PROGRAMMING BASICS

Algorithm for finding the second largest element:-

STEP 1:-Start

STEP 2:-Initialize the variables largest=0 and secondLargest=-1.

STEP 3:-Loop through the array.

STEP 4:-If (currentelement>largest value)
        secondLargest = largest;
        largest = current element;

STEP 5:-Else if (current element >the secondLargest)
        secondLargest = current element;

STEP 6:-Continue the loop until all elements in the array have been processed.

STEP 7:-Return the value of secondLargest.

STEP 8:-End.

Flowchart: -

```
                    ┌─────────────┐
                    │    Start    │
                    └─────────────┘
                           ▲
                           │
                           ▼
                 ┌───────────────────┐
                 │    Initialize     │
                 │ largest,second largest │
                 └───────────────────┘
                           │
                           ▼
                        ◇ if(current          No       ◇ Else if(current
                          element>largest) ──────────────▶ element>second
                        ◇                              ◇   largest)
                           │                                   │
                          Yes                                 Yes
                           │                                   │
                           ▼                                   ▼
              ┌───────────────────────┐         ┌───────────────────────┐
              │ secondLargest=largest │         │ secondLargest = current│
              │ largest =currentelement;│        │ element;              │
              └───────────────────────┘         └───────────────────────┘
                           │                                   │
                           ▼                                   │
              ┌───────────────────────┐                       │
              │ Display second largest │◀──────────────────────┘
              └───────────────────────┘
                           │
                           ▼
                    ┌─────────────┐
                    │     End     │
                    └─────────────┘
```