

LAB(2-12-2025)

INPUT:

Problem List

141. Linked List Cycle

Solved

Easy

Topics

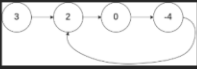
Companies

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.

Example 3:



Input: `head = [1]`, `pos = -1`
Output: `false`

Testcase

Test Result

Accepted

Runtime: 0 ms

Case 1

Case 2

Case 3

Input

head =

[3,2,0,-4]

pos =

1

Output

true

Expected

true

Contribute a testcase

Code

Auto

```
1 bool hasCycle(struct ListNode *head) {
2     if (head == NULL || head->next == NULL)
3         return false;
4     struct ListNode *slow = head;
5     struct ListNode *fast = head;
6     while (fast != NULL && fast->next != NULL) {
7         slow = slow->next;
8         fast = fast->next->next;
9         if (slow == fast)
10            return true;
11     }
12     return false;
13 }
```

Saved

Ln 1, Col 2

OUTPUT:

Problem List

Testcase

Test Result

Accepted

Runtime: 0 ms

Case 1

Case 2

Case 3

Input

head =

[3,2,0,-4]

pos =

1

Output

true

Expected

true

Contribute a testcase

Problem List

Submit

Premium

TestcaseTest Result

AcceptedRuntime: 0 ms

Case 1Case 2Case 3

Input

head =
[1,2]

pos =
0

Output

true

Expected

true

Contribute a testcase

Problem List

Submit

Premium

TestcaseTest Result

AcceptedRuntime: 0 ms

Case 1Case 2Case 3

Input

head =
[1]

pos =
-1

Output

false

Expected

false

Contribute a testcase