

## **Return the node where the cycle starts in a LinkedList**

```
public ListNode detectCycle(ListNode a) {  
    ListNode slow = a; ListNode fast = a; boolean hasCycle = false;  
    while(fast != null && fast.next != null && slow != null){  
        slow = slow.next; fast = fast.next.next;  
        if(fast == slow) {hasCycle = true; break; }  
    }  
    if(!hasCycle) return null;  
    else{  
        fast = a;  
        while(slow != fast){  
            slow = slow.next; fast = fast.next;  
        }  
        return slow;  
    }  
}
```