

$$=6$$

Problem

Problem Description

TLE CE

Zerojudge

M

(naive algorithm)

M

(substitution cipher)

k

$$C = E_K(P) = (P + k) \bmod 26 \quad P = D_K(P) = (C - k) \bmod 26$$

$k = 3$

ABCDEFGHIJKLMNOPQRSTUVWXYZ

DEFGHIJKLMNOPQRSTUVWXYZA

A = 0, B = 1, C = 2, ..., X = 23, Y = 24, Z = 25

Input Format

1000 0

Output Format

k $0 \leq k < 26$

Sample Input 1

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
DEFGHIJKLMNOPQRSTUVWXYZABC
DLQXABXEEQMEUQYLZPEK
YGLSVWSZZLHZPLTGUKZF
Z
Z
```

Sample Output 1

```
3
21
0
```