GAYATHRI

4AL19CS035

Algorithm

Step1 : Start

Step2 : Input n

Step3 : Display Enter the array Elements

   for $(i=0; i<n; i++)$

   output $(arr+i)$

Step4 : for $(i=0; i<(n-1); i++)$

   $pos = i$

   for $(j=i+1; j<n; j++)$

   if $(*(arr+pos) > *(arr+j))$

   $pos = j$

   if $(pos ! = i)$

   $temp = *(arr+i)$

   $*(arr+i) = *(arr+pos)$

   $*(arr+pos) = temp$

Step5 : Display Sorted Elements

   for $(i=0; i<n; i++)$

   output $*(arr+i)$

Step6 : Stop

flowchart

$\big($Start$\big)$

$\downarrow$

Input n

$\downarrow$

Enter the array Elements

$\downarrow$

for (i=0; i<n; i++) → True

$\downarrow$

(arr+i)

$\downarrow$

for (i=0; i<(n-1); i++) → True

$\downarrow$

pos = i

$\downarrow$ ← False

for(j=i+1; j<n; j++) → True

$\downarrow$

If $*(arr+pos) > *(arr+j)$ → True ... False

True → pos = j

If (pos != i) → True ... False

True →

temp = *(arr+i)
*(arr+i) = *(arr+pos)
*(arr+pos) = temp

$\downarrow$

Sorted Elements

$\downarrow$

for(i=0; i<n; i++)

$\downarrow$

*(arr+i)

$\downarrow$

$\big($stop$\big)$