**Binary Tree Zigzag Level Order Traversal**

**There are different ways to traverse a binary tree. The zigzag level order traversal of a binary tree covers all the nodes of the tree such that each level is traversed *left to right* or *right to left* alternatively.**

**Given the root node of a binary tree, return an array depicting the zigzag level order traversal.**

**Note: The first level is traversed left to right.**

**A screenshot of a diagram

Description automatically generated**

**Testing**

**Input Format**

**The first line contains an integer *T* denoting the number of test cases.**

**For each test case, the input has 2 lines:**

* **The first line contains an integer *n* denoting the number of nodes in the tree (including the NULL nodes).**
* **The second line contains *n* space-separated integers that will form the binary tree. The integers follow level order traversal of the tree where -1 indicates a NULL node.**

**Output Format**

**For each test case, the output contains a line with space-separated integers representing the zigzag level order traversal of the binary tree.**

**Sample Input**

**5**

**7**

**1 2 -1 4 -1 5 6**

**3**

**6 -1 4**

**7**

**8 -1 9 -1 10 11 12**

**5**

**28 14 11 -1 48**

**1**

**6**

**Expected Output**

**1 2 4 6 5**

**6 4**

**8 9 10 12 11**

**28 11 14 48**

**6**