

Bubble sort:

Bubble sort algorithm is simple sorting technique to sort the elements of the array, the bubble sort algorithm works based on comparing, swapping of the adjacent elements.

On each iteration the highest element of the array comes to the last, second highest would be the second last and so on...

Bubble sort algorithm:

Step 1: input the length of the array

Step 2: input the array of elements,

Step 3: loop the elements using integer i from 0 to n-1

Step 4: loop the elements using integer j from 0 to n-i-1

Step 5: compare the elements $arr[j]$ and $arr[j+1]$, if $arr[j]$ is greater than $arr[j+1]$

Step 6: swap the $arr[j]$ and $arr[j+1]$

 assign the $arr[j+1]$ to temp variable,

 assign the $arr[j]$ to $arr[j+1]$

 assign the temp to $arr[j]$

Step 7 : repeat the step 5 from $j = 0$ to $j = n-i-1$ and iterator the loop from $i = 0$ to n-1

Step 8: iterate the array element and display to console.

Bubble sort pseudocode:

BEGIN

INPUT THE VALUE n

INPUT THE ARRAY arr

FOR $i=0$ to $i = n-1$ DO

 FOR $j = 0$ to $j = n-1-i$ DO

 IF ($arr[j] > arr[j+1]$)

 temp = $arr[j+1]$

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arr[j+1] = arr[j]
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arr[j] = temp
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ELSE END
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FOR END
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FOR END
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FOR i = 0 to i < n DO
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    DISPLAY arr[i]
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Bubble sort Flow chart

