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.

For example, if the string $s = \text{'abcac'}$ and $n = 10$, the substring we consider is $abcacabcac$, the first 10 characters of her infinite string. There are 4 occurrences of a in the substring.

Function Description

Complete the *repeatedString* function in the editor below. It should return an integer representing the number of occurrences of a in the prefix of length n in the infinitely repeating 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.

Sample Input 0

```
aba
10
```

Sample Output 0

```
7
```

Explanation 0
The first $n = 10$ letters of the infinite string are abaabaabaa. Because there are 7 a's, we print 7 on a new line.

Sample Input 1

```
a
1000000000000
```

Sample Output 1

```
1000000000000
```

Explanation 1
Because all of the first $n = 1000000000000$ letters of the infinite string are a, we print 1000000000000 on a new line.