



Statement

Solution

Given  $N$  space separated integers, please perform the following operations

- Find the unique elements of the array  $A$  - store it as the list *unique*, i.e. create a list *unique* after removing all duplicates from the original array  $A$
- Sort the list *unique* in an ascending order.
- Find the frequency or occurrence of each element of the array *unique* in the array  $A$  - store it as the list *freq*.
- Output the values in the lists *unique* and *freq*

Input Format

- The first line of input will contain a single integer  $T$ , denoting the number of test cases.
- Each test case consists of a two lines of input containing
  - The 1<sup>st</sup> line contains the integer  $N$
  - The 2<sup>nd</sup> line contains  $N$  space separated integers - denoting the array  $A$

Output Format

For each test case, output the following

- The sorted list *unique* on the 1<sup>st</sup> line
- The list *freq* on the 2<sup>nd</sup> line

Sample 1:

Input	Output
2	1 2 3 4 5
5	1 1 1 1 1
5 2 4 1 3	-7 -3 -2 3
6	1 1 1 3
3 -3 3 -2 3 -7	

Explanation:

Test case 2

- The unique elements of the list are -7, -3, -2 and 3
- The frequency of the elements in  $A$  are 1, 1, 1 and 3 respectively