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Fixing sentences

7 points

Introduction

A virus has infected your high school computer server, and it's messing up the e-mail service. It is attacking e-mail messages by randomly reversing some words. This is affecting students as they cannot understand their homework. You decided to help your friends by providing them with a mobile app that reverts the effects of the virus attack. Your app uses an internet dictionary to check word by word their correctness in a sentence, and when a potential reversed word is detected, you get its position within the sentence. With this job done, you just need to reverse those words to resolve the trouble created by the virus.

Can you write a program that, given a sentence with reversed words and their positions, prints out the fixed sentence? Beware when a reversed word is next to a full stop.

Input

A line containing a single sentence with some words reversed.
Several lines with a single positive number describing the position of a reversed word.
A single character '#' marks the end of the input lines.

Output

A single line with the original sentence fixed.

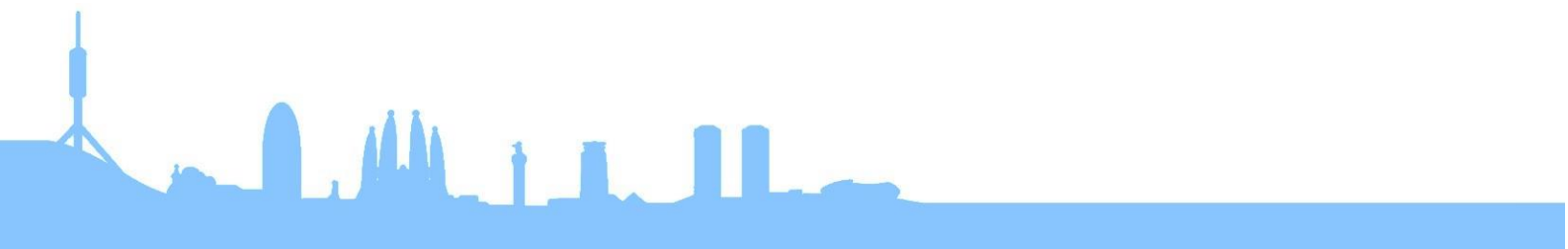
Example 1

Input

```
Notice that this drow is reversed and this rehtona oot.  
4  
9  
10  
#
```

Output

```
Notice that this word is reversed and this another too.
```





Example 2

Input

```
Here we do not have a full pots  
8  
#
```

Output

```
Here we do not have a full stop
```

