STRING

Problem – Valid Parentheses





LeetCode leetcode.com/problems/valid-parentheses

Problem Statement

• Given a string ...

Solution – Valid Parentheses



LeetCode leetcode.com/problems/valid-parentheses

Solution

Explain...

Code – Valid Parentheses



LeetCode leetcode.com/problems/valid-parentheses

Code

```
bool isValid(string s) {
// stack (LIFO)
std::stack<char> brackets;
// O(n)
for (int i = 0; i < s.size(); ++i) {</pre>
     char bracket = s[i];
     if (bracket == '(' || bracket == '[' || bracket == '{'}) {
        brackets.push(bracket);
    } else {
        if (brackets.size() == 0) return false;
        char lastBracket = brackets.top();
        if (bracket == ')' && lastBracket != '(') return false;
        if (bracket == '}' && lastBracket != '{') return false;
        if (bracket == ']' && lastBracket != '[') return false;
        brackets.pop();
// all brackets must be closed
return brackets.size() == 0;
```