

题目：给定一个链表，输出该链表中倒数第k个节点

```
public class B22 {  
  
    public static class ListNode{  
        public int val;  
        public ListNode next;  
        public ListNode(int val) {  
            this.val = val;  
        }  
    }  
  
    //这个题目是用前后指针的方法解决，让第一个指针先向前走k-1步，然后第二个指针和第一个指针同时向后走  
    public static ListNode findKTh(ListNode head, int k) {  
        if(head == null && k <= 0) {  
            return null;  
        }  
        ListNode pre = head;  
        ListNode ret = head;  
        int i = 1;  
  
        while (i <= k && pre != null) {  
            pre = pre.next;  
            i ++;  
        }  
  
        //这里是为了判断假如链表有5个元素，要找倒数第5个，即就是head，此时pre==null，要判断i>k，如果是，返回头  
        if(pre == null && i > k) {  
            return ret;  
        }else if(pre == null){  
            return null;  
        }  
  
        while(pre != null) {  
            pre = pre.next;  
            ret = ret.next;  
        }  
        return ret;  
    }  
  
    public static void main(String [] args) {  
        ListNode l1 = new ListNode(1), l2 = new ListNode(2), l3 = new ListNode(3), l4 = new ListNode(4), l5 =  
        l1.next = l2; l2.next = l3; l3.next = l4; l4.next = l5; l5.next = null;  
        ListNode result = findKTh(l1, 5);  
        System.out.println(result.val);  
    }  
}
```