912. Sort an Array

Medium ☐ 1968 ☐ 511 ☐ Add to List ☐ Share

Given an array of integers nums, sort the array in ascending order.

Example 1:

```
Input: nums = [5,2,3,1]
Output: [1,2,3,5]
```

Example 2:

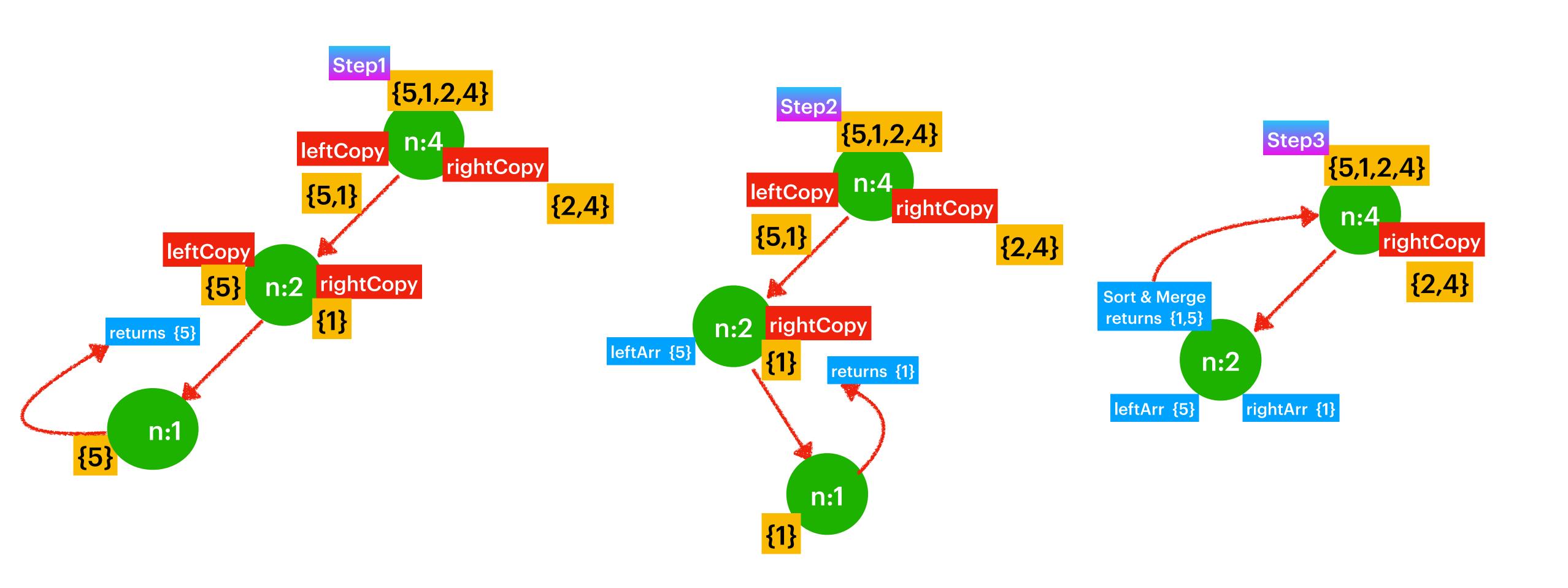
Input: nums = [5,1,1,2,0,0]
Output: [0,0,1,1,2,5]

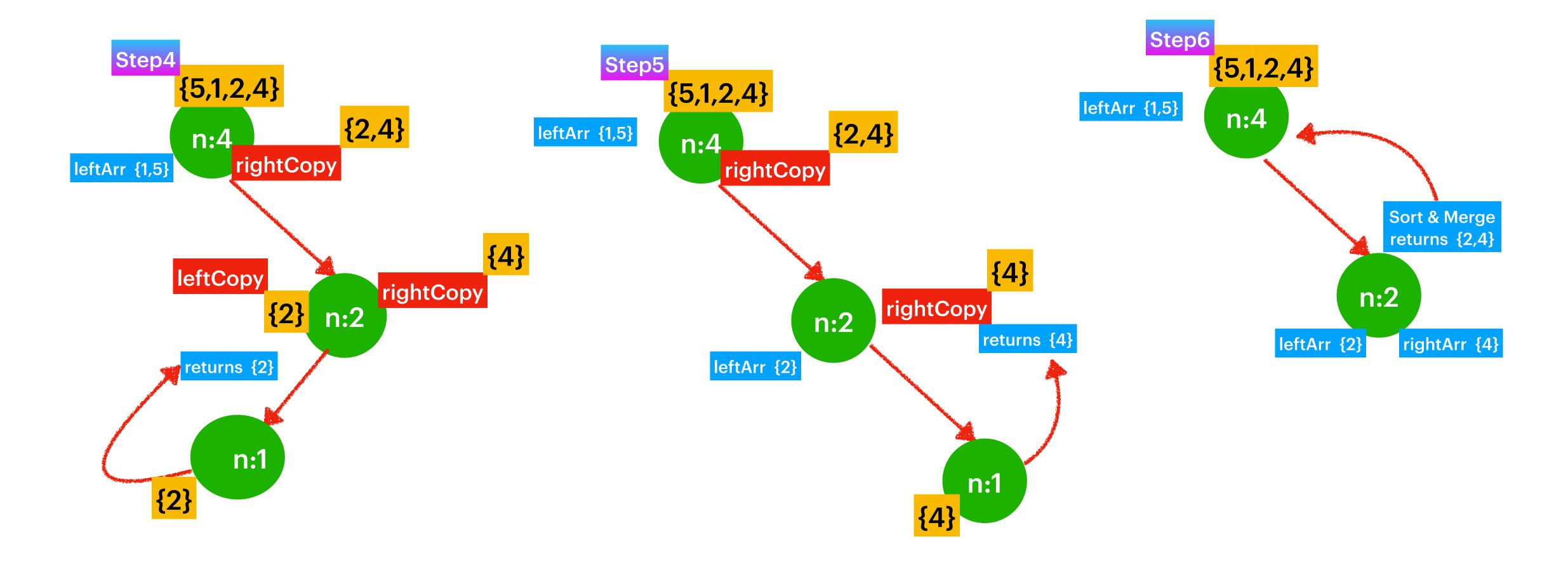
Constraints:

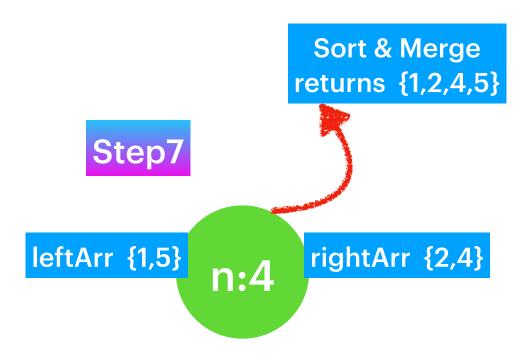
- 1 <= nums.length <= $5 * 10^4$
- $-5 * 10^4 \le nums[i] \le 5 * 10^4$

MergeSort

Recursion Flow







MergeSort

Time Complexity: O(nlog(n))

Space Complexity: O(n)

Stability: YES

[After sort maintains insertion order]

Divide Conquer

Comparison Time: O(nlog(n))

InPlace / OutPlace : Out Place

External Sorting: YES