-4

n an unsorted array, sort by dividing it into two subarrays
en combine it after sorting.

ithm

middle index of array.
mid = l + (last - first)/2

de the array from the middle.

merge sort for first half
merge-sort (array, first, middle)

merge sort for second half
merge-sort (array, mid+1, last)

ge two sorted halves into single array.

4

n an unsorted array, sort array by partioning array into two array while another pivot element such that one of sub holds value smaller than the sub array.

thm →

ose the highest index value has pivot.

e two variables to point left & right of the list luding pivot.

points to the low index.

t points to the high.

le value at left is less than pivot, move right.

ile value at right is greater than pivot, move left.

both step 5 & step 6 does not match swap left right.

left >= right, the index is new pivot.