Graded Lab 1 (P1 batch)

You have an array containing N integers in the range (-2^9, 2^9). Implement quicksort algorithm to arrange contents of the array in increasing order. You are required to show the array contents after completing each iterations.

Input:

The first line of the input contains a single integer $T \leq 10$ denoting the number of test cases. The description of the T test cases follows:

Line 1 contains an integer N ($0 \leq N \leq 1000$), the size of an array.

Line 2 contains N space separated integers, the contents of an array.

Output:

Output of each intermediate step should be on a separate line. Each line should have N space separated integers, i.e. the contents of an array.

Test cases

Sample Input:

2
9
2 7 4 -30 5 3 0 1
6
10 7 4 -2 0 -10

Sample Output:

-30 0 1 2 3 5 4 7
-10 -2 0 4 7 10