### Reverse a linked list(20 times asked)

Given a linked list of **N**nodes. The task is to reverse this list.

**Example 1:**

**Input:**

LinkedList: 1->2->3->4->5->6

**Output:** 6 5 4 3 2 1

**Explanation:** After reversing the list,

elements are 6->5->4->3->2->1.

**Example 2:**

**Input:**

LinkedList: 2->7->8->9->10

**Output:** 10 9 8 7 2

**Explanation:** After reversing the list,

elements are 10->9->8->7->2.

**Your Task:**  
The task is to complete the function **reverseList**() with head reference as the only argument and should return new head after reversing the list.

**Expected Time Complexity:**O(N).  
**Expected Auxiliary Space:**O(1).

**Constraints:**  
1 <= N <= 104

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//{ Driver Code Starts

import java.util.\*;

import java.io.\*;

class Node{

int data;

Node next;

Node(int x){

data = x;

next = null;

}

}

class CodingMaxima{

static void printList(Node node)

{

while (node != null)

{

System.out.print(node.data + " ");

node = node.next;

}

System.out.println();

}

public static void main(String args[]) throws IOException {

Scanner sc = new Scanner(System.in);

int t = sc.nextInt();

while(t > 0){

int n = sc.nextInt();

Node head = new Node(sc.nextInt());

Node tail = head;

for(int i=0; i<n-1; i++)

{

tail.next = new Node(sc.nextInt());

tail = tail.next;

}

Solution ob = new Solution();

head = ob.reverseList(head);

printList(head);

t--;

}

}

}

// } Driver Code Ends

class Solution

{

//Function to reverse a linked list.

Node reverseList(Node head)

{

Node prev = null;

Node current = head;

Node next = null;

while (current != null) {

next = current.next;

current.next = prev;

prev = current;

current = next;

}

head = prev;

return head;

}

}