
honi

output

1 4

input

7
nivelle

output

4 7

input

6
anas

output

1 5