

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
- $0 \leq weight_a \leq 25$

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

```
aaaaa
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 $1 + 1 + 1 + 1 + 1 = 5$ as it consists of 5 letters *a*.