

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:
```