



Valid Parentheses with Multiple Types

You are given a string `s` consisting of different types of parentheses: `()`, `{}`, and `[]`. Your task is to determine whether the given string is valid.

A string is considered valid if:

1. Every opening bracket has a corresponding closing bracket of the same type.
2. The brackets are closed in the correct order. This means that a closing bracket must close the most recent unmatched opening bracket.

Input:

A string `s` consisting of characters `(,)`, `{, }`, `[, and]`.

Output:

- Return `true` if the string is valid.
- Return `false` if the string is invalid.

Examples:

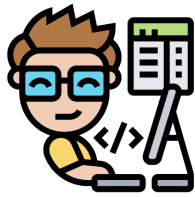
- Example 1
Input: `s = "()"`
Output: `true`
Explanation: The string contains only one pair of valid parentheses.

Constraints:

- $0 \leq s.length \leq 10^4$
- The string `s` contains only the characters `()[]{}.`

Test Cases:

1. Input: `s = "()"`
Output: `true`
2. Input: `s = "([])"`
Output: `false`
3. Input: `s = "[{()}]"`
Output: `true`
4. Input: `s = ""`
Output: `true`



DAILY PROGRAMMING

CHALLENGE



-
5. Input: `s = "{}"`
Output: false

Edge Cases:

1. Empty string: If the input string is empty, the output should be true since there are no parentheses to match.
2. Odd length string: If the string has an odd number of characters, it cannot be valid and should return false.
3. Unmatched closing brackets: If the string starts with a closing bracket, it is invalid.