Repeated String ☆

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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

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Difficulty Easy

Max Score 20

Submitted By 248220

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- 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.

Change Theme Python 3

```
def repeatedString():
    s = input()
    n = int(input())
    count=0 #for noof a's
    #the below for loop for no of a's in the input sting
    for i in s:
        if i=='a':
            count+=1
    l=len(s) #length of the input string
    if n%l==0: #if length of stirng divides n
```

```
12          a=n//l
13          count*=a
14      else:       #if length of stirng doesnt divides n
15          a=n//l
16          c=n%l
17          count*=a
18          for j in range(c): #to count whether any a's in the substirng
19              if s[j]=='a':count+=1
20      print(count)
21  result = repeatedString()
22
23
```

Line: 21 Col: 1

Upload Code as File Test against custom input Run Code Submit Code

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

Sample Test case 0

Sample Test case 1

Input (stdin) Download

```
1  aba
2  10
```

Your Output (stdout)

```
1  7
```

Expected Output Download

```
1  7
```