

```
class ListNode:
    def __init__(self, val=0, next=None):
        self.val = val
        self.next = next

def isPalindrome(head: ListNode) -> bool:
    if not head or not head.next:
        return True

    # Step 1: Find the middle of the linked list
    slow, fast = head, head
    while fast and fast.next:
        slow = slow.next
        fast = fast.next.next

    # Step 2: Reverse the second half of the list
    prev = None
    while slow:
        next_node = slow.next
        slow.next = prev
        prev = slow
        slow = next_node

    # Step 3: Compare the first half and the reversed second half
    first, second = head, prev
    while second:
        if first.val != second.val:
            return False
        first = first.next
        second = second.next

    return True
```