



Repeated String ☆

Problem Submissions Leaderboard Editorial △

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 = `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

- $1 \le |s| \le 100$
- $1 \le n \le 10^{12}$
- 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 $\,$ $\,$ a 's, we print $\,$ $\,$ on a new line.

Sample Input 1

1000000000000



```
£
                                                                                         C#
           // Complete the repeatedString function below.
 17
           static long repeatedString(string s, long n) {
 18
 19
               var length_s = s.Length;
 20
 21
               var aux = n%length_s;
 22
               var count = 0;
 23
               long result = 0;
 24
 25
               foreach(var item in s)
 26
                    if(item == 'a')
 27
 28
 29
                        count++;
 30
 31
               }
 32
               result = count*(n/length_s);
 33
 34
 35
               for(int i = 0; i < aux; i++)
 36
                    if(s[i] == 'a')
 37
 38
 39
                        result++;
 40
 41
                }
 42
 43
                return result;
 44
           }
 45
 16
                                                                                                              Line: 36 Col: 10
                         Test against custom input
                                                                                               Run Code
                                                                                                               Submit Code

↑ Upload Code as File
```

Facing any Issues? Let us know!

You have earned 20.00 points!

These points will also count towards your progress in the Problem Solving Badge.

Problem Solving

44%

639.41/850

Congratulations