19. Remove Nth Node From End of List

Solved ⊘

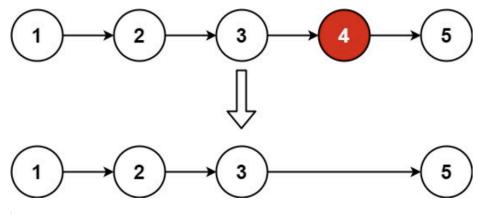Medium   🏷 Topics   🔒 Companies   💡 Hint

Given the `head` of a linked list, remove the nth node from the end of the list and return its head.

Example 1:


```
Input: head = [1,2,3,4,5], n = 2
Output: [1,2,3,5]
```

```
/**
* Definition for singly-linked list.
* public class ListNode {
*     public var val: Int
*     public var next: ListNode?
*     public init() { self.val = 0; self.next = nil; }
*     public init(_ val: Int) { self.val = val; self.next = nil; }
*     public init(_ val: Int, _ next: ListNode?) { self.val = val; self.next = next; }
* }
*/
class Solution {
    func removeNthFromEnd(_ head: ListNode?, _ nint: Int) -> ListNode? {
        if(nint == 1 && head?.next == nil) {
            return nil
        }
        var fastptr = head
```

```
var ni = nint
while(ni != 0) {
    fastptr = fastptr?.next
    ni = ni - 1
}

var slowptr = head
var prev: ListNode? = slowptr

if(fastptr == nil) {
    return head?.next
}

while(fastptr != nil) {
    fastptr = fastptr?.next
    prev = slowptr
    slowptr = slowptr?.next
}

prev?.next = slowptr?.next
return head
    }
}
```