```java
import java.util.Scanner;

public class Lab3_Pro2_64010009 {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        String list1_str, list2_str;

        while (true) {

            System.out.print("Enter list1: ");
            list1_str = scanner.nextLine();

            if (!list1_str.isBlank() && list1_str.replace(" ", "").matches("[0-9]+") && isSorted(stringToList(list1_str)))
                break;

            System.out.println("ERROR: invalid input");
        }
        while (true) {

            System.out.print("Enter list2: ");
            list2_str = scanner.nextLine();

            if (!list2_str.isBlank() && list2_str.replace(" ", "").matches("[0-9]+") && isSorted(stringToList(list2_str)))
                break;

            System.out.println("ERROR: invalid input");
        }
        scanner.close();

        int[] list1 = stringToList(list1_str);
        int[] list2 = stringToList(list2_str);

        int[] merged_list = merge(list1, list2);

        System.out.print("The merged list is ");
        for (int element : merged_list) System.out.print(element + " ");
    }
    public static int[] merge(int[] list1, int[] list2) {

        int[] merge_list = new int[list1.length + list2.length];

        int list1_ptr = 0;
        int list2_ptr = 0;

        while (list1_ptr < list1.length && list2_ptr < list2.length)
            merge_list[list1_ptr + list2_ptr] = list1[list1_ptr] < list2[list2_ptr] ? list1[list1_ptr++] : list2[list2_ptr++];

        while (list1_ptr < list1.length)
            merge_list[list1_ptr + list2_ptr] = list1[list1_ptr++];

        while (list2_ptr < list2.length)
            merge_list[list1_ptr + list2_ptr] = list2[list2_ptr++];

        return merge_list;
    }
    public static boolean isSorted(int[] sorted_list) {

        if (sorted_list.length == 1) return true;

        int temp = sorted_list[0];
        for (int i = 1; i < sorted_list.length; i++) {

            if (sorted_list[i] < temp) return false;
            temp = sorted_list[i];
        }

        return true;
    }
    public static int[] stringToList(String list_str) {

        String[] list_arr = list_str.trim().split(" ");
        int[] list = new int[list_arr.length];

        for (int i = 0; i < list.length; i++) list[i] = Integer.parseInt(list_arr[i]);

        return list;
    }
}
```