

# Middle of the Linked List:

876. Middle of the Linked List

Easy


Topics

Companies

Given the `head` of a singly linked list, return the *middle node* of the linked list.

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

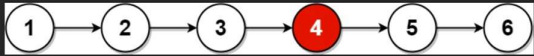
Example 1:



```
graph LR; 1((1)) --> 2((2)); 2 --> 3((3)); 3 --> 4((4)); 4 --> 5((5));
```

**Input:** head = [1,2,3,4,5]  
**Output:** [3,4,5]  
**Explanation:** The middle node of the list is node 3.

Example 2:



```
graph LR; 1((1)) --> 2((2)); 2 --> 3((3)); 3 --> 4((4)); 4 --> 5((5)); 5 --> 6((6));
```

**Input:** head = [1,2,3,4,5,6]  
**Output:** [4,5,6]  
**Explanation:** Since the list has two middle nodes with values 3 and 4, we return the second one.

```
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode* middleNode(struct ListNode* head) {
    if(head==NULL){
        return head;
    }

    struct ListNode * fast,*slow;
    fast=head;
    slow=head;
    while(fast!=NULL && fast->next!=NULL){
        fast=fast->next->next;
        slow=slow->next;
    }
    return slow;
}
```

## Output:

Input

head =  
[1,2,3,4,5]

Output

[3,4,5]

Expected

[3,4,5]