

[0. 1. 2. 4. 5. 6. 7].

nums[left] nums[mid] nums[right]
↓ ↓ ↓
[6. 7. 0. 1. 2. 4. 5]

condition to search in
the left:

target = 3.

[2. 4. 5. 6. 7. 0. 1].

① left is sorted &&

target is within range.

② right is sorted &&

target is not within range.

if (nums[left] < nums[mid] &&

target >= nums[left] && target <= nums[mid] ||

nums[mid] < nums[right] &&

target >= nums[mid] && target <= nums[right])