876. Middle of the Linked List

Given a non-empty, singly linked list with head node `head`, return a middle node of linked list.

If there are two middle nodes, return the second middle node.

```
/**
 * Definition for singly-linked list.
 * public class ListNode {
 *     int val;
 *     ListNode next;
 *     ListNode(int x) { val = x; }
 * }
 */
class Solution {
    public ListNode middleNode(ListNode head) {
        ListNode slow_pointer = head;
        ListNode fast_pointer = head;

        if(head != null) {
            while(fast_pointer != null && fast_pointer.next != null) {
                fast_pointer = fast_pointer.next.next;
                slow_pointer = slow_pointer.next;
            }
        }

        return slow_pointer;
    }
}
```