Problem F2501 New Language

You just found that your little brother is constructing a new language these days. He passed you the dictionary of his new language. Since you are good at programming, you would like to write a translation program to translate his new language. Your work starts from numbers.

You found that in your little brother's new language, number is also represented in decimal, but each digit in different word. You would like to find the 3-digit number given the word of each digit.

Input

The input consists of 13 lines.

The first 10 lines contains each of the word of 10 digits from 0 to 9. Each word has at least 1 and at most 20 lower-case characters.

The next 3 lines contains the word of each digit.

The input guaranteed that the first digit is not 0.

Output

Print the 3-digit number.

Sample Input

azero

bone

ctwo

dthree

efour

ffive

gsix

hseven

ieight

jnine

bone

bone

azero

Sample Output

110