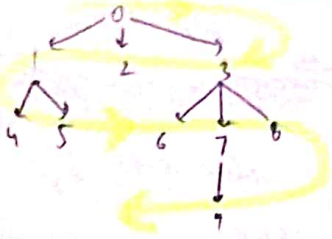
8 LevelOrder Linewise Zig-Zag (Second Method)



Output :
0
3 2 1
4 5 6 7 8
9

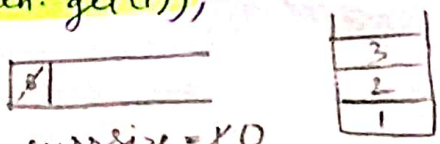
← Iss baar, hum ek stack aur ek Queue liss krengy!
= Hum dono (stack and Queue) ki liye LinkedList ko use krnge

level
→ even → left to right
→ odd → right to left

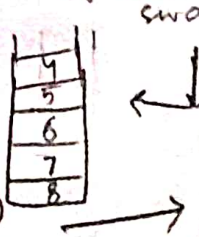
Code

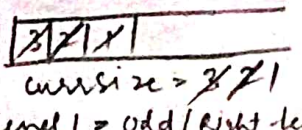
```
public static LevelOrderLinewiseZZ (Node node){
LinkedList<Node> que = new LinkedList<>(); //addLast, removeFirst
LinkedList<Node> st = new LinkedList<>(); //addFirst, removeFirst
que.addLast(node);
  int level = 0;
  while (que.size() != 0){
    int currSize = que.size();
    while (currSize-- > 0){
      Node rnode = que.removeFirst();
      System.out.print(rnode.data + " ");
      if(level % 2 == 0){
        for(int i=0; i< rnode.children.size(); i++){
          st.addFirst(rnode.children.get(i));
        }else{
          for(int = rnode.children.size()-1; i>=0; i--){
          st.addFirst(rnode.children.get(i));
        }
      }
    level++;
    System.out.println();
    LinkedList<Node> temp = que;
    que = st;
    st = temp;
  }
}
```

Output
0
3 2 1
4 5 6 7 8
9

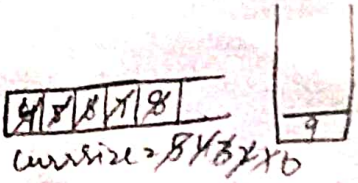


currSize = 0
level 0 = even (left → right)
∴ Stack and Queue are swapped





currSize = 3 2 1
level 1 = odd (right-left)
Queue khatam hoty hi → stack swaps Que



currSize = 5 4 3 2 1 0
level 2 = even (left-right)
Queue khatam
∴ stack swaps Queue

currSize = 0
Queue ends
∴

Output
0
3 2 1
4 5 6 7 8
9