

Alternative Sorting

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Given an array `Arr[]` of N **distinct** integers, print the array in such a way that the first element is first maximum and second element is first minimum and so on.

Input:

First line of input contains a single integer T which denotes the number of test cases. Then T test case follows. First line of each test case contains a single integer N which denotes the number of elements in the array. Second line of each test case contains N space separated integers.

Output:

For each test case print the given array in such a way that the first element is first maximum and second element is first minimum and so on.

Constraints:

$$1 \leq T \leq 100$$

$$1 \leq N \leq 10^4$$

$$1 \leq \text{Arr}[i] \leq 10^5$$

Example:

Input:

2

7

7 1 2 3 4 5 6

8

1 6 9 4 3 7 8 2

Output:

7 1 6 2 5 4 3

9 1 8 2 7 3 6 4