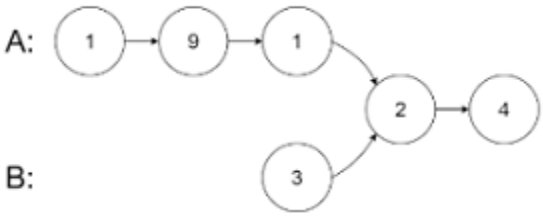
160. Intersection of Two Linked Lists

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`

```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode *getIntersectionNode(struct ListNode *headA,
                                     struct ListNode *headB)
{
    struct ListNode *p1 = headA;
    struct ListNode *p2 = headB;

    while (p1 != p2) {
        p1 = p1 ? p1->next : headB;
        p2 = p2 ? p2->next : headA;
    }
    return p1;
}
```