Word Order Reverser

Thompson Tommy is a well known pop poet who specializes in word-reversed poetry. This is poetry in which the words in each line are presented in reverse order, but the punctuation is left in place.

For example, one of his poems is

moon! full the oh! swoon to me leads loon a of song the for!

Not everyone can stomach this, and you have been asked to write a translator which will render Thompson Tommy's poems readable.

Input

You are being asked to translate a sequence of lines, each no longer than 80 characters. To make things easier, all letters are lower case. There may be blank lines. Input ends with an end of file.

Output

For each line output that line exactly as is but with word substitutions, and only word substitutions. The last word is substituted for the first, the next to last for the second, and so forth, until the first is substituted for the last. Only words are to be substituted; spaces and punctuation are to be left as is. A word is defined as a sequence of lower case letters, containing NO non-letters. A blank line translates to a blank line.

Sample Input

moon! full the oh! swoon to me leads loon a of song the for! george there, hi! phil there, bye! is it, switch friend ** rung+is-bell^the !! ** sung+is-song^the !! ** fun+++what !!

Sample Output

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oh! the full moon!
leads me to swoon
for the song of a loon!

hi there, george!
bye there, phil!
friend switch, it is

** the+bell-is^rung !!
** the+song-is^sung !!
** what+++fun !!
```

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Date: Sat Dec 1 22:26:28 EST 2012

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