



[Daily Problem] Reverse a Linked List

1 missatge

Daily Interview Pro <daily@techseries.dev>

13 d'agost de 2020 a les 16:35



Hi, here's your problem today. This problem was recently asked by Google:

Given a singly-linked list, reverse the list. This can be done iteratively or recursively. Can you get both solutions?

Example:

Input: 4 -> 3 -> 2 -> 1 -> 0 -> NULL
Output: 0 -> 1 -> 2 -> 3 -> 4 -> NULL

```
class ListNode (object ):
    def __init__ (self , x):
        self .val = x
        self .next = None

    # Function to print the list
    def printList (self ):
        node = self
        output = ""
        while node != None:
            output += str (node.val )
            output += " "
            node = node.next
        print (output )

    # Iterative Solution
    def reverseliteratively (self , head):
        # Implement this.

    # Recursive Solution
    def reverseRecursively (self , head):
        # Implement this.

# Test Program
# Initialize the test list:
testHead = ListNode (4)
node1 = ListNode (3)
testHead .next = node1
node2 = ListNode (2)
node1 .next = node2
node3 = ListNode (1)
node2 .next = node3
testTail = ListNode (0)
node3 .next = testTail

print ("Initial list: "
testHead .printList ()
# 4 3 2 1 0
testHead .reverseliteratively (testHead )
#testHead.reverseRecursively(testHead)
print ("List after reversal: "
testTail .printList ()
# 0 1 2 3 4
```

Upgrade to PRO for in-depth solutions with time-space complexity analysis.

» Ready to fast-track your career? Join the premiere tech interview training program [Tech Interview Pro](#).

» For more, join me at CoderPro for 100+ whiteboard coding sessions: <https://coderpro.com/> (20% off now, limited time)

Have a great day!
Daily Interview Pro

© 2020 Daily Interview Pro. All rights reserved.
Did this email bother you? [Unsubscribe](#) anytime.