

Delete Characters To Make Fancy String

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🔧 difficulty	Easy
# Serial	1957
🏷 tags	StackString Manipulation
🗣 language	C++
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🔗 link	https://leetcode.com/problems/delete-characters-to-make-fancy-string/description/
✅ Completion	✔

Intuition

The problem requires modifying the given string to prevent three consecutive identical characters. The goal is to ensure that each character in the resulting string appears at most twice consecutively. We iterate through the string, maintaining a count of consecutive identical characters and appending them only if the count condition is met.

Approach

We iterate through the input string `s` starting from the second character. We keep track of a count of consecutive identical characters. If the current character is different from the previous one, we reset the count and append the character to the `answer` string. If it matches the previous character but has not yet reached the limit of two, we append it and increment the count. This ensures no more than two consecutive identical characters are added to `answer`.

Complexity

Time Complexity:

The time complexity is $O(n)$, where n is the length of the input string `s`. This is because we are iterating through the string once.

Space Complexity:

The space complexity is $O(n)$, where n is the length of the output string. In the worst case, the output string could be the same length as the input string.

Code

```
class Solution {
public:
    string makeFancyString(string s) {
        string answer;
        answer.push_back(s[0]);
```

```
int count = 1;
for(int i = 1; i < s.size(); i++) {
    if(s[i] != s[i - 1]) {
        answer.push_back(s[i]);
        count = 1;
    }
    else if(count != 2) {
        answer.push_back(s[i]);
        count++;
    }
}
return answer;
}
};
```