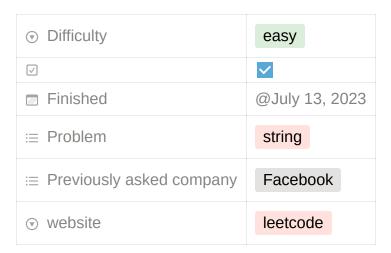
20. Valid Parentheses



Question:

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.
- 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
```

Optimal solution:

Time complexity: O(n)

Space complexity: O(n)

20. Valid Parentheses 1

```
stack.pop()
else:
return False
else:
stack.append(c)
return False if stack else True
```

20. Valid Parentheses 2