160. Intersection of Two Linked Lists

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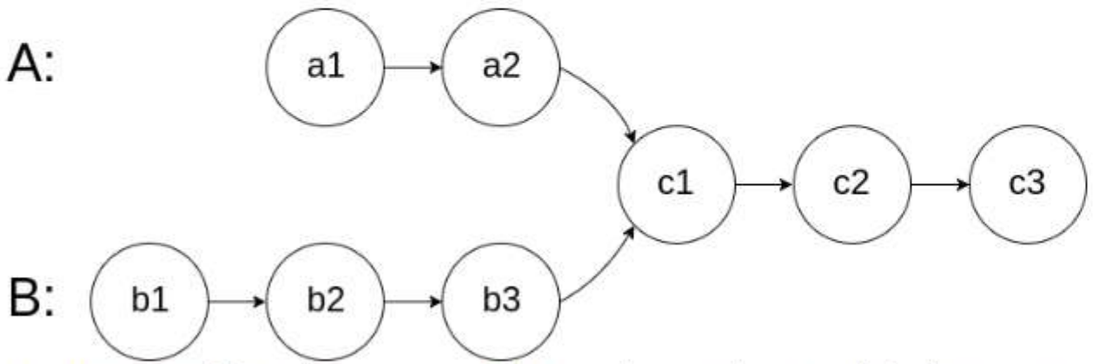
Given the heads of two singly linked-lists `headA` and `headB`, return *the node at which the two lists intersect*. If the two linked lists have no intersection at all, return `null`.

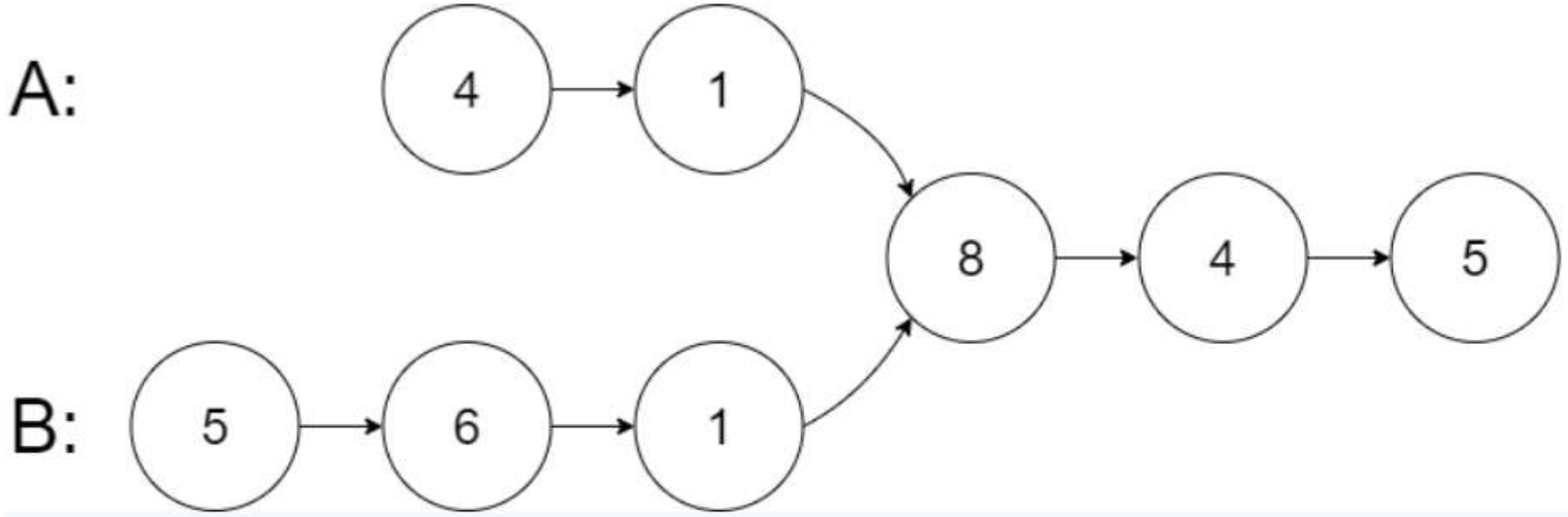
For example, the following two linked lists begin to intersect at node `c1`:



It is **guaranteed** that there are no cycles anywhere in the entire linked structure.

