#15 days Dsa Coding challenge

Day 4

#Leetcode 5

Longest Palindromic Substring

Solution:

class Solution {

public:

string longestPalindrome(string s) {

int n = s.length();

if(n <= 1) return s;

int st = 0, ml = 1;

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

int l = i, r = i;

while(l >= 0 && r < n && s[l] == s[r]) {

if(r - l + 1 > ml) {

st = l;

ml = r - l + 1;

}

l--;

r++;

}

l = i, r = i + 1;

while(l >= 0 && r < n && s[l] == s[r]) {

if(r - l + 1 > ml) {

st = l;

ml = r - l + 1;

}

l--;

r++;

}

}

return s.substr(st, ml);

}

};

Time Complexity:O(n²)

Space Complexity:O(1)