

Leetcode

20. Valid Parentheses

#include <string.h>

bool isValid (char* s) {

int len = strlen(s);

char stack[len];

int top = -1;

for (int i=0; i<len; i++) {

if (s[i] == '(' || s[i] == '[' || s[i] == '{') {

top++;

stack[top] = s[i];

}

else {

if (top == -1) {

return false;

}

if ((s[i] == ')' && stack[top] == '(') ||

(s[i] == ']' && stack[top] == '[') ||

(s[i] == '}' && stack[top] == '{')) {

top--;

}

else {

return false;

}

}

}

return top == -1;

}

Case 1:

$s = "()"$

Output:

True

Case 2:

$s = "()[]{}3"$

Output:

true

Case 3:

$s = "[]"$

Output:

false

Case 4:

$s = "([)]"$

Output:

true

[Signature] 15/10/24