

Nick and Porty : The Concentrated Dark Aquapanela

Nick and Porty continue on their adventures through the galaxy. This time, Perry has sneaked into the nabe , which embarrasses Porty . As Perry is bored, and does not understand much of what is happening, he decides to help Nick with a very simple task: create high-speed fuel for the ship.

This fuel is called "The Concentrated Dark Aguapanela", due to the large amount of energy it provides to the ship. Nick is testing different formulas, and Perry needs to help him organize them consecutively so that it is exactly what is needed. Thus, Nick and Porty begin to list the particles they need to generate "The Concentrated Dark Aqua Panela", and Perry's task is to write these values, separated by hyphens , and determine consecutively what and how many particles of each type are needed. The particles are determined by alien symbols associated with unknown elements on earth: #, \$, %, !, ?, ;, *, +, -, ~.

An example of this would be the following, after Nick and Porty start naming element particles and Perry first writes: # - # - # - ! - ! - ? - + - ~ - ~ - ! - - # . Thus, Perry determines that the following is the required particle order: # (3 units) ,! (2 units) ,? (1 unit), + (1 unit), ~ (2 units) ,! (1 unit), and # (1 unit). After understanding that answer, to facilitate reading, Perry decides to use the following format (first line the name of the element, and the second line the number of particles of said element according to the order):

```
#! ? + ~! #
3 2 1 1 2 1 1
```

However, Perry is doing all of this manually. They stop at their "Python Space Stop" restaurant for a bite to eat, and you notice the slowness with which Perry does this task; To avoid Nick's teasing and Porty's grief , you decide to help Perry with a program that makes the task easier after writing the first sequence of alien particles . Develop a python program that receives as input the list of the hyphenated particles that Perry builds, and generates the output in nice format of the particle order (a particle may appear more than once in the output, but not consecutively) along with another line that corresponds to the number of consecutive particles of the alien element .

Entry

String of characters that corresponds to the succession of alien particles separated by commas.

Departure

Two character strings: the first, with the organized sequence of alien elements to be used; the second, with the quantity of particles of each element to be used according to the order established by Nick and Porty .

| Entry | Departure |
|---|--|
| ? - * - * - # - + - + - + - # - ? - % - + - ~ | ? * # + # ? % + ~ 1 2 1 3 1 1 1 1 1 |

Validate with these others:

| Entry | Departure |
|-------|-----------|
| | |

| | |
|---|---|
| ;-#- - \$-!- + - * - * - # -! -! - # - + - + -! | ;# - \$! + * #! # +! 1 1 1 1 1 1 2 1 2 1 2 1 |
|---|---|