

#15 Days of Coding Challenge

#Day 4

Longest palindrome substring

#Leetcode 5

Solution:

```
class Solution {
public:
    string ans = "";
    void expand(string &s , int left ,int right)
    {
        while(left >= 0 && right < s.size())
        {
            if(s[left] != s[right])
                break;
            left--,right++;
        }
        if(ans.size() < right - left )
            ans = s.substr(left + 1 , right - left - 1);
    }
    string longestPalindrome(string s) {
        for(int i = 0 ; i < s.size() ; i++)
        {
            expand(s , i , i);
            expand(s , i , i+1);
        }
        return ans;
    }
};
```

Time Complexity: $O(n^2)$

Space Complexity: $O(1)$