



Compress the String! ★

52/115 challenges solved

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Problem

Submissions

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Editorial

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.

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Language

Python 3



```
1 # Enter your code here. Read input from STDIN. Print output to STDOUT
2 from itertools import groupby
3
4 s = input()
5 lst = [(len(list(v)),int(k)) for k,v in groupby(s)]
6 print(*lst)
7
8
```

EMACS

Line: 5 Col: 28

 Upload Code as File

☐ Test against custom input

Run Code

Submit Code

You have earned 20.00 points!
52/115 challenges solved.

45%



Congratulations

You solved this challenge. Would you like to challenge your friends?


Next Challenge

✔ Test case 0

Compiler Message

Success


✔ Test case 1 

✔ Test case 2 

Input (stdin)

1 1222311


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✔ Test case 3 

Expected Output

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

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✔ Test case 4 

✔ Test case 5 

✔ Test case 6 🔒

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