

Distinct value

Given n integers a_0, a_1, \dots, a_{n-1} . Print all distinct elements of the given list in increasing order

Input

+ The first line is the number of testcases T ($1 \leq T \leq 10$). Each line in the following T lines describes a test case:

+ Each test case starts with a positive integer n and the sequence a_0, a_1, \dots, a_{n-1} . Numbers are separated by a space.

Output

The sequence of distinct values. The numbers are sorted in ascending order and separated by a space.

Example

Input:

2

5 1 2 3 4 4

5 5 4 9 10 2

Output:

1 2 3

2 4 5 9 10