

Problem List < > ✎ Submit Solved

Description Accepted Editorial Solutions Submissions

234. Palindrome Linked List

Easy Topics Companies

Given the `head` of a singly linked list, return `true` if it is a [palindrome](#) or `false` otherwise.

Example 1:

```
graph LR; 1((1)) --> 2((2)); 2((2)) --> 2((2)); 2((2)) --> 1((1))
```

Input: head = [1,2,2,1]
Output: true

Example 2:

```
graph LR; 1((1)) --> 2((2))
```

Input: head = [1,2]
Output: false

Constraints:

- The number of nodes in the list is in the range $[1, 10^5]$.
- $0 \leq \text{Node.val} \leq 9$

Follow up: Could you do it in $O(n)$ time and $O(1)$ space?

```
/*
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
bool isPalindrome(struct ListNode* head) {
    struct ListNode *slow = head, *fast = head, *prev = NULL, *tmp;
    while(fast && fast->next)
        fast = fast->next->next,
        tmp = slow->next, slow->next = prev, prev = slow, slow = tmp;
    slow = (fast ? slow->next : slow);
    while(slow)
        if(slow->val != prev->val) return false;
        else slow = slow->next, prev = prev->next;
    return true;
}
```

Ln 9, Col 19

Saved

Testcase | Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input
head =
[1,2,2,1]

Output
true

Expected
true

Activate Windows
Go to Settings to activate Windows.

Explore career opportunities at Citi Apply Now Gurugram

18K 357 137 Online

Type here to search 23°C Mostly sunny 10.52.05 AM 24-11-2025