

20. Valid Parentheses

Total Accepted: **106254** Total Submissions: **361425** 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.

[Subscribe](#) to see which companies asked this question

```
//C++
//author:zzw
class Solution {
public:
    bool isValid(string s) {
        if(s.empty()) return false;
        int len = s.length();
        if(len & 0x01) return false;
        stack<char> str_stack;
        for(int i=0;i<len;i++)
        {
            if(!str_stack.empty())
            {
                if((str_stack.top()=='{'
&& s[i]=='}')||(str_stack.top()=='[' && s[i]==']')
                ||(str_stack.top()=='(' && s[i]=='))){
                    str_stack.pop();
                }else{
                    str_stack.push(s[i]);
                }
            }else
            {
                str_stack.push(s[i]);
            }
        }
        return str_stack.empty();
    }
};
```