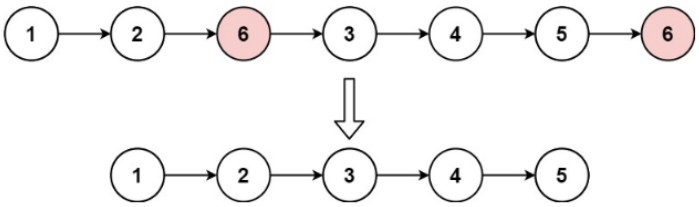
203. Remove Linked List Elements

Easy | Topics | Companies

Given the `head` of a linked list and an integer `val`, remove all the nodes of the linked list that has `Node.val == val`, and return *the new head*.

Example 1:




```
Input: head = [1,2,6,3,4,5,6], val = 6
Output: [1,2,3,4,5]
```

Example 2:

```
Input: head = [], val = 1
Output: []
```

Example 3:

```
Input: head = [7,7,7,7], val = 7
Output: []
```

C | Auto

```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode* removeElements(struct ListNode* head, int val) {
    while (head != NULL && head->val == val) {
        head = head->next;
    }

    struct ListNode* current = head;

    while (current != NULL && current->next != NULL) {
        if (current->next->val == val) {
            current->next = current->next->next;
        } else {
            current = current->next;
        }
    }

    return head;
}
```

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]

Testcase | Test Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

head =
[]

val =
1

Output

[]

Expected

[]

Testcase | Test Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

head =
[7,7,7,7]

val =
7

Output

[]

Expected

[]