141. Linked List Cycle

Attempted

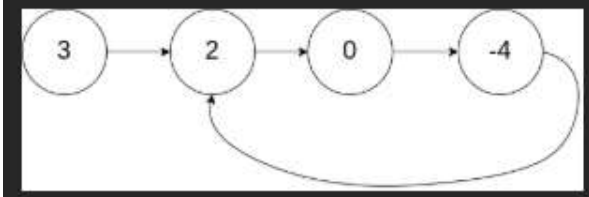
Easy | Topics | Companies

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.**

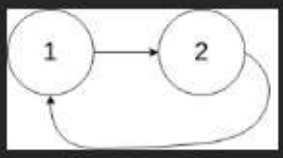
Return `true` *if there is a cycle in the linked list.* Otherwise, return `false`.

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
> **Explanation:** There is no cycle in the linked list.

Constraints:

- The number of the nodes in the list is in the range `[0, 10^4]`.

C Auto

```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
bool hasCycle(struct ListNode *head) {
    struct ListNode *s=head;
    struct ListNode *t=head;
    while(t!=NULL && t->next!=NULL){
        t=t->next->next;
        if(t==s){
            return true;
        }
        s=s->next;
    }
    return false;
}
```

Saved Ln 1, Col 1

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