Algorithm

Step 1 : Start

Step 2 : Input size

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

Step 4 : Display enter %d. 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 step 10 and step 11.

Step 6 : else

      smallest = array[1]

      secondsmallest = array[0]

      goto step 10 and step 11

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

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

      second smallest = array[i]

      goto step 10 and step 11

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

      second smallest = array[i]

Step 10 : Print the second smallest element

Step 11 : Stop

Flowchart

```
                    ( Start )
                        |
                        v
                 [ input size ]
                        |
                        v
            / print how many \
           /  elements do you  \
            \  want to enter   /
                        |
                        v
               [ Read size ]
                        |
                        v
          / Enter % of elements /
                        |
                        v
                   [ i = 0 ]
                        |
                        v
          < i < size >---False---->  < array[0] < array[i] >---False---->
               |                            |
              True                         True
               v                            v
      [ input array[i] ]            [ smallest = array[0] ]
               |                            |
               v                            v
           [ i++ ]            [ Second smallest = array[i] ]
                                            |
                                            v
                              [ smallest = array[i] ]
                                            |
                                            v
                           [ Second smallest = array[0] ]
                                            |
                                            v
                                       [ i = 2 ]
                                            |
                                            v
                           < i < size >---False---->
                                |
                               True
                                v
            False          < array[i] < smallest? >
              <----------------|
                              True
                                v
                   [ Second smallest = smallest ]
                                |
                                v
        < array[i] < second smallest >
              |
   [ i++ ]    v
        < ---/ print the second  /
            /  smallest element  /     [ smallest = array[i] ]
                        |
                        v
                    ( Stop )
```