

86. Partition List

Medium

1044

263

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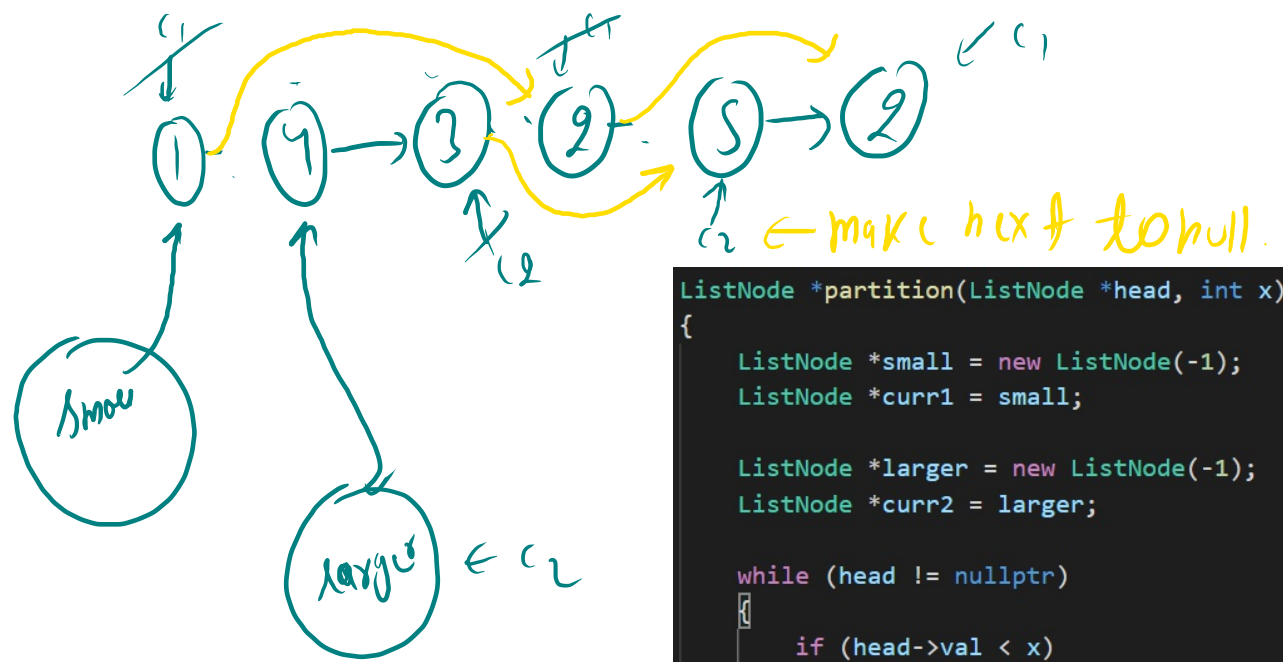
Given a linked list and a value x , partition it such that all nodes less than x come before nodes greater than or equal to x .

You should preserve the original relative order of the nodes in each of the two partitions.

Example:

Input: head = 1->4->3->2->5->2, $x = 3$

Output: 1->2->2->4->3->5



```
ListNode *partition(ListNode *head, int x)
{
    ListNode *small = new ListNode(-1);
    ListNode *curr1 = small;

    ListNode *larger = new ListNode(-1);
    ListNode *curr2 = larger;

    while (head != nullptr)
    {
        if (head->val < x)
        {
            curr1->next = head;
            curr1 = head;
        }
        else
        {
            curr2->next = head;
            curr2 = head;
        }
        head = head->next;
    }

    curr2->next = nullptr; // important
    curr1->next = larger->next;
    return small->next;
}
```