

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 func QuickSort(array []int) []int {
6     return helper(array, 0, len(array)-1)
7 }
8
9 func helper(array []int, start, end int) []int {
10     if start >= end {
11         return array
12     }
13
14     pivot := start
15     left := start + 1
16     right := end
17     for right >= left {
18         if array[left] > array[pivot] && array[right] < array[pivot] {
19             array[left], array[right] = array[right], array[left]
20         }
21         if array[left] <= array[pivot] {
22             left += 1
23         }
24         if array[right] >= array[pivot] {
25             right -= 1
26         }
27     }
28
29     array[pivot], array[right] = array[right], array[pivot]
30
31     if right-1-start < end-(right+1) {
32         helper(array, start, right-1)
33         helper(array, right+1, end)
34     } else {
35         helper(array, right+1, end)
36         helper(array, start, right-1)
37     }
38     return array
39 }
40
```