

# Insertion Sort for Singly Linked List

Given a singly linked list, sort the list (in **ascending** order) using **insertion sort** algorithm.

## Example 1:

### Input:

N = 10

Linked List = 30->23->28->30->11->14->  
19->16->21->25

### Output :

11 14 16 19 21 23 25 28 30 30

### Explanation :

The resultant linked list is sorted.

## Example 2:

### Input :

N = 7

Linked List=19->20->16->24->12->29->30

### Output :

12 16 19 20 24 29 30

### Explanation :

The resultant linked list is sorted.

## Your task:

You don't need to read input or print anything. Your task is to complete the function **insertionSort()** which takes the head of the linked list, sorts the list using insertion sort algorithm and returns the head of the sorted linked list.

**Expected Time Complexity :**  $O(n^2)$

**Expected Auxiliary Space :**  $O(1)$

## Constraints:

$0 \leq n \leq 5 \cdot 10^3$