

20. Valid Parentheses (Easy)

You are given a string `s` consisting of the following characters: `'('`, `)'`, `'{'`, `'}'`, `'['` and `']'`.

The input string `s` is valid if and only if:

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Return `true` if `s` is a valid string, and `false` otherwise.

Example 1:

Input: `s = "[]"`

Output: `true`

Example 2:

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

Output: `true`

Example 3:

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

Output: `false`

Explanation: The brackets are not closed in the correct order.

Constraints:

- `1 <= s.length <= 1000`

```
class Solution {
public:
    bool isValid(string s) {
        stack<char> stack;
        pair<char,char> a= {'(',')'},b= {'[',']'},c= {'{',''}';
        char tmp;
        for(char cc:s){
            switch (cc){
                case ')':
                    if(stack.empty() || stack.top() != a.first) return false;
                    stack.pop();
                    break;
                case ']':
                    if(stack.empty() || stack.top() != b.first) return false;
                    stack.pop();
                    break;
                case '}':
                    if(stack.empty() || stack.top() != c.first) return false;
                    stack.pop();
                    break;
                default: stack.push(cc);
            }
        }
        return stack.empty();
    }
};
```