

Task:

Lilah has a string, s , of lowercase English letters that she repeated infinitely many times.

Given an integer, n , find and print the number of letter a's in the first n letters of Lilah's infinite string.

repeatedString has the following parameter(s):

- s : a string to repeat
- n : the number of characters to consider

Input Format

The first line contains a single string, s .

The second line contains an integer, n .

Constraints

- $1 \leq |s| \leq 100$
- $1 \leq n \leq 10^{12}$
- For 25% of the test cases, $n \leq 10^6$.

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.

Example:**Input 1**

aba
10

Output 1

7

Explanation

The first n letters of the infinite string are abaabaabaa. Because there are 7 a's, we print 7 on a new line.