

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // Best: O(nlog(n)) time | O(log(n)) space
5     // Average: O(nlog(n)) time | O(log(n)) space
6     // Worst: O(n^2) time | O(log(n)) space
7     func quickSort(_ array: inout [Int]) -> [Int] {
8         quickSortHelper(&array, 0, array.count - 1)
9         return array
10    }
11
12    func quickSortHelper(_ array: inout [Int], _ startIndex: Int, _ endIndex: Int) {
13        if startIndex >= endIndex {
14            return
15        }
16
17        let pivotIndex = startIndex
18        var leftPointer = startIndex + 1
19        var rightPointer = endIndex
20
21        while leftPointer <= rightPointer {
22            if array[leftPointer] > array[pivotIndex], array[rightPointer] < array[pivotIndex] {
23                swap(&array, leftPointer, rightPointer)
24            }
25
26            if array[leftPointer] <= array[pivotIndex] {
27                leftPointer += 1
28            }
29
30            if array[rightPointer] >= array[pivotIndex] {
31                rightPointer -= 1
32            }
33        }
34    }
35 }
```

Solution 1   Solution 2   Solution 3

```
1 class Program {
2     func quickSort(_ array: inout [Int]) -> [Int] {
3         // Write your code here.
4         return []
5     }
6 }
7
```

Our Tests

Custom Output

Submit Code

```
1 class Program {
2     func quickSort(_ array: inout [Int]) -> [Int] {
3         // Write your code here.
4         return []
5     }
6 }
```

```
1 class Program {
2     func quickSort(_ array: inout [Int]) -> [Int] {
3         // Write your code here.
4         return []
5     }
6 }
```

