1. The elements of the output array must be in non-decreasing order.

Input: 3,9,7,2,1,6,5,4  
Output: 0,0,0,0,0,0,0,0

2. The elements of the output array must be in non-decreasing order, and the output array must not contain any value that was not contained in the input array.

Input: 3,9,7,2,1,6,5,4  
Output: 3,3,3,3,3,3,3,3

3. The elements of the output array must be in non-decreasing order, and the output array must not contain any value that was not contained in the input array, and the output array must contain every value that was contained in the input array.

Input: 2,1,2,3,4,2,4,5,7  
Output: 1,2,3,4,5,7

4. The elements of the output array must be in non-decreasing order, and the output array must not contain any value that was not contained in the input array, and the output array must contain every value that was contained in the input array, and the input and output array must be of the same size.

Input: 2,1,2,3,4,2,4,5,7  
Output: 1,1,1,2,3,4,5,7

5. The elements of the output array must be in non-decreasing order, and the output array must not contain any value that was not contained in the input array, and the output array must contain every value that was contained in the input array, and the input and output array must be of the same size, and the multiplicities of the numbers in the input and output must be the same.

I think this works, do you agree?