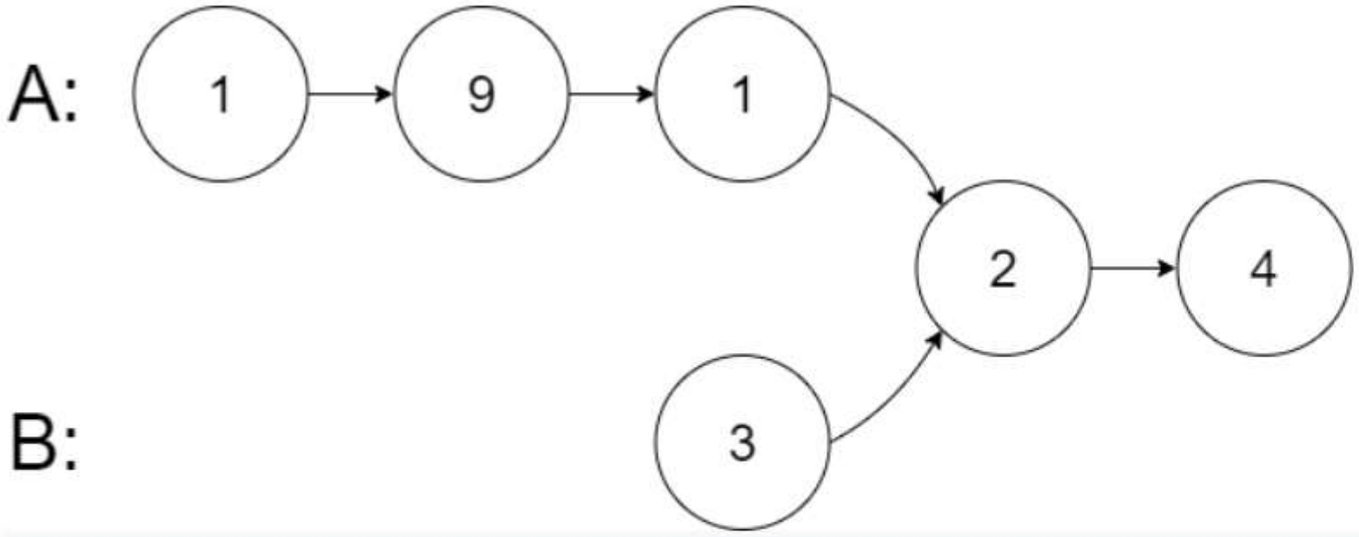
Note that the linked lists must **retain their original structure** after the function returns.

Example 1:



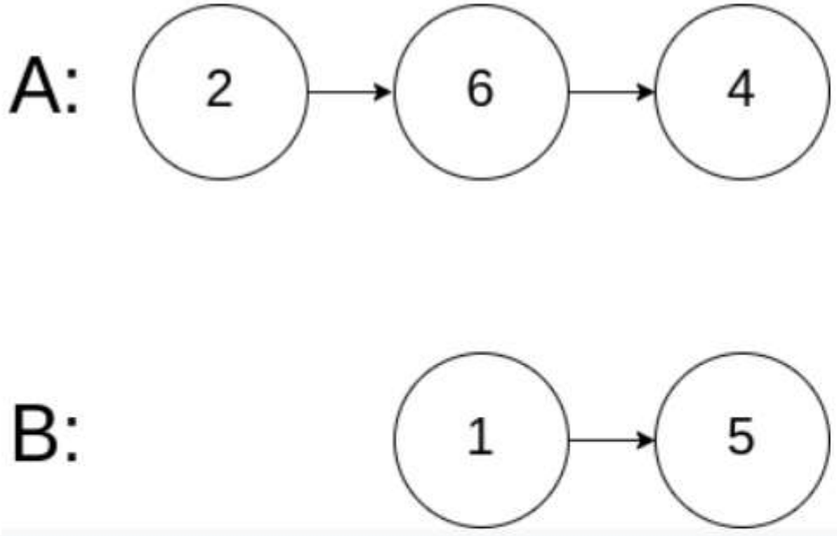
Input: intersectVal = 8, listA = [4,1,8,4,5], listB = [5,6,1,8,4,5], skipA = 2, skipB = 3
Output: Intersected at '8'
Explanation: The intersected node's value is 8 (note that this must not be 0 if the two lists intersect).
From the head of A, it reads as [4,1,8,4,5]. From the head of B, it reads as [5,6,1,8,4,5]. There are 2 nodes before the intersected node in A; There are 3 nodes before the intersected node in B.

Example 2:



Input: intersectVal = 2, listA = [1,9,1,2,4], listB = [3,2,4], skipA = 3, skipB = 1
Output: Intersected at '2'
Explanation: The intersected node's value is 2 (note that this must not be 0 if the two lists intersect).
From the head of A, it reads as [1,9,1,2,4]. From the head of B, it reads as [3,2,4]. There are 3 nodes before the intersected node in A; There are 1 node before the intersected node in B.

Example 3:



Input: intersectVal = 0, listA = [2,6,4], listB = [1,5], skipA = 3, skipB = 2
Output: No intersection
Explanation: From the head of A, it reads as [2,6,4]. From the head of B, it reads as [1,5]. Since the two lists do not intersect, intersectVal must be 0, while skipA and skipB can be arbitrary values.
Explanation: The two lists do not intersect, so return null.

Constraints:

- The number of nodes of `listA` is in the `m`.
- The number of nodes of `listB` is in the `n`.
- `0 <= m, n <= 3 * 10^4`
- `1 <= Node.val <= 10^5`
- `0 <= skipA <= m`
- `0 <= skipB <= n`
- `intersectVal` is `0` if `listA` and `listB` do not intersect.
- `intersectVal == listA[skipA + 1] == listB[skipB + 1]` if `listA` and `listB` intersect.

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