

PROBLEM:-142

```
class Solution {  
  
public:  
  
    ListNode *detectCycle(ListNode *head) {  
  
        if (!head || !head->next) return NULL;  
  
        ListNode *slow = head, *fast = head;  
  
        while (fast && fast->next) {  
  
            slow = slow->next;  
  
            fast = fast->next->next;  
  
            if (slow == fast) break;  
  
        }  
  
        if (!fast || !fast->next) return NULL;  
  
        slow = head;  
  
        while (slow != fast) {  
  
            slow = slow->next;  
  
            fast = fast->next;  
  
        }  
  
        return slow;  
    }  
};
```

C++ Auto

```
1 class Solution {
2 public:
3     ListNode *detectCycle(ListNode *head) {
4         if (!head || !head->next) return NULL;
5         ListNode *slow = head, *fast = head;
6         while (fast && fast->next) {
7             slow = slow->next;
8             fast = fast->next->next;
9             if (slow == fast) break;
10        }
11        if (!fast || !fast->next) return NULL;
12        slow = head;
```

Saved

Testcase | Test Result

Accepted Runtime: 3 ms

Case 1

Case 2

Case 3

Input

head =

[3,2,0,-4]

pos =

1