141. Linked List Cycle

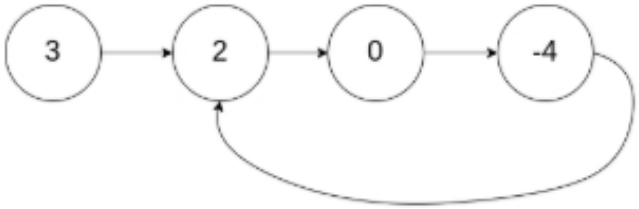
Easy | Topics | Companies

Given `head`, the head of a linked list, determine if the linked list has a cycle in it.

There is a cycle in a linked list if there is some node in the list that can be reached again by continuously following the `next` pointer. Internally, `pos` is used to denote the index of the node that tail's `next` pointer is connected to. **Note that `pos` is not passed as a parameter.**

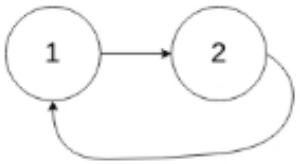
Return `true` *if there is a cycle in the linked list*. Otherwise, return `false`.

Example 1:




```
Input: head = [3,2,0,-4], pos = 1
Output: true
Explanation: There is a cycle in the linked list, where the tail connects to the 1st node (0-indexed).
```

Example 2:




```
Input: head = [1,2], pos = 0
Output: true
Explanation: There is a cycle in the linked list, where the tail connects to the 0th node.
```

Home | /** * Definition for singly-linked | Linked List Cycle - LeetCode | Remove Nth Node From End of

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fdcekDDIKM submitted at Nov 17, 2025 11:39

Editorial | Solution

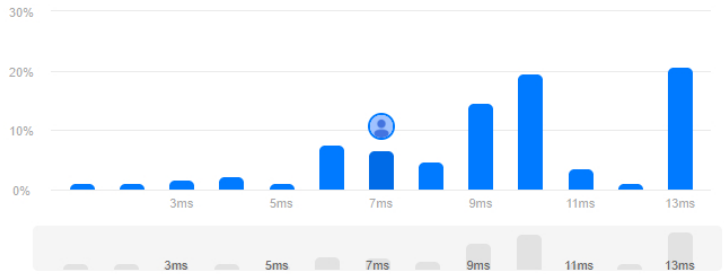
Runtime

7 ms | Beats 87.81%

Analyze Complexity

Memory

11.26 MB | Beats 39.17%



Code | C

```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
bool hasCycle(struct ListNode *head) {
```

View more

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- 142. Linked List Cycle II
- 202. Happy Number

Write your notes here

Code

C | Auto

```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
bool hasCycle(struct ListNode *head) {
    if(head==NULL)
    return false;
    struct ListNode*slow=head;
    struct ListNode*fast=head;

    while(fast!=NULL && fast->next!=NULL){
        slow=slow->next;
        fast=fast->next->next;
        if(slow==fast){
            return true;
        }
    }
    return false;
}
```

Saved | Ln 7, Col 4

Testcase | Test Result

[3,2,0,-4]

pos =

1

Output

true

Expected

true

Contribute a testcase

Type here to search

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