

# Problem 761: Special Binary String

## Problem Information

**Difficulty:** Hard

**Acceptance Rate:** 65.43%

**Paid Only:** No

**Tags:** String, Recursion

## Problem Description

\*\*Special binary strings\*\* are binary strings with the following two properties:

- \* The number of `0`'s is equal to the number of `1`'s.
- \* Every prefix of the binary string has at least as many `1`'s as `0`'s.

You are given a \*\*special binary\*\* string `s`.

A move consists of choosing two consecutive, non-empty, special substrings of `s`, and swapping them. Two strings are consecutive if the last character of the first string is exactly one index before the first character of the second string.

Return \_the lexicographically largest resulting string possible after applying the mentioned operations on the string\_.

\*\*Example 1:\*\*

\*\*Input:\*\* s = "11011000" \*\*Output:\*\* "11100100" \*\*Explanation:\*\* The strings "10" [occurring at s[1]] and "1100" [at s[3]] are swapped. This is the lexicographically largest string possible after some number of swaps.

\*\*Example 2:\*\*

\*\*Input:\*\* s = "10" \*\*Output:\*\* "10"

\*\*Constraints:\*\*

`* `1 <= s.length <= 50` * `s[i]` is either `'0` or `'1`. * `s` is a special binary string.`

## Code Snippets

### C++:

```
class Solution {  
public:  
    string makeLargestSpecial(string s) {  
  
    }  
};
```

### Java:

```
class Solution {  
public String makeLargestSpecial(String s) {  
  
}  
}
```

### Python3:

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