

203. Remove Linked List Elements

Solved ✓

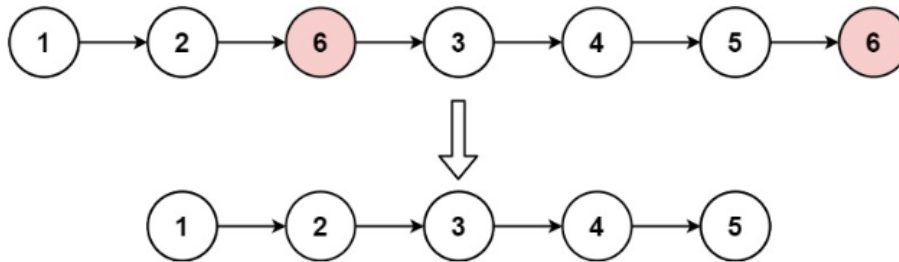
Easy

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: `[]`

</> Code

C ▾  Auto

```
1  /**
2  * Definition for singly-linked list.
3  * struct ListNode {
4  *     int val;
5  *     struct ListNode *next;
6  * };
7  */
8  struct ListNode* removeElements(struct ListNode* head, int val) {
9
10     struct ListNode* dummy = (struct ListNode*)malloc(sizeof(struct ListNode));
11     dummy->next = head;
12
13     struct ListNode* prev = dummy;
14     struct ListNode* curr = head;
15
16     while (curr != NULL)
17     {
18         if (curr->val == val) {
19             prev->next = curr->next;
20             free(curr);
21             curr = prev->next;
22         } else {
23             prev = curr;
24             curr = curr->next;
25         }
26     }
27     struct ListNode* newHead = dummy->next;
28     free(dummy);
29     return newHead;
30 }
31
32
```