

## Quick Sort Algorithm

```

int arr[] = { 3, 1, 2, 5, 8, 7, 6 };
int s = 0;
int pivot = arr[s];
count = 0; (2)
while (i <= r) {
    if (arr[i] <= pivot) {
        count++;
        // Recursion
    }
}
Swap(arr[pivotIndex], arr[s])

```

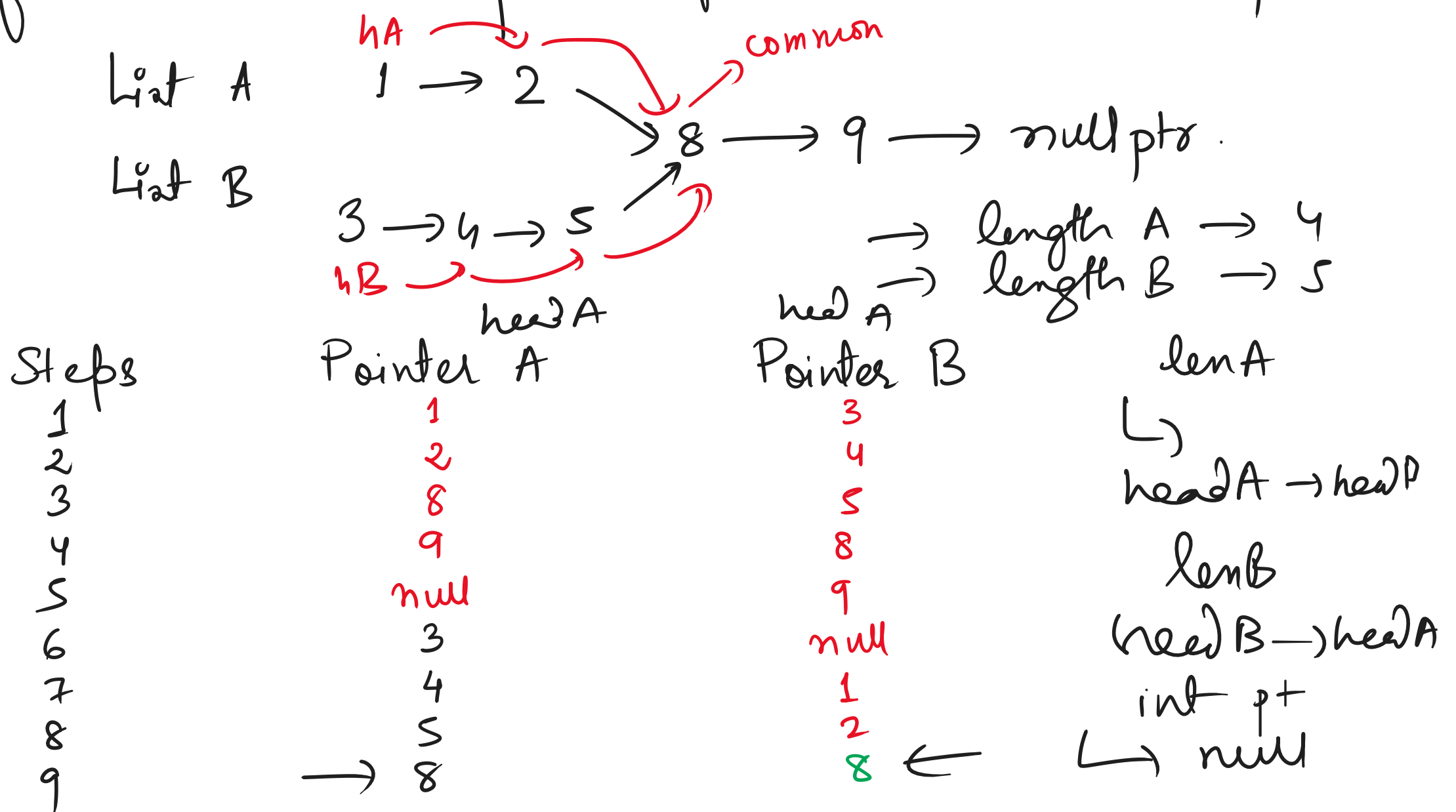
$\text{pivotIndex} = [s + \text{count}]$   
 $= 0 + 2 = 2$   
 array: 0 2, 1, 3, 5, 8, 7, 6 9  
 pivot is at index 2 (value 1)

while (i < pivotIndex && j > pivotIndex) {  
     while (arr[i] < pivot) i++;  
     while (arr[j] > pivot) j--;  
 }

Give me one soln, I will give you the rest.

## Interview Questions on Linked Lists :->

Capgemini :-> Given two linked lists list A & list B find the intersection point. If not, return nullptr.



**\*\* Imp (TCS/Accenture/Math Co)**

## Floyd's Algorithm for Cycle Detection in SLL

List :-> 1 → 2 → 3 → 4 → 5 → 3 (cycle)

5 is connected back to 3 forming a cycle.

true or false;

Steps

1  
2  
3  
4

Slow

1  
2  
3  
4  
5

Fast

1  
3  
5  
4  
5