Given a reference of a node in a connected undirected graph. Return a deep copy (clone) of the graph. Each node in the graph contains a val (int) and a list (List[Node]) of its neighbors.

```
/*
// Definition for a Node.
class Node {
public:
    int val;
    vector<Node*> neighbors;

    Node() {
        val = 0;
        neighbors = vector<Node*>();
    }

    Node(int _val) {
        val = _val;
        neighbors = vector<Node*>();
    }

    Node(int _val, vector<Node*> _neighbors) {
        val = _val;
        neighbors = _neighbors;
    }
};
*/
```

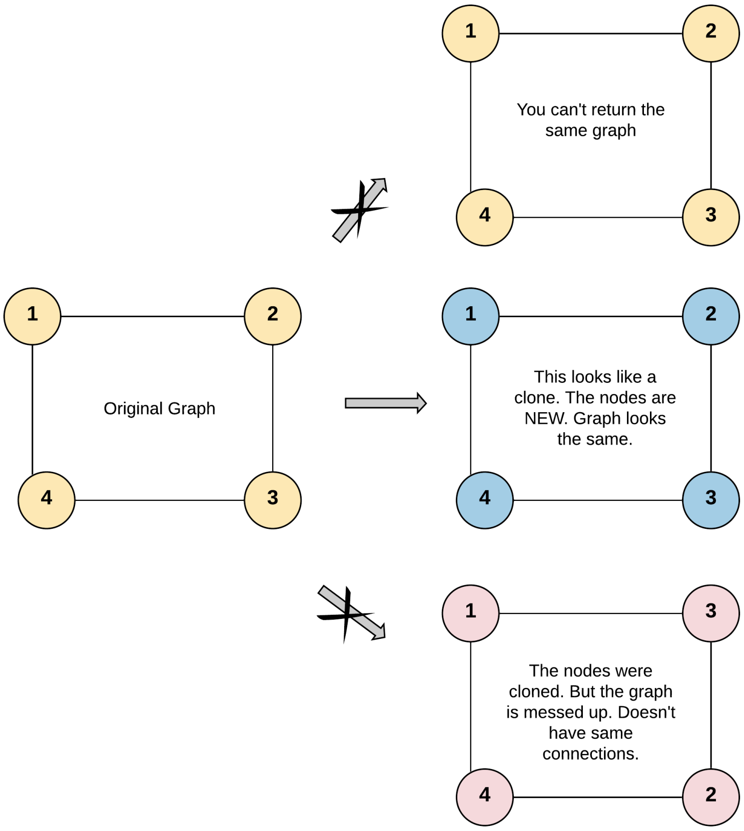
Test case format:

For simplicity sake, each node's value is the same as the node's index (1-indexed). For example, the first node with $val = 1$, the second node with $val = 2$, and so on. The graph is represented in the test case using an adjacency list.

Adjacency list is a collection of unordered lists used to represent a finite graph. Each list describes the set of neighbors of a node in the graph.

The given node will always be the first node with $val = 1$. You must return the copy of the given node as a reference to the cloned graph.

Example 1:


1
2
You can't return the same graph
4
3
1
2
Original Graph
4
3
1
2
This looks like a clone. The nodes are NEW. Graph looks the same.
4
3
1
3
The nodes were cloned. But the graph is messed up. Doesn't have same connections.
4
2

Input: adjList = [[2,4],[1,3],[2,4],[1,3]]

Output: [[2,4],[1,3],[2,4],[1,3]]

Explanation: There are 4 nodes in the graph.
1st node ($val = 1$)'s neighbors are 2nd node ($val = 2$) and 4th node ($val = 4$).
2nd node ($val = 2$)'s neighbors are 1st node ($val = 1$) and 3rd node ($val = 3$).
3rd node ($val = 3$)'s neighbors are 2nd node ($val = 2$) and 4th node ($val = 4$).
4th node ($val = 4$)'s neighbors are 1st node ($val = 1$) and 3rd node ($val = 3$).

Example 2:

Input: adjList = [[]]
Output: [[]]
Explanation: Note that the input contains one empty list. The graph consists of only one node with $val = 1$ and it does not have any neighbors.

Example 3:
Input: adjList = []
Output: []
Explanation: This an empty graph, it does not have any nodes.

Example 4:

Input: adjList = [[2],[1]]
Output: [[2],[1]]

Constraints:

- $1 \leq Node.val \leq 100$
- $Node.val$ is unique for each node
- Number of Nodes will not exceed 100
- There is no repeated edges and no self-loops in the graph
- The Graph is connected and all nodes can be visited starting from the given node