# 856. Score of Parentheses

Given a balanced parentheses string s, compute the score of the string based on the following rule:

- () has score 1
- AB has score A + B, where A and B are balanced parentheses strings.
- (A) has score 2 \* A, where A is a balanced parentheses string.

### Example 1:

```
Input: s = "()"

Output: 1
```

## Example 2:

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

Output: 2
```

## Example 3:

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

Output: 2
```

## Example 4:

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

Output: 6
```

#### Note:

- 1. s is a balanced parentheses string, containing only ( and ).
- 2. 2 <= s.length <= 5

```
class Solution:
    def scoreOfParentheses(self, s: str) -> int:
        stack = []

    for i in range(len(s)):
        if s[i]=='(':
            stack.append('('))
        else:
            if stack[-1]=='(':
```

```
stack.pop()
    stack.append(1)

else:
    temp = 0
    while stack[-1]!='(':
        temp = temp+stack.pop()
    stack.pop()
    stack.append(2*temp)

if stack[0]=='(':
    return 2*stack[-1]

else:
    return sum(stack)
```

```
class Solution:
    def scoreOfParentheses(self, s: str) -> int:
        ans = 0
        stack = []
        for i in range(len(s)):
            char = s[i]
            if char=='(':
                stack.append(char)
            else:
                if stack[-1]=='(':
                    stack.pop()
                    stack.append(1)
                else:
                    temp = 0
                    while stack[-1]!='(':
                        temp= temp+stack.pop()
                    stack.pop()
                    stack.append(2*temp)
        return sum(stack)
```