

CS_DataStructures[] ELinked List Cycle - LeetCodeLab prog B BST ImplementationInbox (545) - sravanthics24@leetcodem

leetcode.com/problems/linked-list-cycle/description/

Problem List<>>Solved

DescriptionAcceptedXEditorialSolutionsSubmissions

141. Linked List Cycle


EasyTopicsCompanies

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
Explanation: There is no cycle in the linked list.

17.1K469179 Online

Code

Auto

1/**
2 * Definition for singly-linked list.
3 * struct ListNode {
4 * int val;
5 * struct ListNode *next;
6 * };
7 */
8 bool hasCycle(struct ListNode *head) {
9 if (head == NULL || head->next == NULL)
10 return false;
11
12 struct ListNode *slow = head;
13 struct ListNode *fast = head;
14
15 while (fast != NULL && fast->next != NULL) {
16 slow = slow->next;
17 fast = fast->next->next;
18
19 if (slow == fast) {
20 return true;
21 }
22 }
23
24 return false;
25 }
26
27

SavedLn 1, Col 1

Testcase>Test Result

AcceptedRuntime: 0 ms

Case 1Case 2Case 3

Input

head =
[1]

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SavedLn 1, Col 1

Testcase>Test Result

AcceptedRuntime: 0 ms

Case 1Case 2Case 3

Input

head =
[1,2]

pos =
0

Output

true

Expected

true

Contribute a testcase


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Tested: head = [1,2,0,-4], pos = -1
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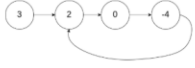
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