

678. Valid Parenthesis String

Difficulty : Medium

<https://leetcode.com/problems/valid-parenthesis-string>

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 "".

Example 1:

Input: `s = "()"`

Output: `true`

Example 2:

Input: `s = "(*)"`

Output: `true`

Example 3:

Input: `s = "(*))"`

Output: `true`

Constraints:

- `1 <= s.length <= 100`
- `s[i]` is '(', ')', or '*'.