

ALGORITHM:

①

MERGE SORT

Step 1: Start

Step 2: Declare the variables

Step 3: Read the size of first array

Step 4: Read elements of first array in sorted order

Step 5: Read the size of second array

Step 6: Read the elements of second array in sorted order

Step 7: Repeat step 8 and 9 while $i < m$ & $k < n$

Step 8: Check if $a[i] \leq b[j]$ then $c[k++] = b[j++]$

Step 9: Else $c[k++] = a[i++]$

Step 10: Repeat step 11 while $i < m$

Step 11: $c[k++] = a[j++]$

Step 12: Repeat step 13 while $j < n$

Step 13: $c[k++] = b[j++]$

Step 14: print the first array

Step 15: print the second array

Step 16: print the Merged array

Step 17: End.