## Week 15- Day 3 : Coding Challenge

(Maximum marks -15)	
Q-1 ) Briefly describe CAP theorem (Easy)	(5 marks)
Q-2) Explain DHCP, ARP and NAT.	(5 marks)
(Easy)	,
Q-3) Longest Palindrome	(5 marks)
https://leetcode.com/problems/longest-palindrome/ (Easy)	
Given a string s which consists of lowercase or uppercase lett	ers, return <i>the</i>
length of the longest palindrome that can be built with those le	tters.
Letters are case sensitive, for example, "Aa" is not considered	l a palindrome
here.	
Example 1:	
Input: s = "abccccdd"	
Output: 7	
Explanation:	
One longest palindrome that can be built is "dccaccd", whose	length is 7.

## **Marks distribution:**

Question 1,2 and 3 carry 5 marks each.