

Problem 3612: Process String with Special Operations I

Problem Information

Difficulty: **Medium**

Acceptance Rate: 64.90%

Paid Only: No

Tags: String, Simulation

Problem Description

You are given a string `s`` consisting of lowercase English letters and the special characters: ``*``, ``#``, and ``%``.

Build a new string `result`` by processing `s`` according to the following rules from left to right:

* If the letter is a **lowercase** English letter append it to `result``. * A ``!`` **removes** the last character from `result``, if it exists. * A ``#`` **duplicates** the current `result`` and **appends** it to itself. * A ``%`` **reverses** the current `result``.

Return the final string `result`` after processing all characters in `s``.

Example 1:

Input: `s = "a#b%"`

Output: `"ba"`

Explanation:

`i` | s[i] | Operation | Current result` ---|---|---|--- 0 | 'a' | Append 'a' | "a" 1 | '#' | Duplicate result` | "aa" 2 | 'b' | Append 'b' | "aab" 3 | '%' | Reverse result` | "baa" 4 | '!` | Remove the last character | "ba" Thus, the final result` is "ba".`

Example 2:

Input: s = "z*#"

Output: ""

Explanation:

i | s[i] | Operation | Current result ---|---|---|--- 0 | 'z' | Append 'z' | "z" 1 | '*' | Remove the last character | "" 2 | '#' | Duplicate the string | "" Thus, the final result is "".

Constraints:

1 <= s.length <= 20 * s consists of only lowercase English letters and special characters *, #, and %.

Code Snippets

C++:

```
class Solution {
public:
    string processStr(string s) {

    }

};
```

Java:

```
class Solution {
    public String processStr(String s) {

    }

}
```

Python3:

```
class Solution:
    def processStr(self, s: str) -> str:
```