MLE '19 Contest 2 P1 - FUN

Time Limit: 3.0s   **Memory Limit:** 128M

A string is *fun* if it contains each character at most K times. Given a string S, how many substrings of the string are *fun*? A substring is a **non-empty** contiguous sequence of characters within a string.

Input Specification

The first line will contain the string S $(1 \le |S| \le 10^5)$. The string will only consist of lowercase latin characters.

The second line will contain the integer K $(1 \le K \le |S|)$.

Output Specification

Output the number of substrings that are considered *fun*.

Subtasks

Subtask 1 [10%]

$|S| \le 20$

Subtask 2 [20%]

S will only contain the characters a and b .

Subtask 3 [70%]

No further constraints.

Sample Input 1 (Subtask 1)

```
abcabca
2
```

Sample Output 1

```
27
```

Sample Input 2 (Subtask 2)

```
aaaaaaaaaabbbbbbbbbba
2
```

Sample Output 2

```
45
```

Sample Input 3 (Subtask 3)

```
abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrstuvwxyz
1
```

Sample Output 3

```
1027
```