There is a string, s, of lowercase English letters that is repeated infinitely many times. Given an integer, n, find and print the number of letter a's in the first n letters of the infinite string.

Example

$s = $ 'abcac'
$n = 10$

The substring we consider is $abcacabcac$, the first 10 characters of the infinite string. There are 4 occurrences of a in the substring.

Function Description

Complete the repeatedString function in the editor below.

repeatedString has the following parameter(s):

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

Returns

- int: the frequency of a in the substring

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, $n \leq 10^6$.

Sample Input

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 return 7.

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 return 1000000000000.