

Remove Adjacent Repeated Characters IV

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1 # Method 1
2 # Time : O(n)
3 # Space : O(n)
4 class Solution(object):
5     def deDup(self, input):
6         """
7         input: string input
8         return: string
9         """
10        # write your solution here
11        if len(input) <= 1:
12            return input
13        stack = []
14        f = 0
15        while f < len(input):
16            if len(stack) > 0 and input[f] == stack[-1]:
17                while f < len(input) and input[f] == stack[-1]:
18                    f += 1
19            else:
20                stack.append(input[f])
21                f += 1
22        return ''.join(stack)
23
24 # Method 2
25 # Time : O(n)
26 # Space : O(1)
27 class Solution(object):
28     def deDup(self, input):
29         """
30         input: string input
31         return: string
32         """
33        # write your solution here
34        input = list(input)
35        if len(input) <= 1:
36            return input
37        s = 0
38        f = 1
39        while f < len(input):
40            if s >= 0 and input[f] == input[s]:
41                while f < len(input) and input[f] == input[s]:
42                    f += 1
43            s -= 1
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44     else:
45         input[s + 1] = input[f]
46         f += 1
47         s += 1
48     return ''.join(input[0:s + 1])
49     # s + 1 is because of the definition of list slicing
```