High Security Strings



Estimating the strength of any password is an important aspect of Information Security. In this challenge, your task is to calculate the strength of a given password in terms of weights assigned to the characters.

- A password consists of English lowercase letters only.
- Each English lowercase letter has assigned an integer weight in the range from 0 to 25 inclusive in such a way that the weight of letter a is given explicitly and weights of other letters follow in cyclic order. For example, if weight(a) = 5, then weight(b) = 6, weight(c) = 7, ..., weight(u) = 25, weight(v) = 0, ..., weight(z) = 4.
- The strength of a password is the sum of weights of all characters the password consists of

Given a password string and the weight of letter a the task is to calculate the strength of the password.

Consider the following example. Let the password be hackerrank and the weight of letter a be 10. Then, the weights of all letters of the password are: weight(h)=17, weight(a)=10, weight(c)=12, weight(k)=20, weight(e)=14, weight(r)=1, weight(n)=23, so the strength of the password is 17+10+12+20+14+1+1+10+23+20=128.

Input Format

In the first line, there is a string *password* denoting the password.

In the second line, there is an integer $weight_a$ denoting the weight of letter a

Constraints

- $1 \leq |password| \leq 100$
- password consists of English lowercase letters only
- $0 \le weight_a \le 25$

Output Format

The only line of the output must contain an integer denoting the strength of the password.

Sample Input 0

hellomrz 2

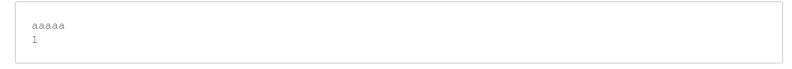
Sample Output 0

91

Explanation 0

The password is "hellomrz" and the weight of a is 2, so the weights of all letters of the password are: weight(h) = 9, weight(e) = 6, weight(l) = 13, weight(o) = 16, weight(m) = 14, weight(r) = 19, weight(z) = 1. The strength of the password is then 9 + 6 + 13 + 13 + 16 + 14 + 19 + 1 = 91.

Sample Input 1



Sample Output 1

5

Explanation 1

The password is "aaaaa" and the weight of a is 1, so the strength of the password is 1+1+1+1=5 as it consists of 5 letters a.