

Problem 20 – Oh, My Girl!

A painter acquainted a girl programmer. When he invited her to a date, she agreed. But the girl wanted the boy to take her from home. She handed him a sheet of paper on which **her address was written**. When he looked, he saw a lot of random characters without meaning and without order. After the main text there was a short string - key. The address was **parted in pieces of two to six symbols**. All parts of text are surrounded by **key in the beginning and key in the end**.

Example

a-.8850,a745#"F5Sofa7#"FFF5a1#"D5ia, a000#"FFF5a88887#"F532 a123457#"F5a7 #FGDGSDG5G.S.a#"5 ma-5.55gghja-.885y8hgja#"F5Rakoa#"F5a5#"F5vsa9#"F5ghhjkuu867885a7#"FYIYUHUI5ki a7#"FUIO5 a9997#"F5Stra#"5gia-5.558dft.8.8.a60-6.05hu-h-0yuua-.885rla-5.55yuti-..uioa-.885!a-5.55

The key: a7#"F5

The actual address: Sofia, 32 Rakovski Str

The key is not something permanent. It is a string, which meets the following criteria:

- The **first, last** and all other characters **other than numbers and letters** have a hard value as the given key
- The **symbols between them** are of the **same type** as the type of symbol in the original key: Where there is a **digit**: in its place can sit a **sequence of DIGITS** with **indefinite length or no length**. Where there is a **letter**: in its place can sit a **sequence of LETTERS** with **indefinite length or no length**.
- The letters are **case-sensitive**.
- Remember to escape all special characters when you want to match them with literal meaning.

Input

The input will be read from the console. The **key** will be received on the first line. The **text** will be received on the next lines, ending with the keyword "END".

Output

The resulting paragraph should be printed as output.

Constraints

- The **text** will be a string with a length of [20 ... 1000]
- The **key** will be a string with a length of [2 ... 10].

Examples

Input	Output
a7#"F5 a-.8850,a745#"F5Sofa7#"FFF5a 1#"D5ia, a000#"FFF5a88887#"F532 a123457#"F5a7 #FGDGSDG 5G.S.a#"5 ma-5.55gghja-.885y8 hgja#"F5Rakoa#"F5a5#"F5vsa9#"F5ghhjkuu867885a7#"FYIYUHUI5ki a7#"FUIO5 a9997#"F5Stra#"5gia-5.558dft.8.8.a60-6.05hu-h- 0yuua-.885rla-5.55yuti-..uioa-.885!a-5.55 END	Sofia, 32 Rakovski Str