

```

1  package LinkedList;
2
3  class FindLastKIndex{
4
5      public Node findLastKIndex(Node head, int lastKIndex) {
6
7          if (lastKIndex <= 0) {
8              return null;
9          }
10
11
12         Node slow = null;
13         Node fast = head;
14
15         for (int i = 0; i < lastKIndex - 1; i++) {
16
17             if ( fast != null ) {
18                 fast = fast.next;
19             } else {
20                 return null;
21             }
22         }
23         if ( fast == null ) {
24             return null;
25         }
26
27         fast = fast.next;
28         slow = head;
29         while ( fast != null ) {
30
31             slow = slow.next;
32             fast = fast.next;
33         }
34
35         return slow;
36     }
37
38     public static void main(String[] args) {
39
40         FindLastKIndex findLastKIndex = new FindLastKIndex();
41
42         Node head = new Node(0);
43         Node temp = head;
44         for (int i = 1; i < 6; i++ ) {
45             temp.next = new Node(i);
46             temp = temp.next;
47         }
48
49         Node result1 = findLastKIndex.findLastKIndex(head, 0);
50         Node result2 = findLastKIndex.findLastKIndex(head, -1);
51         Node result3 = findLastKIndex.findLastKIndex(head, 1);
52         Node result4 = findLastKIndex.findLastKIndex(head, 2);
53         Node result5 = findLastKIndex.findLastKIndex(head, 5);
54         Node result6 = findLastKIndex.findLastKIndex(head, 6);
55         Node result7 = findLastKIndex.findLastKIndex(head, 7);
56         Node result8 = findLastKIndex.findLastKIndex(head, 8);
57
58         System.out.println("haha");
59     }
60 }

```