```
1
    /*Author: Bochen (mddboc@foxmail.com)
2
    Last Modified: Tue Apr 10 22:28:44 CST 2018*/
3
4
    /*Given a linked list, remove the nth node from the end of list and return its head.
5
6
    For example,
7
8
    Given linked list: 1->2->3->4->5, and n=2.
9
    After removing the second node from the end, the linked list becomes
10
            1 -> 2 -> 3 -> 5.
11
           Note:
12
           Given n will always be valid.
13
      Try to do this in one pass.*/
14
15
    import java.util.*;
    import java.lang.Math;
16
17
    import java.lang.System;
18
    import java.lang.Integer;
19
20
21
    public class Main {
22
23
    public static void main(String[] args) {
24
     ----int[] nums = \{5, 5, 3, 5, 1, -5, 1, -2\};
25
26
     Solution solution = new Solution();
27
    List<List<Integer>> receive = solution.fourSum(nums, 4);
28
29
30
    System.out.println("haha");
31
    . . . . . }
32
33
    }
34
35
    class ListNode {
36
37
    · · · int val;
    ListNode next;
38
39
40
    ListNode(int x) {
41
           val = x;
42
    . . . . . }
43
    }
44
45
    class Solution {
46
    public ListNode removeNthFromEnd(ListNode head, int n) {
47
     ListNode psudoHeadNode = new ListNode(0);
48
    psudoHeadNode.next = head;
49
50
51
     ListNode frontNode = psudoHeadNode, backNode = psudoHeadNode;
52
53
    for (int i = 0; i < n; i++) {
54
              frontNode = frontNode.next;
55
56
57
    while (frontNode.next != null) {
58
59
    frontNode = frontNode.next;
60
    backNode = backNode.next;
61
    62
63
    frontNode = backNode.next.next;
64
    backNode.next = frontNode;
65
66
    return psudoHeadNode.next;
67
    · · · · }
68
    }
```