

Algorithm mergeSort(L)

Input: Array of RGB Colors

Output: Sorted Array

if L.Size() <= 1

return L

(left,right) = Partition(L)

left = mergeSort(left)

right = mergeSort(right)

return merge(left, right)

Algorithm merge(left, right)

Input: Array left and right

Output: Merge left and right in sorted order

result = new array of size n

leftIndex = 0

rightIndex = 0

while leftIndex < left.size() and rightIndex < right.size()

if (left[leftIndex] = 'red' or left[leftIndex] = 'green') and

(right[rightIndex] = 'green' or right[rightIndex] = 'blue')

result.insertLast(left[leftIndex])

increment leftIndex

else

result.insertLast(right[rightIndex])

increment rightIndex

insert the remaining elements of left to result

insert the remaining elements of right to result

return result