

# 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

NULL
1 -> 2 -> NULL
```

## Sample Output

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

## Explanation

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