1614. Maximum Nesting Depth of the Parentheses

Solved ●

Easy Topics Companies Hint

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(C) = 0`, where `C` is a string with a single character not equal to `"("` or `")"`.
- `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`.

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

Constraints:

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

Seen this question in a real interview before? 1/4

Yes No

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Hint 1

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