

PRIMITIVE TYPEWRITERS

In the 1880s and 1890s, the cheapest mechanical typewriters had a single button, a bar with all characters written on it, and a slider that moved up and down the bar. The slider allowed you to indicate a character, and when you pushed the button, the indicated character was printed on the page. In this problem, we assume that the keys occur on the bar in this order:

q w e r t y u i o p a s d f g h j k l z x c v b n m

In the following figures, the ^ represents the position indicated by the slider.

q w e r t y u i o p a s d f g h j k l z x c v b n m
^

Figure 1: slider indicates 'h'

Considering Figure 1, if you press the button, the machine types an 'h'. If you move the slider two positions to the right, we get

q w e r t y u i o p a s d f g h j k l z x c v b n m
^

Figure 2: slider indicates 'k'

Considering Figure 2, if you press the button, the machine types a 'k'. If you press the button again, another 'k' will be typed.

Problem:

Assume the slider initially indicates the 'q' position. Moving the slider costs money: moving the slider n positions, either left or right, costs you n cents. Pressing the button has no cost.

Given a number of "messages" without spaces or punctuation, how many cents will it cost to type each message?

INPUT: lines, each containing one message (up to 100 messages) . Each message has at least one character, and no more than 80 characters. Characters are lower-case letters, only.

Sample input data (typewriter.txt)

qtwww

qq

qtw

Sample Output:

7

0

7

Judge Data Set 1- Input

wtpsdhkzxcmt
abcdefghijkl
qqwwtuip
cbeiop
dddkkkmmm

Judge Data Set 1 – Output (20 marks each)

46
75
9
51
25

Judge Data Set 2 – Input

q
qtw
stjeandebrebeuf
stmary
stthomasmore
bishoptonnos
cathedral
bishopryan
cardinalnewman
hamiltonwentworthcatholicdistrictschoolboard

Judge Data Set 2 – Output (10 marks each)

0
7
183
63
106
99
96
82
174
406