

Intersection Point in Y Shaped Linked Lists

Given two singly linked lists of size **N** and **M**, write a program to get the point where two linked lists intersect each other.

Example 1:

Input:

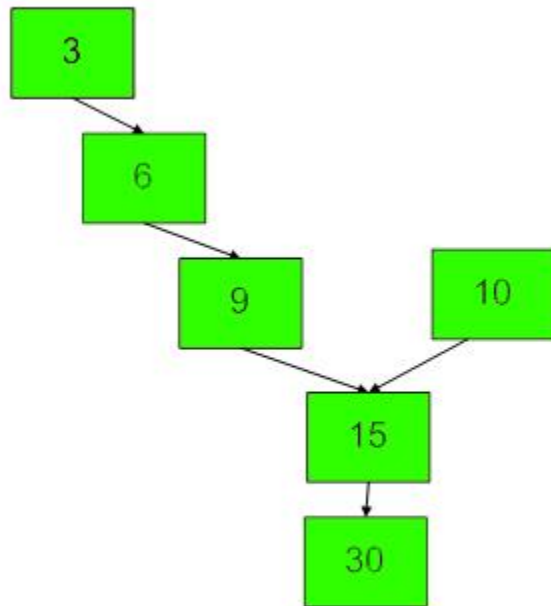
LinkedList1 = 3->6->9->common

LinkedList2 = 10->common

common = 15->30->NULL

Output: 15

Explanation:



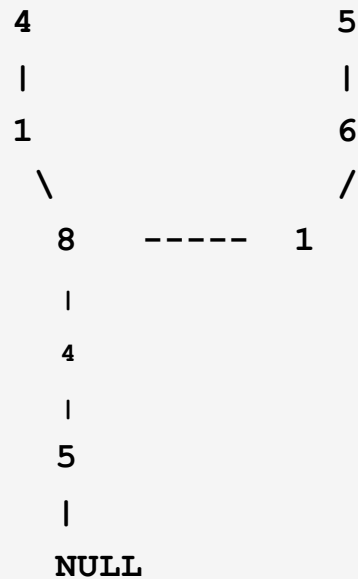
Example 2:

Input:

```
Linked List 1 = 4->1->common
Linked List 2 = 5->6->1->common
common = 8->4->5->NULL
```

Output: 8

Explanation:



Your Task:

You don't need to read input or print anything. The task is to complete the function **intersectPoint()** which takes the pointer to the head of linklist1(**head1**) and linklist2(**head2**) as input parameters and returns data value of a node where two linked lists intersect. If linked list do not merge at any point, then it should return **-1**.

Challenge : Try to solve the problem without using any extra space.

Expected Time Complexity: $O(N+M)$

Expected Auxiliary Space: $O(1)$

Constraints:

$$1 \leq N + M \leq 2 \cdot 10^5$$

$$-1000 \leq \text{value} \leq 1000$$