LeetCode   Explore^{Day 24}   Problems   Mock^{new}   Contest   Discuss   Store

🚀 September LeetCoding Challenge 🚀   ⭐ Premium

Description   Solution   Discuss (999+)   Submissions   C++   Autocomplete

20. Valid Parentheses

Easy   👍 5688   👎 238   ♡ Add to List   ⤷ Share

Given a string `s` containing just the characters `'('`, `')'`, `'{'`, `'}'`, `'['` 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.

Example 1:

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

Example 2:

```
Input: s = "()[]{}"
Output: true
```

Example 3:

```
Input: s = "(]"
Output: false
```

Example 4:

```
Input: s = "([)]"
Output: false
```

Example 5:

```
Input: s = "{[]}"
Output: true
```

```cpp
class Solution {
public:
    bool isValid(string s) {
        stack<char> stk;
        for(char c:s){
            if(c=='[' || c=='{' ||c=='('){
                stk.push(c);
            }
            else if(c==']'){
                if(stk.empty() || stk.top()!='[')
                    return false;
                stk.pop();
            }
            else if(c=='}'){
                if(stk.empty() || stk.top()!='{')
                    return false;
                stk.pop();
            }
            else{
                if(stk.empty() || stk.top()!='(')
                    return false;
                stk.pop();
            }

        }
        if(stk.empty())
            return true;
        return false;
    }
};
```

Problems   Pick One   Prev   1/59   Next   Console   Contribute *i*   ▶ Run Code   Submit