Good morning! Here's your coding interview problem for today.

This problem was asked by Google.

Given the root to a binary tree, implement serialize(root), which serializes the tree into a string, and deserialize(s), which deserializes the string back into the tree.

For example, given the following Node class

class Node:

def \_\_init\_\_(self, val, left=None, right=None):

self.val = val

self.left = left

self.right = right

The following test should pass:

node = Node('root', Node('left', Node('left.left')), Node('right'))

assert deserialize(serialize(node)).left.left.val == 'left.left'