**Wavy Sort**

**Problem description**

An array is called wave array if all it’s elements are arranged in a wave-like pattern which is as follows:

ar[0] >= ar[1] <= ar[2] >= ar[3] <= ar[4] >= ar[5] <= ...and so on

An array **ar[ ]** of **N** positive integers is being given and you have to sort it into a wave array.

**Input Format**

First line contains the size of the array, and the second line contains the array itself.

**Output Format**

The sorted wave array is printed as output. Each element of the array is space separated.

**Constraints**

1<= **N**<=106, 1<= **ar[i]** <= 106, where **i** is the array-index.

**Sample Input**

4

1 2 3 4

**Sample Output**

2 1 4 3

**Explanation**

The array elements have been sorted as per the pattern discussed above.

**HINT**- Swap adjacent elements.