# Linked List Cycle - LeetCode

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


141. Linked List Cycle

Easy

Topics

Companies

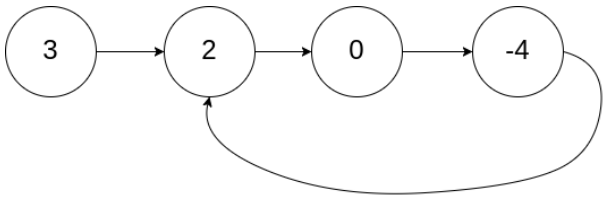
Given `head`, the head of a linked list, determine if the linked list has a cycle in it.

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`.

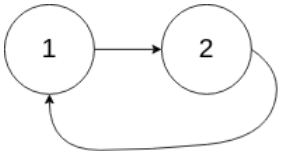
**Example 1:**

```
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.
```




**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]`.
- `-10^5 <= Node.val <= 10^5`
- `pos` is `-1` or a **valid index** in the linked-list.

**Follow up:** Can you solve it using `O(1)` (i.e. constant) memory?

Accepted

3.4M

Submissions

6.6M

Acceptance Rate

51.3%

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