Given the array nums, for each nums[i] find out how many numbers in the array are smaller than it. That is, for each nums[i] you have to count the number of valid j's such that j != i **and** nums[j] < nums[i].

Return the answer in an array.

**Example 1:**

**Input:** nums = [8,1,2,2,3]

**Output:** [4,0,1,1,3]

**Explanation:**

For nums[0]=8 there exist four smaller numbers than it (1, 2, 2 and 3).

For nums[1]=1 does not exist any smaller number than it.

For nums[2]=2 there exist one smaller number than it (1).

For nums[3]=2 there exist one smaller number than it (1).

For nums[4]=3 there exist three smaller numbers than it (1, 2 and 2).

**Example 2:**

**Input:** nums = [6,5,4,8]

**Output:** [2,1,0,3]

**Example 3:**

**Input:** nums = [7,7,7,7]

**Output:** [0,0,0,0]

**Constraints:**

* 2 <= nums.length <= 500
* 0 <= nums[i] <= 100