Aakash's Powah

Aakash has a string **s** of lowercase English letters. Now Aakash is no ordinary boy. He gains special powers after drinking Coca-Cola. Aakash decided to use his power to make his string infinitely long. To do this he repeated the string again and again infinite number of times. Now he wants you to find the number of a's in the first **n** letters of this infinite string.

Input Format

The first line contains a single string, **s**.

The second line contains an integer, **n**.

Constraints

- **1 ≤ length of s ≤ 100**
- $1 \le n \le 10^{12}$

Output Format

Print a single integer denoting the number of letter a's in the first **n** letters of the infinite string created by repeating **s** infinitely many times.

Sample Input 0

```
az
7
```

Sample Output 0

```
4
```

Explanation 0

First 7 letters of az repeated indefinitely are azazaza. There are 4 a's in it so we output 4.