**Algorithm for Finding the Smallest Number in a List/Array**

* **Algorithm (Find Smallest Number):**

Input: An array/list of numbers.

Output: The smallest number in the array.

* **Steps:**

Initialize a variable smallest to the first element of the array (i.e., smallest = array[0]).

Iterate through each element x in the array.

If x < smallest, update smallest = x.

After finishing the iteration, smallest will hold the smallest number in the array.

Return the value of smallest.

**Pseudocode**:

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function findSmallest(array):

smallest = array[0]

for each element x in array:

if x < smallest:

smallest = x

return smallest

**2. Algorithm for Finding the Second or Third Largest Element in a List/Array**

* **Algorithm (Find Second or Third Largest Element):**

Input: An array/list of numbers. Output: The second or third largest number in the array. Steps:

* **Find the Second Largest Element:**

Initialize two variables first and second to negative infinity (or the smallest possible value).

Iterate through the array.

If the current element is greater than first, update second to first, and first to the current element.

Else if the current element is greater than second and not equal to first, update second to the current element.

After finishing the iteration, second will hold the second largest element.

* **Find the Third Largest Element:**

Initialize three variables first, second, and third to negative infinity (or the smallest possible value).

Iterate through the array.

If the current element is greater than first, update third to second, second to first, and first to the current element.

Else if the current element is greater than second and not equal to first, update third to second, and second to the current element.

Else if the current element is greater than third and not equal to second, update third to the current element.

After finishing the iteration, third will hold the third largest element.

**Pseudocode (Find Second Largest):**

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function find Second Largest(array):

first = -∞

second = -∞

for each element x in array:

if x > first:

second = first

first = x

else if x > second and x != first:

second = x

return second

Pseudocode (Find Third Largest):

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function findThirdLargest(array):

first = -∞

second = -∞

third = -∞

for each element x in array:

if x > first:

third = second

second = first

first = x

else if x > second and x != first:

third = second

second = x

else if x > third and x != second:

third = x

return third