

20. Valid Parentheses ★

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Total Accepted: **136485** Total Submissions: **439369** Difficulty: **Easy**

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

The brackets must close in the correct order, "()" and "()[]{}" are all valid but "[" and "([)]" are not.

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C++



```
1 class Solution {
2     public:
3         bool isValid(string s) {
4             std::stack<char> stack;
5             for (auto& it : s) {
6                 if (!stack.empty()) {
7                     switch (stack.top()) {
8                         case '(':
9                             if (it == ')') stack.pop();
10                            else stack.push(it);
11                            break;
12                        case '[':
13                            if (it == ']') stack.pop();
14                            else stack.push(it);
15                            break;
16                        case '{':
17                            if (it == '}') stack.pop();
18                            else stack.push(it);
19                            break;
20                        default:
21                            stack.push(it);
22                            break;
23                    }
24                }
25                else {
26                    stack.push(it);
27                }
28            }
29            return stack.empty();
30        }
31    };
32 }
```

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```
27         }
28     }
29     return stack.empty() ? true : false;
30 }
31 }
```

Custom Testcase ☐

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