

Yash Amin Pseudo code

```
length ← array.length
left ← int [length - (length/2)]
right ← int [length/2]
rightValue ← 0
leftValue ← 0
if (length=0) then
  for i ← 0 to length - 1
    if (i < length - (length/2)) then
      left[leftValue] ← array[k], leftValue ← leftValue + 1
    else right[rightValue] ← array[k], rightValue ← rightValue + 1
    end if
  end for
  left ← merge(left)
  right ← merge(right)
  rightIndex ← 0, leftIndex ← 0
  for k ← 0 to length - 1
    if (rightValue = rightIndex) then
      array[k] ← left[leftIndex], leftIndex ← leftIndex + 1
    else if (leftValue = leftIndex) then
      array[k] ← right[rightIndex], rightIndex ← rightIndex + 1
    else if (left[leftIndex] <= right[rightIndex])
      array[k] ← left[leftIndex], leftIndex ← leftIndex + 1
    else array[k] ← right[rightIndex], rightIndex ← rightIndex + 1
    end if
  end for
end if
return (array)
```