

Problem 20: Valid Parentheses

Problem Information

Difficulty: Easy

Acceptance Rate: 43.20%

Paid Only: No

Tags: String, Stack

Problem Description

Given a string `s` containing just the characters `'('`, `')'`, `'{` and `'}'`, ` '['` and `']'`, determine if the input string is valid.

An input string is valid if:

1. Open brackets must be closed by the same type of brackets.
2. Open brackets must be closed in the correct order.
3. Every close bracket has a corresponding open bracket of the same type.

Example 1:

Input: s = "()"

Output: true

Example 2:

Input: s = "()[]{}"

Output: true

Example 3:

Input: s = "()"

****Output:**** false

****Example 4:****

****Input:**** s = "()"

****Output:**** true

****Example 5:****

****Input:**** s = "()"

****Output:**** false

****Constraints:****

* `1 <= s.length <= 104` * `s` consists of parentheses only `'(()){}{'`.

Code Snippets

C++:

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

Java:

```
class Solution {
public boolean isValid(String s) {
        }
}
```

Python3:

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