1 Longest of the Longest

You are given a list of strings, array, containing different phrases. You need to implement a program, that returns the following elements:

- The longest string in the array on the first line. When measuring the length spaces are included but not punctuation. If multiple strings of the same length are found consider only the first one ignoring the others.
- The longest word contained in the longest string on the second line. In the case that multiple words of the same length are found, only the first word should be considered and the rest ignored. If the longest word appears only once in the longest string then it should be printed, if the word appears more than once in the longest string then it should be printed in reverse

Input/Output

The input is one line in array format containing the phrases. The array format used is defined by phrases enclosed in single quotes, separated by commas and enclosed in square brackets.

Ex. ['Phrase 1', 'Phrase 2', 'Phrase 3']

The output consists of two lines, ls and lw:

ls is the longest string in the array

lw is the longest word in ls printed in normal order if it appears only once in ls and in reverse order otherwise

Constraints

- $0 \le \text{length of } array \le 1\,000\,000\,000.$
- $0 \le \text{length of each string in } array \le 1\,000\,000$

Examples

Sample Input 1

['i am a', 'i am a contestant',
'i am a contestanb']

Sample Output 1

i am a contestant
contestant

Sample Input 2

['welcome', 'welcome to UCC', 'welcome to UCC, welcome']

Sample Output 2

welcome to UCC, welcome
emoclew