

A nasty virus has infected my computer. Its effect has been to attack all my text files and reverse every word in them. Your job in this problem is to write the code to restore my text files to their original condition.

As far as the virus was concerned, a word was any sequence of characters that ended with a space or an end of line character. You will see what I mean when I tell you that the first line in one of my files was:

Get ready for the New Zealand Programming Contest on 26th September.

The virus turned this into:

teG ydaer rof eht weN dnalaeZ gnimmaroorP tsetnoC no ht62 .remetpeS

See how it included the full stop with September and put it before the letters?

Input

Input will consist of a single line containing from 1 to 250 characters. There will not be any tab characters. There will be only 1 space between words or between a sentence terminator (. ? or !) and the next sentence.

Output

Output will consist of one line where each word (as defined in paragraph 2 above) in the input line has been reversed.

Sample Input 1

teG ydaer rof eht weN dnalaeZ gnimmaroorP tsetnoC no ht62 .remetpeS

Output for Sample Input 1

Get ready for the New Zealand Programming Contest on 26th September.

Sample Input 2

I ekil .maerc-eci

Output for Sample Input 2

I like ice-cream.