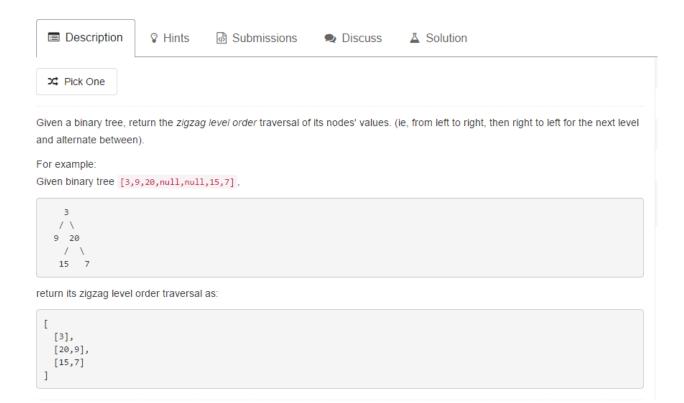
## 103. Binary Tree Zigzag Level Order Traversal



```
* 这道题目同样是BFS,用一个flag记录是否需要reverse,如果需要的话就把reverse的结果存储即可。
public class L103 {
   public class TreeNode{
       int val;
       TreeNode left;
       TreeNode right;
       public TreeNode(int x) {
            val = x;
   }
     public List<List<Integer>> zigzagLevelOrder(TreeNode root) {
        List<List<Integer>> res = new ArrayList<List<Integer>>();
         if(root == null)
             return res;
         LinkedList<TreeNode> queue = new LinkedList<TreeNode>();
         queue.add(root);
         int num = 0;
         boolean reverse = false;
         while (!queue.isEmpty()) {
            num = queue.size();
            ArrayList<Integer> levelres = new ArrayList<Integer>();
            for(int i = 0; i < num; i++) {</pre>
                TreeNode node = queue.poll();
                levelres.add(node.val);
                if(node.left != null)
                    queue.add(node.left);
                if(node.right != null)
                    queue.add(node.right);
            if(reverse){
                Collections.reverse(levelres);//反转
               reverse = false;
            }else {
                reverse = true;
            res.add(levelres);
        return res;
    }
}
```