Problem 1669: Merge In Between Linked Lists

Problem Information

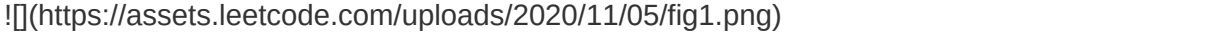
Difficulty: Medium
Acceptance Rate: 82.75%
Paid Only: No
Tags: Linked List

Problem Description

You are given two linked lists: `list1` and `list2` of sizes `n` and `m` respectively.

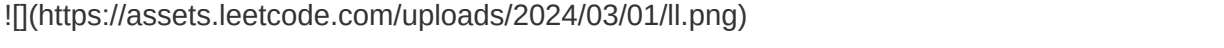
Remove `list1`'s nodes from the `ath` node to the `bth` node, and put `list2` in their place.

The blue edges and nodes in the following figure indicate the result:



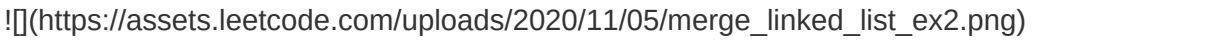
Build the result list and return its head.

Example 1:



Input: list1 = [10,1,13,6,9,5], a = 3, b = 4, list2 = [1000000,1000001,1000002] **Output:** [10,1,13,1000000,1000001,1000002,5] **Explanation:** We remove the nodes 3 and 4 and put the entire list2 in their place. The blue edges and nodes in the above figure indicate the result.

Example 2:



Input: list1 = [0,1,2,3,4,5,6], a = 2, b = 5, list2 = [1000000,1000001,1000002,1000003,1000004] **Output:** [0,1,1000000,1000001,1000002,1000003,1000004,6] **Explanation:** The blue edges and

nodes in the above figure indicate the result.

Constraints:

* `3 <= list1.length <= 104` * `1 <= a <= b < list1.length - 1` * `1 <= list2.length <= 104`

Code Snippets

C++:

```
/**
* Definition for singly-linked list.
* struct ListNode {
* int val;
* ListNode *next;
* ListNode() : val(0), next(nullptr) {}
* ListNode(int x) : val(x), next(nullptr) {}
* ListNode(int x, ListNode *next) : val(x), next(next) {}
* };
*/
class Solution {
public:
ListNode* mergeInBetween(ListNode* list1, int a, int b, ListNode* list2) {

}
};
```

Java:

```
/**
* Definition for singly-linked list.
* public class ListNode {
* int val;
* ListNode next;
* ListNode() {}
* ListNode(int val) { this.val = val; }
* ListNode(int val, ListNode next) { this.val = val; this.next = next; }
* }
*/
class Solution {
public ListNode mergeInBetween(ListNode list1, int a, int b, ListNode list2)
```

```
{

}
}
```

Python3:

```
# Definition for singly-linked list.
# class ListNode:
# def __init__(self, val=0, next=None):
# self.val = val
# self.next = next
class Solution:
def mergeInBetween(self, list1: ListNode, a: int, b: int, list2: ListNode) ->
ListNode:
```