

1490. Clone N-ary Tree

Medium
 348
 14
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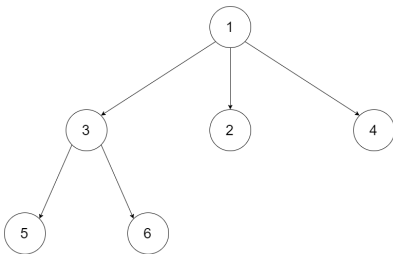
Given a `root` of an N-ary tree, return a **deep copy** (clone) of the tree.

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;
}
```

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

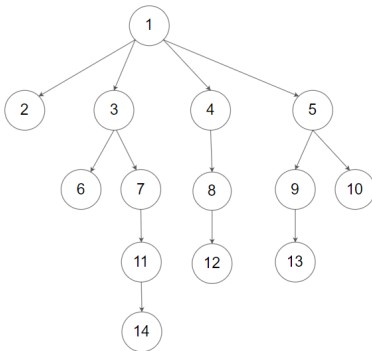
Example 1:



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,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,14]`

Constraints:

- The depth of the n-ary tree is less than or equal to `1000`.
- The total number of nodes is between `[0, 104]`.

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

```

1  /*
2  // Definition for a Node.
3  class Node {
4  public:
5      int val;
6      vector<Node*> children;
7
8      Node() {}
9
10     Node(int _val) {
11         val = _val;
12     }
13
14     Node(int _val, vector<Node*> _children) {
15         val = _val;
16         children = _children;
17     }
18 };
19 */
20
21 class Solution {
22     unordered_map<Node*,Node*> mp;
23 public:
24     Node* dfs(Node* root)
25     {
26         if(!root)
27             return NULL;
28
29         Node* curr = new Node(root->val);
30         mp[root] = curr;
31         for(int i=0;i<root->children.size();i++)
32         {
33             curr->children.push_back(dfs(root->children[i]));
34         }
35         return curr;
36     }
37
38     Node* cloneTree(Node* root) {
39         Node* curr = dfs(root);
40         return curr;
41     }
42 };

```

NEW

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Accepted

Runtime: 3 ms

?

Your input

[1,null,3,2,4,null,5,6]

Output

[1,null,3,2,4,null,5,6]

Diff

Expected

[1,null,3,2,4,null,5,6]

Console...

[Use Example Testcases](#)

Run Code ^

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