

# Delete nodes having greater value on right

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Given a singly linked list, remove all the nodes which have a greater value on its following nodes.

## Example 1:

```
Input: LinkedList = 12->15->10->11->5->6->2->3
Output: 15 11 6 3 Explanation: Since, 12, 10, 5 and 2 are
the elements which have greater elements
on the following nodes. So, after deleting
them, the linked list would like be 15,
11, 6, 3.
```

## Example 2:

```
Input: LinkedList = 10->20->30->40->50->60
Output: 60
```

## Your Task:

The task is to complete the function **compute()** which should modify the list as required and return the head of the modified linked list. The **printing** is done by the **driver** code,

**Expected Time Complexity:**  $O(N)$

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

## Constraints:

$1 \leq \text{size of linked list} \leq 1000$

$1 \leq \text{element of linked list} \leq 1000$

**Note:** Try to solve the problem without using any extra space.

```
def compute(self, head) :
    #Your code here
    if head is None or head.next is None:
        return head
    dummyHead = Node(-1)
    prev = dummyHead
    head = self.reverse(head)
    curr = head
    maxEle = 0
    while curr!=None:
        if curr.data>=maxEle:
            prev.next = curr
            prev = curr
```

```
        maxEle = curr.data
    curr = curr.next
    if prev.next!=None:
        prev.next = None
    dummyHead.next = self.reverse(dummyHead.next)
    return dummyHead.next
```