Repeated String

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.

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.