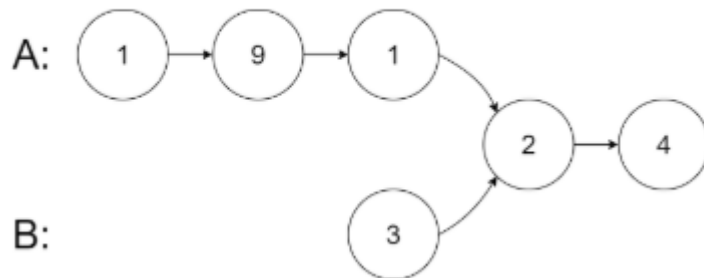


## 160. Intersection of Two Linked Lists

Write a program to find the node at which the intersection of two singly linked lists begins.

### Example 2:



Input: intersectVal = 2, listA = [1,9,1,2,4], listB = [3,2,4], skipA = 3, skipB = 1

Output: Reference of the node with value = 2

Input 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.

- 尋找交錯點，沒找到回傳 NULL

- Example

- A: 1 9 1 2 4 N 3 \*2\* 4

- B: 3 2 4 N 1 9 1 \*2\* 4

```
1  /**
2   * Definition for singly-linked list.
3   * struct ListNode {
4   *     int val;
5   *     struct ListNode *next;
6   * };
7   */
8  struct ListNode *getIntersectionNode(struct ListNode *headA,
9                                     struct ListNode *headB)
10 {
11     struct ListNode *p1 = headA;
12     struct ListNode *p2 = headB;
13
14     while (p1 != p2) {
15         p1 = p1 ? p1->next : headB;
16         p2 = p2 ? p2->next : headA;
17     }
18     return p1;
19 }
```

