class Solution:

def copyRandomList(self, head: 'Optional[Node]') -> 'Optional[Node]':

if not head:

return None

old\_to\_new = {}

curr = head

while curr:

old\_to\_new[curr] = Node(curr.val)

curr = curr.next

curr = head

while curr:

old\_to\_new[curr].next = old\_to\_new.get(curr.next)

old\_to\_new[curr].random = old\_to\_new.get(curr.random)

curr = curr.next

return old\_to\_new[head]