Clone Graph

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 value (int) and a list (List[Node]) of its neighbors.

```
class Node {
        public int val;
public List<Node> neighbors;
```

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).

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

> > Output: [[]]

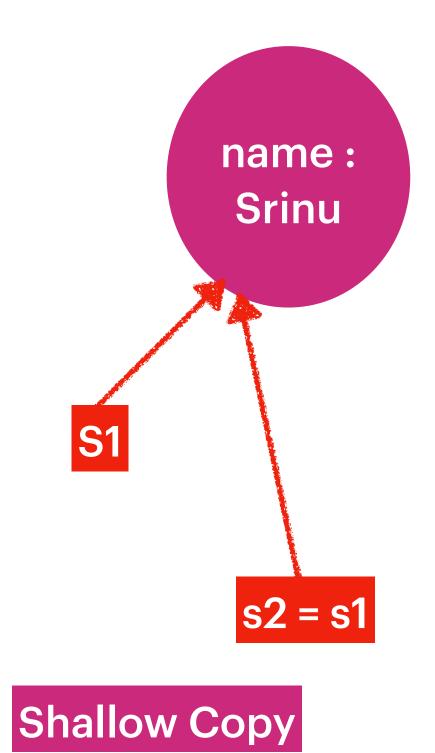
Input: adjList = [[]]

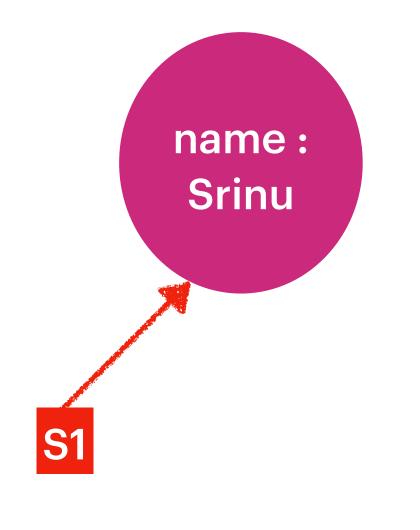
Constraints:

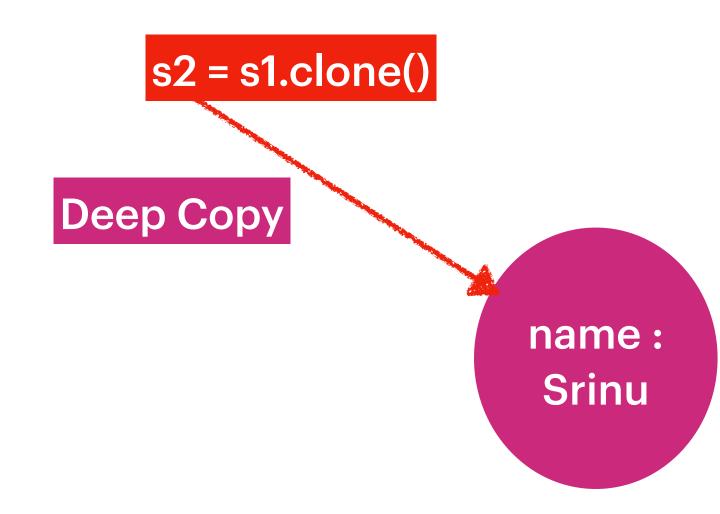
The number of nodes in the graph is in the range [0, 100] 1 <= Node.val <= 100 Node.val is unique for each node. There are no repeated edges and no self-loops in the graph. The Graph is connected and all nodes can be visited starting from the given node.

```
class cloneGraph {
public Node cloneGraph(Node node) {
```

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.







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