#15 days Dsa Coding challenge

Day 4

#Leetcode 20

Valid Parentheses

Solution:

class Solution {

public:

bool isValid(string s) {

int n=s.size();

char top;

vector<char>stack;

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

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

stack.push\_back(s[i]);

}

else {

if(stack.empty()) return false;

top=stack.back();

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

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

stack.pop\_back();

}

else

return false;

}

}

return stack.empty();

}

};

Time Complexity:O(n)

Space Complexity:O(n)