



Dashboard > Data Structures > Linked Lists > Merge two sorted linked lists

Points: 235 Rank: 34184

# Merge two sorted linked lists **■**





This challenge is part of a tutorial track by MyCodeSchool

You're given the pointer to the head nodes of two sorted linked lists. The data in both lists will be sorted in ascending order. Change the next pointers to obtain a single, merged linked list which also has data in ascending order. Either head pointer given may be null meaning that the corresponding list is empty.

## **Input Format**

You have to complete the Node\* MergeLists(Node\* headA, Node\* headB) method which takes two arguments - the heads of the two sorted linked lists to merge. You should NOT read any input from stdin/console.

## **Output Format**

Change the next pointer of individual nodes so that nodes from both lists are merged into a single list. Then return the head of this merged list. Do NOT print anything to stdout/console.

#### Sample Input

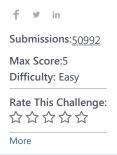
```
1 -> 3 -> 5 -> 6 -> NULL
2 -> 4 -> 7 -> NULL
15 -> NULL
12 -> NULL
1 -> 2 -> NULL
```

### **Sample Output**

```
1 -> 2 -> 3 -> 4 -> 5 -> 6 -> 7 -> NULL
12 -> 15 -> NULL
1 -> 2 -> NULL
```

#### **Explanation**

1. We merge elements in both list in sorted order and output.



Current Buffer (saved locally, editable)  $\ \mathscr{V} \ \mathfrak{O}$ 







```
1 ▼ /*
 2
      Merge two linked lists
 3
      head pointer input could be NULL as well for empty list
      Node is defined as
 4
 5
      class Node {
         int data;
 6
 7
         Node next;
 8
      }
 9
10
11 v Node mergeLists(Node headA, Node headB) {
         // This is a "method-only" submission.
12
13
         // You only need to complete this method
14
15
    }
16
                                                                                                                   Line: 1 Col: 1
                      Test against custom input
                                                                                                       Run Code
                                                                                                                    Submit Code
1 Upload Code as File
```

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