C program to find second smallest element in an array

NEHA
4AL19CS058
06-06-2020

Algorithm

Step 1: Start

Step 2: input size

Step 3: Display how many elements you want to enter

Step 4: Display the elements

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

    input array[i]

Step 5: if (array[0] < array[1])

Step 5.1: smallest = array[0]

Step 5.2: secondsmallest = array[1]

Step 5.3: goto step10 and step11

Step 6: else

    smallest = array[1]

    secondsmallest = array[0]

    goto step 10 and step11

Step 7: for (i=2; i < size; i++)

Step 8: if (array[i] < smallest)

    secondsmallest = smallest

    smallest = array[i]

    goto step 10 and step11

Step 9: else if (array[i] < secondsmallest)

    secondsmallest = array[i]

Step 10: Print the second smallest element

Step 11: stop

Flowchart--

Start

Input size

Print how many elements you want to enter

Read size

Enter i'd element

i = 0

i < size
- T → input count → i++
- F → array[0] < array[i]
  - T → smallest = array[0] → secondsmallest = array[i]
  - F → smallest = array[i] → secondsmallest = array[0] → i = 2

i < size
- T → array[i] < smallest
  - T → secondsmallest = smallest → smallest = array[i]
  - F → array[i] < second smallest
    - F → i++
    - T → Print the second smallest element → Stop