912. Sort an Array

Description

Given an array of integers `nums` , sort the array in ascending order and return it.

You must solve the problem **without using any built-in** functions in `O(nlog(n))` time complexity and with the smallest space complexity possible.

Example 1:

```
Input: nums = [5,2,3,1]
Output: [1,2,3,5]
Explanation: After sorting the array, the positions of some numbers are not changed (for example, 2 and 3), while the positions of other numbers are changed (for example, 1 and 5).
```

Example 2:

```
Input: nums = [5,1,1,2,0,0]
Output: [0,0,1,1,2,5]
Explanation: Note that the values of nums are not necessairly unique.
```

Constraints:

- `1 <= nums.length <= 5 * 10^4`
- `-5 * 10^4 <= nums[i] <= 5 * 10^4`