

## **Week 13- Day 5 : Coding Challenge**

(Maximum marks -15)

**Q-1 ) Q1. Represent a graph using adjacency list and adjacency matrix.**

**(5 marks)**

(super-easy)

Don't just blindly copy the code, try to understand each line of code.

**Q-2 )Palindrome Number - Try using BFS in this**

**(5 marks)**

<https://leetcode.com/problems/palindrome-number/>

(Easy)

Given an integer x, return true if x is palindrome integer.

An integer is a palindrome when it reads the same backward as forward. For example, 121 is palindrome while 123 is not.

Example 1:

Input: x = 121

Output: true

Example 2:

Input: x = -121

Output: false

Explanation: From left to right, it reads -121. From right to left, it becomes 121-. Therefore it is not a palindrome.

**Q-3 ) Binary Tree Zigzag Level Order Traversal**

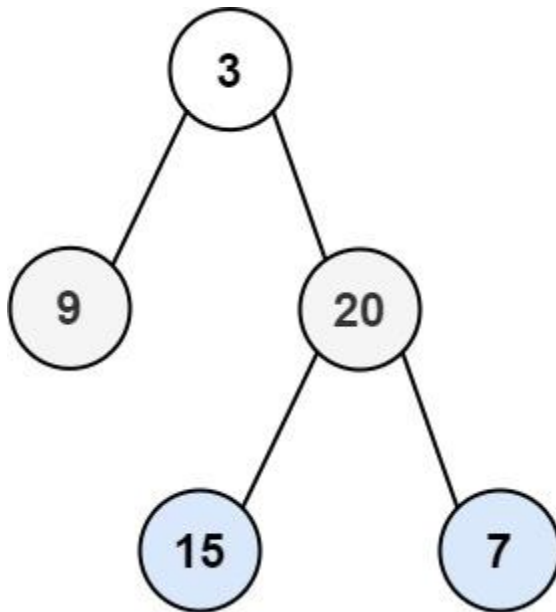
**(5 marks)**

<https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>

(Medium)

Given the `root` of a binary tree, return *the zigzag level order traversal of its nodes' values*. (i.e., from left to right, then right to left for the next level and alternate between).

Example 1:



Input: root = [3,9,20,null,null,15,7]

Output: [[3],[20,9],[15,7]]

Example 2:

Input: root = [1]

Output: [[1]]

**Marks distribution:**

Question 1,2 and 3 carry 5 marks each.