Q2. Reordering Array (30 marks):

You are required to reorder the elements of an array with the following instructions:

(1) All the element(s) with the smallest value will be listed at the beginning of the array.
(2) All the element(s) with the largest value will be listed at the end of the array.
(3) The remaining elements will be listed in the relative order as they appear in the original array.

The example below shows the original array content and the reordered array content.

Original Array:

[6, 10, 8, 0, 3, 10, 0, 10, 1]

Reordered Array:

[0, 0, 6, 8, 3, 1, 10, 10, 10]

Write a programme to

Input, in sequence

X, the number of elements in the array, where $1 \le X \le 50$; and subsequently,

X **integers** that represent the elements of the array, respectively.

Output, the order of the elements in the reordered array, following the three instructions given in the above. Please note that each two consecutive elements in the array will be separated by a space.

试题 2. 重新排序数组（30 分）：

请按照以下规定重新排列一数组里的元素：

(1) 具有最小值的所有元素将排在数组的开头。

(2) 具有最大值的所有元素将排在数组的末尾。

(3) 其余元素将按照它们在原始数组中出现的相对顺序排列。

下面的示例显示了原始数组内容和重新排序的数组内容。

原始数组：

[6, 10, 8, 0, 3, 10, 0, 10, 1]

重新排序后的数组：

[0, 0, 6, 8, 3, 1, 10, 10, 10]

试写一程式以

依序输入

X，代表了数组里元素的数目，其中 $1 \le X \le 50$；接着，

X 个整数，分别代表了数组里的元素。

输出，遵循上面列出的三个规定重新排序后、数组元素的顺序。请注意，两个相邻的元素须由一空格分隔。

Example (例子)

Input (输入)	Output (输出)
9 6 10 8 0 3 10 0 10 1	0 0 6 8 3 1 10 10 10
15 -7 9 -6 5 10 -7 0 7 12 6 8 1 -6 -7 -7	-7 -7 -7 -7 9 -6 5 10 0 7 6 8 1 -6 12
7 -2 6 6 -2 6 -2 6	-2 -2 -2 6 6 6 6
5 9 9 9 9 9	9 9 9 9 9
10 1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
20 88 9 3 -1 -6 -6 88 23 16 0 88 88 -6 0 1 37 66 15 -2 -6	-6 -6 -6 -6 9 3 -1 23 16 0 0 1 37 66 15 -2 88 88 88 88