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4ALI9CS085.

Algorithm

step 1: start

step 2 : Inputn

Step 3: Enter the elements

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

   Input a[i]

step 4: if (a[0] < a[i])

   · small = a[0]

   second smallest = a[i]

else

   small = a[i].

   second smallest = a[0]

step 5: for (i=2; i<n; i++)

   if (a[i] < small]

   second smallest = small

   small = a[i]

elif (a[i] < second smallest)

   second smallest = a[i]

step 6 : Display second smallest element is

   output second smallest.

step 7 : stop.

Flowchart

Start

Input n

Enter the element input a[i]

If a[0] < a[i]

False branch:
small = a[i]
Second small = a[0]

True branch:
small = a[0]
Second smallest = a[i]

for (i=2; i<n; i++)

If a[i] < small

True:
Second smallest = small
small = a[i]

False:
If a[i] < Second small

True:
Second smallest = a[i]

False

Display output second smallest element is second smallest.

Stop