**“Merge Two Sorted Linked Lists”**

import java.util.\*;

class ListNode {

int val;

ListNode next;

ListNode() {}

ListNode(int val) {

this.val = val;

}

ListNode(int val, ListNode next) {

this.val = val;

this.next = next;

}

}

class Main {

public ListNode mergeTwoLists(ListNode list1, ListNode list2) {

if(list1 == null) return list2;

if(list2 == null) return list1;

ListNode head, tmp;

if(list1.val < list2.val) {

tmp = list1;

list1 = list1.next;

}else {

tmp = list2;

list2 = list2.next;

}

head = tmp;

while(list1 != null && list2 != null) {

if(list1.val <= list2.val) {

tmp.next = list1;

list1 = list1.next;

} else {

tmp.next = list2;

list2 = list2.next;

}

tmp = tmp.next;

}

tmp.next = (list1 != null) ? list1 : list2;

return head;

}

public static void main(String args[]) {

ListNode l1 = new ListNode(1, new ListNode(3, new ListNode(5)));

ListNode l2 = new ListNode(2, new ListNode(4, new ListNode(6)));

Main sol = new Main();

ListNode merged = sol.mergeTwoLists(l1, l2);

while (merged != null) {

System.out.print(merged.val + " ");

merged = merged.next;

}

}

}