

5535. Maximum Nesting Depth of the Parentheses

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A string is a **valid parentheses string** (denoted **VPS**) if it meets one of the following:

- It is an empty string `""`, or a single character not equal to `"(" or ")"`,
- It can be written as `AB` (`A` concatenated with `B`), where `A` and `B` are **VPS**'s, or
- It can be written as `(A)`, where `A` is a **VPS**.

We can similarly define the **nesting depth** `depth(S)` of any VPS `S` as follows:

- `depth("") = 0`
- `depth(A + B) = max(depth(A), depth(B))`, where `A` and `B` are **VPS**'s
- `depth("(" + A + ")") = 1 + depth(A)`, where `A` is a **VPS**.

For example, `""`, `"()()"`, and `"()(()())"` are **VPS**'s (with nesting depths 0, 1, and 2), and `")("` and `"(())"` are not **VPS**'s.

Given a **VPS** represented as string `s`, return the **nesting depth** of `s`.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Example 1:

Input: `s = "(1+(2*3)+((8)/4))+1"`
Output: 3
Explanation: Digit 8 is inside of 3 nested parentheses in the string.

Example 2:

Input: `s = "(1)+((2))+(((3)))"`
Output: 3

Example 3:

Input: `s = "1+(2*3)/(2-1)"`
Output: 1

Example 4:

Input: `s = "1"`
Output: 0

Constraints:

- `1 <= s.length <= 100`
- `s` consists of digits `0-9` and characters `'+'`, `'-'`, `'*'`, `'/'`, `'('`, and `')'`.
- It is guaranteed that parentheses expression `s` is a **VPS**.

JavaScript

```
1 /**
2  * @param {string} s
3  * @return {number}
4  */
5 const maxDepth = (s) => {
6   let current_max = 0;
7   let max = 0;
8   let n = s.length;
9   for (let i = 0; i < n; i++) {
10    if (s[i] == '(') {
11      current_max++;
```

```
12 ▾         if (current_max > max) {  
13             max = current_max;  
14         }  
15     }  
16 ▾     else if (s[i] == ')') {  
17 ▾         if (current_max > 0) {  
18             current_max--;  
19 ▾         } else {  
20             return -1;  
21         }  
22     }  
23 }  
24 ▾ if (current_max != 0) {  
25     return -1;  
26 }  
27 return max;  
28 };
```

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