Lab Program 5(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 :-

Testcase >_ Test Result

Accepted Runtime: 0 ms

☑ Case 1   ☑ Case 2

Input

head =

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

Output

[4,5,6]

Expected

[4,5,6]

2)

LeetCode program :-

Code :-

```c
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 : -

Accepted   Runtime: 0 ms

☑ Case 1   ☑ Case 2   ☑ **Case 3**

Input

head =

[7,7,7,7]

val =

7

Output

[]

Expected

[]