

# Problem on **SLL**: Removing the N<sup>th</sup> Node from the End

You are asked to program this method:

```
public ListNode removeNthFromEnd(ListNode head, int n)
```

Remove the n<sup>th</sup> node from the end of the chain starting from head.

**Requirement:**  $n \leq$  number of nodes in the input chain

<https://leetcode.com/problems/remove-nth-node-from-end-of-list/>

```
@Test
public void test_1() {
    ListNode input =
        new ListNode(1,
            new ListNode(2,
                new ListNode(3,
                    new ListNode(4,
                        new ListNode(5, null))))));
    ListUtilities util = new ListUtilities();
    ListNode output = util.removeNthFromEnd(input, 2);
    assertTrue(input == output);
    assertTrue(input.val == 1);
    assertTrue(input.next.val == 2);
    assertTrue(input.next.next.val == 3);
    assertTrue(input.next.next.next.val == 5);
}
```

```
@Test
public void test_2() {
    ListNode input = new ListNode(1, null);
    ListUtilities util = new ListUtilities();
    ListNode output = util.removeNthFromEnd(input, 1);
    assertTrue(output == null);
}
```