297. Serialize and Deserialize Binary Tree

• Serialization is the process of converting a data structure or object into a sequence of bits

so that it can be stored in a file or memory buffer, or transmitted across a network

connection link to be reconstructed later in the same or another computer environment.

• Design an algorithm to serialize and deserialize a binary tree. There is no restriction on

how your serialization/deserialization algorithm should work. You just need to ensure that

a binary tree can be serialized to a string and this string can be deserialized to the original

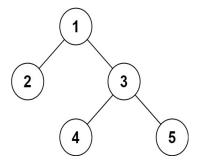
tree structure.

• Clarification: The input/output format is the same as how LeetCode serializes a binary

tree. You do not necessarily need to follow this format, so please be creative and come up

with different approaches yourself.

Example 1:



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

Output: [1,2,3,null,null,4,5]

Example 2:

- **Input:** root = []
- Output: []

Constraints:

- The number of nodes in the tree is in the range $[0, 10^4]$.
- -1000 <= Node.val <= 1000