

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`