

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`

Constraints:

- $1 \leq s.length \leq 10^4$
- `s` consists of parentheses only '()[]{}'.

## Solution:

```
class Solution {
    public boolean isValid(String s) {
        Stack<Character> stack = new Stack<>();
        char[] chars = s.toCharArray();

        for (int i = 0; i < chars.length; i++) {
            char newChar = chars[i];
            if (chars[i] == '(' || chars[i] == '{' || chars[i] == '[') {
                stack.push(chars[i]);
            } else {

                if (stack.isEmpty()) {
                    return false;
                }
            }
        }
    }
}
```

```
Character popped = stack.pop();
if (popped == '(') {
    if (newChar != ')') {
        return false;
    }
} else if (popped == '{') {
    if (newChar != '}') {
        return false;
    }
} else if (popped == '[') {
    if (newChar != ']') {
        return false;
    }
}
}
}
return stack.isEmpty();
}
```