

## Nishit Prakash Tare s2-43

```
class LL:
    def __init__(self):
        self.head = None
        self.tail = None

    class Node:
        def __init__(self, value):
            self.value = value
            self.next = None

    def insertNode(self, value):
        new_node = self.Node(value)
        if self.head is None:
            self.head = new_node
            self.tail = new_node
            return
        self.tail.next = new_node
        self.tail = new_node

    def printLL(self):
        cnode = self.head
        while cnode:
            print(cnode.value, end=" ")
            cnode = cnode.next
        print()

    def rotateLL(self, k):
        if not self.head or k == 0:
            return

        length = 1
        temp = self.head
        while temp.next:
            temp = temp.next
            length += 1

        k = k % length
        if k == 0:
            return

        prev = None
        new_tail = self.head
        for _ in range(length - k):
            prev = new_tail
            new_tail = new_tail.next

        prev.next = None
        temp.next = self.head
```

```
        self.head = new_tail
        self.tail = prev

list_values = [1, 2, 3, 4, 5]
ll = LL()
for i in list_values:
    ll.insertNode(i)

ll.printLL()
ll.rotateLL(2)
ll.printLL()

1 2 3 4 5
4 5 1 2 3
```