

<https://leetcode.com/problems/valid-parentheses/description/>

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.

```
class Solution {  
  
public:  
  
    bool isValid(string s) {  
  
        stack<char> c;  
  
        for(char i: s)  
  
        {  
  
            switch(i)  
  
            {  
  
                case '(':  
  
                    c.push(i);  
  
                    break;  
  
                case ')':  
  
                    if(c.empty() != 1 && c.top() == '(')  
  
                    {  
  
                        c.pop();  
  
                    }  
  
                    else  
  
                    {  
  
                        c.push(i);  
  
                    }  
  
            }  
  
        }  
  
    }  
  
};
```

```
break;

case '[':

    c.push(i);

    break;

case ']':

    if(c.empty()!=1 && c.top()=='[')

    {

        c.pop();

    }

    else

    {

        c.push(i);

    }

    break;

case '{':

    c.push(i);

    break;

case '}':

    if(c.empty()!=1 && c.top()=='{')

    {

        c.pop();

    }

    else

    {

        c.push(i);
```

```

        }

        break;

    }

}

return c.empty();

}

};

```

leetcode.com/problems/valid-parentheses/submissions/1323951170/

Problem List < > Run Submit

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted

Antra\_03 submitted at Jul 17, 2024 15:35

Runtime: 0 ms | Beats 100.00% | Memory: 7.68 MB | Beats 39.02%

Analyze Complexity

Code | C++

```

class Solution {
public:
    bool isValid(string s) {
        stack<char> c;
        for(char i: s)
        {
            switch(i)
            {

```

View more

Code

```

19         c.push(i);
20     }
21
22     break;
23     case '[':
24         c.push(i);
25     break;
26     case ']':
27         if(c.empty()!=1 && c.top()=='[')
28         {

```

Saved Ln 40, Col 43

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

s =

"{}"

Output

false

Expected

false

Contribute a testcase