

Your code is to Prepare two sorted linked lists A and B.

Merge the two lists A and B in a one sorted list. The list should be made by splicing together the nodes of the first two lists. Return the head of the merged linked list (A).

Example 1:

Input: 4,2,1, #,3, 4,1,#

Output:

A = [1,2,4], B = [1,3,4]

A=[1,1,2,3,4,4]

Example 2:

Input: #,#

Output:

A = [], B = []

A= []

Example 3:

Input: #,0,#

Output:

A = [], B = [0]

A=[0]

NB.: Using Recursion is preferred and higher weightage.

(a) State the complexity of your algorithm and justify.