

Description

Solution

Discuss (999+)

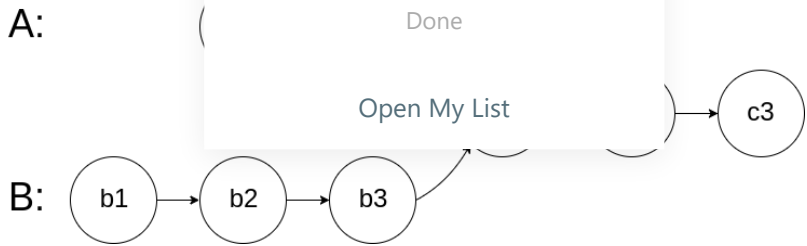
Submissions

160. Intersection of Two Linked Lists

Easy 4110 470 Add to List Share

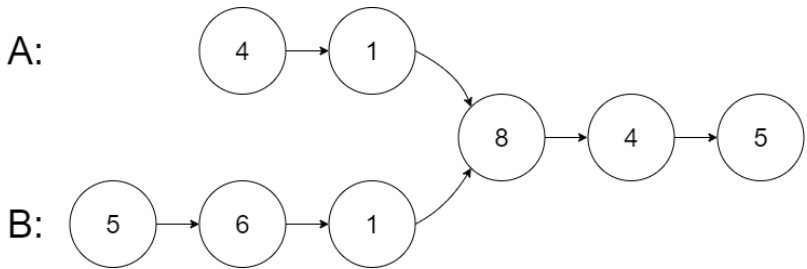
Write a program to find the intersection of two singly linked lists begins.

For example, the



begin to intersect at node c1.

Example 1:



Input: intersectVal = 8, listA = [4,1,8,4,5], listB = [5,6,1,8,4,5], skipA = 2, skipB = 3

Output: Reference of the node with value = 8

Input 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:

```
C++
return NULL;
ListNode* tail1;
ListNode* tail2;
tail1=headA;
tail2=headB;
int c1=1,c2=1;
while(tail1->next){
    tail1=tail1->next;
    c1++;
}
while(tail2->next){
    tail2=tail2->next;
    c2+=1;
}
if(tail1!=tail2)
    return NULL;
// cout<<"c1: "<<c1<<" ";
// cout<<"c2: "<<c2<<"\n";
if(c1>c2){
    for(int i=0;i<(c1-c2);i++)
        headA=headA->next;
}
else{
    for(int i=0;i<(c2-c1);i++)
        headB=headB->next;
}
while(headA->next){
    if(headA==headB)
        return headA;
    headA=headA->next;
    headB=headB->next;
}
return headA;
};
```

Testcase Run Code Result Debugger

Accepted Runtime: 0 ms

Your input

8
[4,1,8,4,5]

stdout

c1: 5 c2: 6

Output

Intersected at '8'

Diff

Expected

Intersected at '8'