

Zig Zag Sequence



You will be given an array a of n distinct integers. You have to transform the array into a zig zag sequence by permuting the array elements. A sequence will be called a zig zag sequence if the first k elements in the sequence are in increasing order and the last k elements are in decreasing order, where $k = (n + 1)/2$.

For example let's say $a = [2, 3, 5, 1, 4]$. Now if we permute the array like this $[1, 4, 5, 3, 2]$ then it'll become a zig zag sequence.

Note: You can modify at most *three* lines in the given code and you cannot add or remove lines to the code.

To restore the original code in the editor, create a new buffer by clicking on the top left icon in the editor.

Input Format

The first line contains t the number of test cases. The first line of each test case contains an integer n . Then next line of the test case contains n elements of array a .

Constraints

$$1 \leq t \leq 20$$

$$1 \leq n \leq 10000 \text{ (} n \text{ is always odd)}$$

$$1 \leq a_i \leq 10^9$$

Output Format

For each test cases, print the elements of the transformed zig zag sequence in a single line.

Sample Input 0

```
1
7
1 2 3 4 5 6 7
```

Sample Output 0

```
1 2 3 7 6 5 4
```