**Algorithm to Find the Second Largest Number:**

1. Create two variables, the ‘**largest**’ and ‘**second-largest’**, and initialize them using the array's first two entries.
2. Continue iterating through the array's remaining elements, comparing each one to the largest and second-largest:
3. Update second-largest **to** largest and update largest to be the element if the element is greater than the largest.
4. Update the second largest to be the element if the element is greater than the second largest but less than or equal to the largest.
5. The second largest integer in the array will be the value of the second largest once all of the array's items have been iterated through.
6. Thus the Second Largest Element in the array has been found.

**Flowchart to Identify the Second Largest Number:**

**Is input[0]>input[1]?**

Yes

No

**firstlargest = input[O]; second largest = input[l]**

**firstlargest = input[1]; second largest = input[0]**

**Second largest=first largest**

**First largest=input[i]**

**Int i=2**

**Return Second Largest Number**

Yes

No

**Is i<input.length?**

Yes

**Is input[i]>firstLargest?**

No

No

Yes

**Second largest=input[i]**

**Is input[i]<firstLargest&&Input[i]>secondLargest**

**I=i+1**

**Break the loop**