

Given **K** sorted linked lists each of size **N**. The task is to merge them in such a way that after merging they will be sorted.

Input:

First line of input contains number of testcases T. For each testcase, first line of input contains number of linked lists and next line contains data of elements of all K linked lists, with first element as N, the length of linked list and next N elements for the same linked list.

Output:

Print the merged linked list.

Constraints

$1 \leq T \leq 50$

$1 \leq N \leq 10^3$

Example:**Input**

1

4

3 1 2 3 2 4 5 2 5 6 2 7 8

Output:

1 2 3 4 5 5 6 7 8

Explanation

Testcase 1: The test case has 4 sorted linked list of size 3, 2, 2, 2

1st list 1 -> 2-> 3

2nd list 4->5

3rd list 5->6

4th list 7->8

The merged list will be 1->2->3->4->5->5->6->7->8.