writing an algorithm for the second largest number in an array

Algorithm:

1. Initialize two variables, largest and second\_largest, to be the first and second elements in the array, respectively.
2. Iterate through the rest of the list, comparing each element to the current values of largest and second\_largest.
3. If the current element is greater than largest, then update second\_largest with largest and largest with the current element, respectively.

1. If the current element is not larger than largest but is larger than second\_largest, update only second\_largest to be the current element.

Once the iteration is complete, the value of second\_largest will be the second largest number in the array.