

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(n) time | O(1) space
5     public static int[] findThreeLargestNumbers(int[] array) {
6         int[] threeLargest = {Integer.MIN_VALUE, Integer.MIN_VALUE, Integer.MIN_VALUE};
7         for (int num : array) {
8             updateLargest(threeLargest, num);
9         }
10        return threeLargest;
11    }
12
13    public static void updateLargest(int[] threeLargest, int num) {
14        if (num > threeLargest[2]) {
15            shiftAndUpdate(threeLargest, num, 2);
16        } else if (num > threeLargest[1]) {
17            shiftAndUpdate(threeLargest, num, 1);
18        } else if (num > threeLargest[0]) {
19            shiftAndUpdate(threeLargest, num, 0);
20        }
21    }
22
23    public static void shiftAndUpdate(int[] array, int num, int idx) {
24        for (int i = 0; i <= idx; i++) {
25            if (i == idx) {
26                array[i] = num;
27            } else {
28                array[i] = array[i + 1];
29            }
30        }
31    }
32 }
33
```

Solution 1

Solution 2

Solution 3

```
1 class Program {
2     public static int[] findThreeLargestNumbers(int[] array) {
3         // Write your code here.
4         return null;
5     }
6 }
7
```

Custom Output

Submit Code

Run or submit code when you're ready.

Our Tests