1490. Clone N-ary Tree Premium

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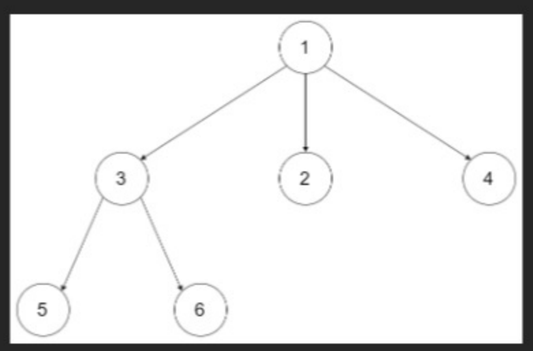
Given a `root` of an N-ary tree, return a **deep copy** (clone) of the tree.

Each node in the n-ary tree contains a val (`int`) and a list (`List[Node]`) of its children.

```
class Node {
    public int val;
    public List<Node> children;
}
```

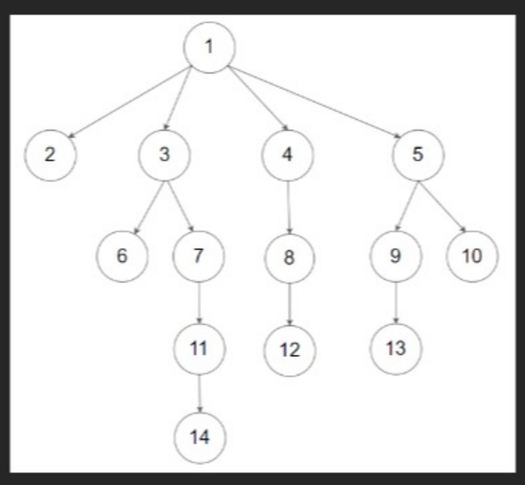
Nary-Tree input serialization is represented in their level order traversal, each group of children is separated by the null value (See examples).

Example 1:




```
Input: root = [1,null,3,2,4,null,5,6]
Output: [1,null,3,2,4,null,5,6]
```

Example 2:




```
Input: root = [1,null,2,3,4,5,null,null,6,7,null,8,null,9,10,null,null,11,null,12,null,13,null,null,14]
Output: [1,null,2,3,4,5,null,null,6,7,null,8,null,9,10,null,null,11,null,12,null,13,null,null,14]
```

Constraints:

- The depth of the n-ary tree is less than or equal to `1000`.
- The total number of nodes is between `[0, 10^4]`.

Follow up: Can your solution work for the graph problem?

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Traverse the tree, keep a hashtable with you and create a clone node for each node in the tree.

Hint 2

Start traversing the original tree again and connect each child pointer in the cloned tree the same way as the original tree with the help of the hashtable.

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