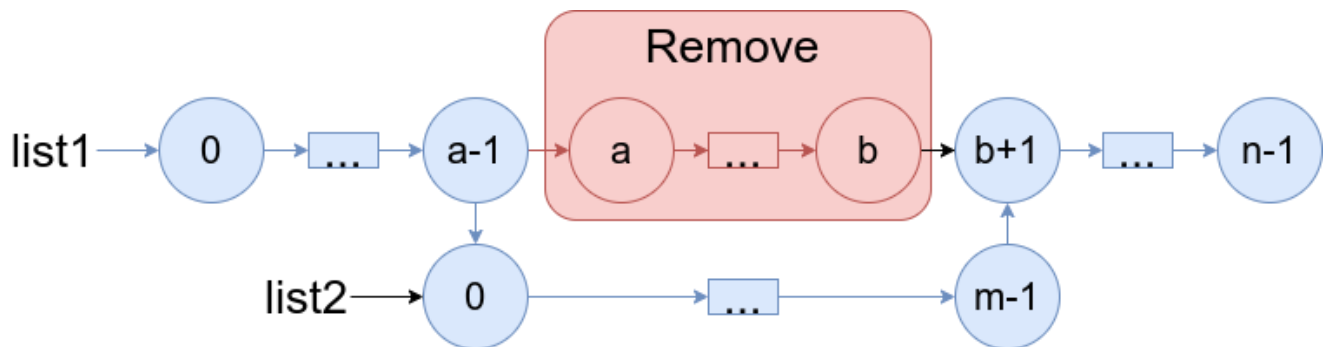


# 1669. Merge in Between Linked Lists

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

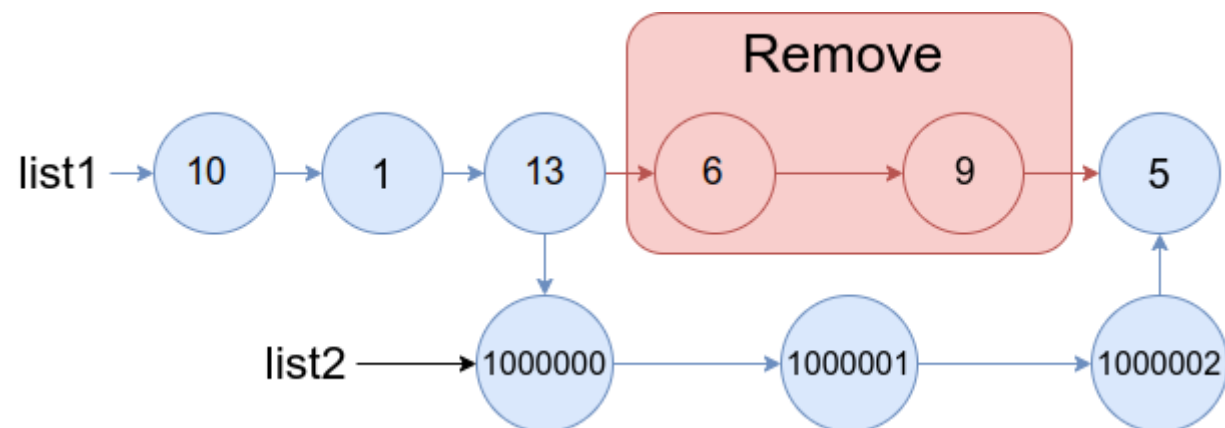
Remove `list1`'s nodes from the `a`th node to the `b`th node, and put `list2` in their place.

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



Build the result list and return its head.

**Example 1:**

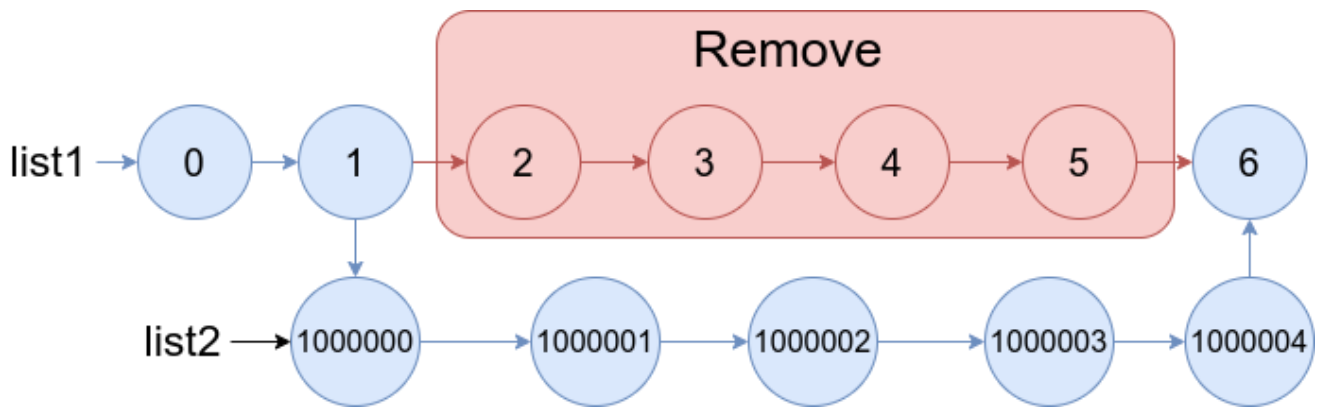


**Input:** `list1 = [10,1,13,6,9,5]`, `a = 3`, `b = 4`, `list2 = [1000000,1000001,1000002]`

**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:

- $3 \leq \text{list1.length} \leq 10^4$
- $1 \leq a \leq b < \text{list1.length} - 1$
- $1 \leq \text{list2.length} \leq 10^4$

```

class Solution {
    public ListNode mergeInBetween(ListNode list1, int a, int b, ListNode list2) {
        ListNode currNode = list1;
        int index = 0;

        while (index < a - 1) {
            currNode = currNode.next;
            index++;
        }

        ListNode front = currNode;

        while (index < b + 1) {
            currNode = currNode.next;
            index++;
        }

        ListNode rear = currNode;
        ListNode secondListTail = list2, secondListHead = list2;

        while (secondListTail.next != null) {
            secondListTail = secondListTail.next;
        }

        front.next = secondListHead;
        secondListTail.next = rear;
    }
}
  
```

```
        return list1;  
    }  
}
```