

Lab Program 4(B)

1)

Program - LeetCode program :-

Code :-

```
struct ListNode* middleNode(struct ListNode* head) {
    struct ListNode *slow = head;
    struct ListNode *fast = head;

    while (fast != NULL && fast->next != NULL) {
        slow = slow->next;
        fast = fast->next->next;
    }

    return slow;
}
```

OUTPUT :-

Case 1:-

☒ Testcase | [Test Result](#)

Accepted Runtime: 0 ms

☒ Case 1

☒ Case 2

Input

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

Output

[3,4,5]

Expected

[3,4,5]

Case 2 :-

The screenshot shows a LeetCode test result interface. At the top, there are tabs for 'Testcase' and 'Test Result', with 'Test Result' being the active tab. Below the tabs, the status 'Accepted' is displayed in green, followed by 'Runtime: 0 ms'. There are two tabs for test cases: 'Case 1' and 'Case 2', both marked with a green checkmark. The 'Case 2' tab is selected. Below the tabs, the 'Input' section shows 'head =' followed by '[1,2,3,4,5,6]'. The 'Output' section shows '[4,5,6]'. The 'Expected' section also shows '[4,5,6]'. At the bottom right, there is a link that says 'Contribute a testcase'.

2)

Program - LeetCode program :-

Code :-

```
struct ListNode* removeElements(struct ListNode* head, int val) {  
    while (head != NULL && head->val == val) {  
        head = head->next;  
    }  
  
    struct ListNode *curr = head;  
  
    while (curr != NULL && curr->next != NULL) {  
        if (curr->next->val == val) {  
            curr->next = curr->next->next;  
        } else {  
            curr = curr->next;  
        }  
    }  
  
    return head;  
}
```

OUTPUT :-

Case 1 :-

☒ Testcase | [>_ Test Result](#)

Accepted Runtime: 0 ms

☒ Case 1 ☒ Case 2 ☒ Case 3

Input

head =
[1,2,6,3,4,5,6]

val =
6

Output

[1,2,3,4,5]

Expected

[1,2,3,4,5]

Case 2 :-

☒ Testcase | [>_ Test Result](#)

Accepted Runtime: 0 ms

☒ Case 1 ☒ Case 2 ☒ Case 3

Input

head =
[]

val =
1

Output

[]

Expected

[]

Case 3 :-

☒ Testcase | ☒ Test Result

Accepted Runtime: 0 ms

☒ Case 1 ☒ Case 2 ☒ Case 3

Input

head =
[7,7,7,7]

val =
7

Output

[]

Expected

[]