083. Remove Duplicates from Sorted List

083 Remove Duplicates from Sorted List

- **Linked List**

Description

Given a sorted linked list, delete all duplicates such that each element appear only *once*.

For example,

Given `1->1->2`, return `1->2`.

Given `1->1->2->3->3`, return `1->2->3`.

1. Thought line

2. Linked List

```cpp
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     ListNode *next;
 *     ListNode(int x) : val(x), next(NULL) {}
 * };
 */
class Solution {
public:
    ListNode* deleteDuplicates(ListNode* head) {
        ListNode* dummyHead = new ListNode(0);
        dummyHead->next = head;
        ListNode* validatedPtr = dummyHead;

        while(head!=nullptr){
            while(head->next!=nullptr && head->next->val == head->val)
                head = head->next;
            validatedPtr->next = head;
            validatedPtr = validatedPtr->next;
            head = head->next;
        }
        validatedPtr->next = nullptr;
        return dummyHead->next;
    }
};
```