

5470. Minimum Insertions to Balance a Parentheses String

sions (/contest/biweekly-contest-32/problems/minimum-insertions-to-balance-a-parentheses-string/submissions/)

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Given a parentheses string `s` containing only the characters `'('` and `')'`. A parentheses string is **balanced** if:

- Any left parenthesis `'('` must have a corresponding two consecutive right parenthesis `'))'`.
- Left parenthesis `'('` must go before the corresponding two consecutive right parenthesis `'))'`.

For example, `"()"`, `"()()())"` and `"(()())"` are balanced, `")()"`, `"())"` and `"(())"` are not balanced.

You can insert the characters `'('` and `')'` at any position of the string to balance it if needed.

Return *the minimum number of insertions* needed to make `s` balanced.

User Accepted:	724
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User Tried:	1301
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Total Accepted:	728
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Total Submissions:	2051
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Difficulty:	Medium
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Example 1:

Input: `s = "())"`

Output: 1

Explanation: The second `'('` has two matching `'))'`, but the first `'('` has only `')` matching

Example 2:

Input: `s = "()"`

Output: 0

Explanation: The string is already balanced.

Example 3:

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

Output: 3

Explanation: Add `'('` to match the first `'))'`, Add `'))'` to match the last `'('`.

Example 4:

Input: `s = "((((("`

Output: 12

Explanation: Add 12 `')` to balance the string.

Example 5:

Input: `s = "))))))"`**Output:** 5**Explanation:** Add 4 '(' at the beginning of the string and one ')' at the end. The string becomes "((((()))".**Constraints:**

- $1 \leq s.length \leq 10^5$
- `s` consists of '(' and ')' only.

JavaScript ▼



```
1 ▾ /**
2   * @param {string} s
3   * @return {number}
4   */
5 ▾ var minInsertions = function(s) {
6
7   };
```

☐ Custom Testcase

Use Example Testcases

Run

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