

2h 11m
left

ALL



1. Better Compression

Consider a string, S , that is a series of characters, each followed by its frequency as an integer. The string is not compressed correctly, so there may be multiple occurrences of the same character. A properly compressed string will consist of one instance of each character in alphabetical order followed by the total count of that character within the string.

Example

The string 'a3c9b2c1' has two instances where 'c' is followed by a count: once with 9 occurrences, and again with 1. It should be compressed to 'a3b2c10'.

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Function Description

Complete the function *betterCompression* in the editor below.

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betterCompression has the following parameter:

S : a compressed string

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Returns:

string: the properly compressed string

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Constraints

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- $1 \leq \text{size of } S \leq 100000$
- ' a ' \leq characters in $S \leq$ ' z '
- $1 \leq \text{frequency of each character in } S \leq 1000$

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► Input Format For Custom Testing

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▼ Sample Case 0

Sample Input

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STDIN	Function
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a12b56c1	→ S = 'a12b56c1'

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Sample Output

a12b56c1