Rinson Dsouza
4AL19CS069
C Section

C Program to find Second Smallest in an array

Algorithm

Step 1 :- Start

Step 2 :- input Size

Step 3 :- Display how many elements do you want to enter

Step 4 :- Display enter 1.d elements
for (i = 0; i < Size; i++)
input array[i]

Step 5 :- if (array[0] < array[1])
{
    Smallest = array[0]
    SecondSmallest = array[1]
    goto step 10 and 11

Step 6 :- else
{
    Smallest = array[i]
    SecondSmallest = array[0]
    goto step 10 and step 11

Step 7 :- for (i < 2; i < Size; i++)

Step 8 :- if (array[i] < Smallest)
    SecondSmallest = Smallest
    Smallest = array[i]

    goto step 10 and step 11

Step 9 :- else if (array[i] < Second.Smallest)
    SecondSmallest = array[i]

Step 10 :- Print the Second Smallest element

Step 11 :- Stop

flowchart :-

Start

input size

Print how many element do you want to enter

Read size

Enter 1/d element

i=0

i<size → false

True

input arr[i]

i++

arr[0] < arr[1]

false

Smallest < array [1]

True

Smallest < arr[i]

SecondSmallest < array [0]

SecondSmallest < arr[i]

i=2

i<size → false

True

arr[i] < Smallest

True

SecondSmallest = Smallest

Smallest=array [i]

false

arr[i] < SecondSmallest

false

i++

Print the Second Smallest

Stop