

A. Black Square

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

Quite recently, a very smart student named Jury decided that lectures are boring, so he downloaded a game called "Black Square" on his super cool touchscreen phone.

In this game, the phone's screen is divided into four vertical strips. Each second, a black square appears on some of the strips. According to the rules of the game, Jury must use this second to touch the corresponding strip to make the square go away. As Jury is both smart and lazy, he counted that he wastes exactly a_i calories on touching the i -th strip.

You've got a string s , describing the process of the game and numbers a_1, a_2, a_3, a_4 . Calculate how many calories Jury needs to destroy all the squares?

Input

The first line contains four space-separated integers a_1, a_2, a_3, a_4 ($0 \leq a_1, a_2, a_3, a_4 \leq 10^4$).

The second line contains string s ($1 \leq |s| \leq 10^5$), where the i -th character of the string equals "1", if on the i -th second of the game the square appears on the first strip, "2", if it appears on the second strip, "3", if it appears on the third strip, "4", if it appears on the fourth strip.

Output

Print a single integer — the total number of calories that Jury wastes.

Examples

input

Copy

1 2 3 4

123214

output

Copy

13

input

Copy

1 5 3 2

11221

output

Copy

13