

# Problem 1249: Minimum Remove to Make Valid Parentheses

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 71.12%

**Paid Only:** No

**Tags:** String, Stack

## Problem Description

Given a string  $s$  of `(` , `)` and lowercase English characters.

Your task is to remove the minimum number of parentheses ( `(` or `)` , in any positions ) so that the resulting \_parentheses string\_ is valid and return \*\*any\*\* valid string.

Formally, a \_parentheses string\_ is valid if and only if:

- \* It is the empty string, contains only lowercase characters, or
- \* It can be written as `AB` (`A` concatenated with `B`), where `A` and `B` are valid strings, or
- \* It can be written as `(A)`, where `A` is a valid string.

**Example 1:**

**Input:**  $s = \text{"lee(t(c)o)de"}$  **Output:**  $\text{"lee(t(c)o)de"}$  **Explanation:**  $\text{"lee(t(co)de)"}$  ,  
 $\text{"lee(t(c)ode)}$  would also be accepted.

**Example 2:**

**Input:**  $s = \text{"a)b(c)d"}$  **Output:**  $\text{"ab(c)d"}$

**Example 3:**

**Input:**  $s = \text{"")("} \text{)} \text{))("}$  **Output:**  $\text{""} \text{}}$  **Explanation:** An empty string is also valid.

**\*\*Constraints:\*\***

\* `1 <= s.length <= 105` \* `s[i]` is either `(` or `)` or lowercase English letter.

## Code Snippets

**C++:**

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

**Java:**

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

**Python3:**

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