


678. Valid Parenthesis String

Solved 

Medium

 Topics

 Companies

Given a string `s` containing only three types of characters: `'('`, `')'` and `'*'`, return `true` if `s` is **valid**.

The following rules define a **valid** string:

- Any left parenthesis `'('` must have a corresponding right parenthesis `')'`.
- Any right parenthesis `')'` must have a corresponding left parenthesis `'('`.
- Left parenthesis `'('` must go before the corresponding right parenthesis `')'`.
- `'*'` could be treated as a single right parenthesis `')'` or a single left parenthesis `'('` or an empty string `''`.

```
class Solution {
    func checkValidString(_ s: String) -> Bool {
        var openb = 0
        var closeb = 0
        var starcount = 0

        for i in s {
            if(i == "(") {
                openb = openb + 1
            } else if(i == ")") {
                if(openb == 0 && starcount == 0) {
                    return false
                }
                if(openb == 0) {
                    starcount = starcount - 1
                } else {
                    openb = openb - 1
                }
            } else {
                starcount = starcount + 1
            }
        }

        print(openb)
        print(starcount)
        if(openb > 0 && openb > starcount) {
```

```

        return false
    }

    openb = 0
    starcount = 0
    for i in s.reversed() {
        if(i == ")") {
            openb = openb + 1
        } else if(i == "(") {
            if(openb == 0 && starcount == 0) {
                return false
            }
            if(openb == 0) {
                starcount = starcount - 1
            } else {
                openb = openb - 1
            }
        } else {
            starcount = starcount + 1
        }
    }

    if(openb > 0 && openb > starcount ) {
        return false
    }

    return true
}
}

```