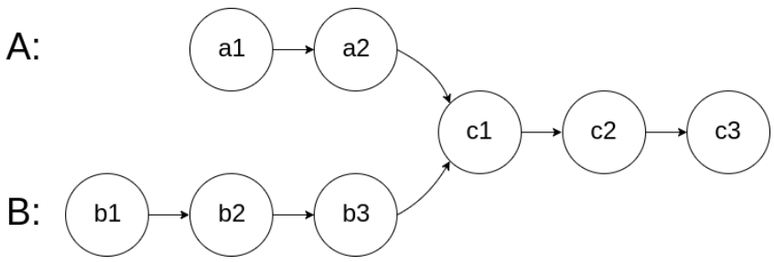
160. Intersection of Two Linked Lists

Easy Topics Companies

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 in

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



The test cases are generated such 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.

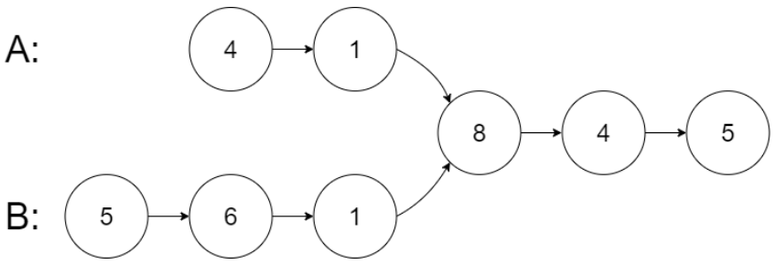
Custom Judge:

The inputs to the **judge** are given as follows (your program is **not** given these inputs):

- `intersectVal` - The value of the node where the intersection occurs. This is `0` if there is no intersected node.
- `listA` - The first linked list.
- `listB` - The second linked list.
- `skipA` - The number of nodes to skip ahead in `listA` (starting from the head) to get to the intersected node.
- `skipB` - The number of nodes to skip ahead in `listB` (starting from the head) to get to the intersected node.

The judge will then create the linked structure based on these inputs and pass the two heads, `headA` and `headB` to your program. If you cc

Example 1:

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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 inters
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 ar
– Note that the intersected node's value is not 1 because the nodes with value 1 in A and B (2nd nod
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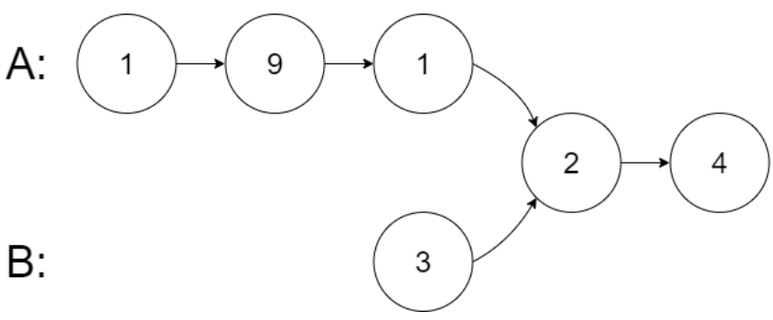
Example 2:

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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 inters
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