

# Compress the String!

In this task, we would like for you to appreciate the usefulness of the `groupby()` function of `itertools` . To read more about this function, [Check this out](#) .

You are given a string  $S$  . Suppose a character ' $c$ ' occurs consecutively  $X$  times in the string. Replace these consecutive occurrences of the character ' $c$ ' with  $(X, c)$  in the string.

For a better understanding of the problem, check the explanation.

## Input Format

A single line of input consisting of the string  $S$ .

## Output Format

A single line of output consisting of the modified string.

## Constraints

All the characters of  $S$  denote integers between  $0$  and  $9$ .

$$1 \leq |S| \leq 10^4$$

## Sample Input

```
1222311
```

## Sample Output

```
(1, 1) (3, 2) (1, 3) (2, 1)
```

## Explanation

First, the character **1** occurs only once. It is replaced by  $(1, 1)$  . Then the character **2** occurs three times, and it is replaced by  $(3, 2)$  and so on.

Also, note the single space within each compression and between the compressions.