```java
/**
 * Definition for singly-linked list.
 * public class ListNode {
 *     int val;
 *     ListNode next;
 *     ListNode(int x) { val = x; }
 * }
 */
class Solution {
    public ListNode removeElements(ListNode head, int val) {
        ListNode dh = new ListNode(0);
        dh.next = head;
        ListNode ptr1 = dh;
        ListNode ptr2 = head;

        while (ptr2 != null) {
            if (ptr2.val != val) {
                ptr1.next = ptr2;
                ptr1 = ptr1.next;
            }
            ptr2 = ptr2.next;
        }
        ptr1.next = null;
        return dh.next;
    }
}
```