Algorithm

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Step1: Start

Step2: Input on

Step3: Display enter the array elements.

    Repeat for $i=0$ to $n-1$

      Input $a[i]$

Step4: Repeat for $i=0$ to $n-1$

    $j=i$

    while. $[i>=1 \ \&\& \ a[i] < a[i-1])$

      if $(a[i] < a[j-1])$

      else $= a[i]$

      $a[i] = a[j-1]$

      $a[j-1] = else$

Step5: Display after merge sort

    Repeat for $i=0$ to $n-1$

      output $a[i]$

Step6: Stop.

Flowchart

```
                    ( Start )
                        |
                        v
                 [ Input n ]
                        |
                        v
           [ Enter array elements ]
                        |
                        v
         < for (i=0; i<n; i++) >
                        |
                        v
              [ Input a[i] ]
                        |
                        v
         < for (i=1; i<n; i++) >
                        |
                        v
                  [ j=1 ]
                        |
                        v
              < while(j>=1
               && a[j] < a[j-1] ) >
         |                        |
         v                        v
    [ i = j-1 ]          < if(a[j] < a
                              [j-1] ) >
                                  |
                                  v
                         [ ele = a[j]
                           a[j] = a[j-1]
                           a[j-1] = else ]
                        |
                        v
          [ After merce sort ]
                        |
                        v
         < for (i=0; i<n; i++) >        True
                        |
                        v
              [ output a[i] ]
                        |
                        v
                    ( Stop )
```