① Bubble Sort algo:

Step 1:- algorithm Bubble_Sort (list)

Step 2:- pre: list != ϕ

Step 3:- Post list is sorted in asceding order for all values

Step 4:- for i ← 0 to list : count +

Step 5:- for j ← 0 to list : count −1

Step 6: if list[i] < list[j]

Step 7: Swap (list[i]; list[j])

Step 8: end if

Step 9: end for

Step 10) end for

Step 11: return list

Step 12: end Bubble Sort

Algorithm of merge sort:

Step 1: Find the middel index of the array

middel = (1 + (last - first)) / 2

Step 2: Divided the array from the middle

Step 3: call merge sort for the first half of the array

mergesort (array, first, middle)

Step 4: call merge sort for the second half of the array

mergesort (array, middle + 1, last)

Step 5: merge the two sorted values into a single sorted array.

quick Sort:

Step ① quickSort (array, leftmostIndex, rightmostIndex)

Step ② if (left most Index < right most Index)

pivotIndex ← partition (array, leftmost Index, rightmost Index)

quickSort (array, left most Index, PivotIndex − 1)

quick Sort (array, pivot Index, rightmost Index)

Step ③. partition (array, leftmost Index, rightmost Index)

Set rightmost Index as pivot Index

StoreIndex ← leftmost Index − 1

Step ④ for i ← leftmost Index + 1

Step ⑤ if element [i] ≤ pivot Element [i] < pivot Element

Swap element[i] < pivot Element

StoreIndex++

Swap pivotElement and element[StoreIndex+1]

return StoreIndex + 1