

Given an array **arr** of distinct elements of size **N**, the task is to rearrange the elements of the array in a zig-zag fashion so that the converted array should be in the below form:

$$\text{arr}[0] < \text{arr}[1] > \text{arr}[2] < \text{arr}[3] > \text{arr}[4] < \dots \text{arr}[n-2] < \text{arr}[n-1] > \text{arr}[n].$$

**NOTE:** If your transformation is correct, the output will be 1 else the output will be 0.

**Example 1:**

**Input:**

**N** = 7

**Arr[]** = {4, 3, 7, 8, 6, 2, 1}

**Output:** 3 7 4 8 2 6 1

**Explanation:** 3 < 7 > 4 < 8 > 2 < 6 > 1

**Example 2:**

**Input:**

**N** = 4

**Arr[]** = {1, 4, 3, 2}

**Output:** 1 4 2 3

**Explanation:** 1 < 4 > 2 < 3

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **zigZag()** which takes the array of integers **arr** and **n** as parameters and returns void. You need to modify the array itself.

**Expected Time Complexity:**  $O(N)$

**Expected Auxiliary Space:**  $O(1)$

**Constraints:**

$$1 \leq N \leq 10^6$$

$$0 \leq \text{Arr}_i \leq 10^9$$