

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // Best: O(nlog(n)) time | O(log(n)) space
4 // Average: O(nlog(n)) time | O(log(n)) space
5 // Worst: O(n^2) time | O(log(n)) space
6 function quickSort(array) {
7   quickSortHelper(array, 0, array.length - 1);
8   return array;
9 }
10
11 function quickSortHelper(array, startIdx, endIdx) {
12   if (startIdx >= endIdx) return;
13   const pivotIdx = startIdx;
14   let leftIdx = startIdx + 1;
15   let rightIdx = endIdx;
16   while (rightIdx >= leftIdx) {
17     if (array[leftIdx] > array[pivotIdx] && array[rightIdx] < array[pivotIdx]) {
18       swap(leftIdx, rightIdx, array);
19     }
20     if (array[leftIdx] <= array[pivotIdx]) leftIdx++;
21     if (array[rightIdx] >= array[pivotIdx]) rightIdx--;
22   }
23   swap(pivotIdx, rightIdx, array);
24   const leftSubarrayIsSmaller = rightIdx - 1 - startIdx < endIdx - (rightIdx - 1);
25   if (leftSubarrayIsSmaller) {
26     quickSortHelper(array, startIdx, rightIdx - 1);
27     quickSortHelper(array, rightIdx + 1, endIdx);
28   } else {
29     quickSortHelper(array, rightIdx + 1, endIdx);
30     quickSortHelper(array, startIdx, rightIdx - 1);
31   }
32 }
33
```

Solution 1   Solution 2   Solution 3

```
1 function quickSort(array) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.quickSort = quickSort;
7
```

Our Tests

Custom Output

Submit Code

```
1 // Test Case 1: [1, 2, 3, 4, 5]
2 // Expected: [1, 2, 3, 4, 5]
3
4 // Test Case 2: [5, 4, 3, 2, 1]
5 // Expected: [1, 2, 3, 4, 5]
6
7 // Test Case 3: [1, 3, 5, 2, 4]
8 // Expected: [1, 2, 3, 4, 5]
9
10 // Test Case 4: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
11 // Expected: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
12
13 // Test Case 5: [10, 9, 8, 7, 6, 5, 4, 3, 2, 1]
14 // Expected: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
15
```

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```

```
10 # Get the data from the API
11 data = requests.get('https://api.nasa.gov/planetary/earthquakes?format=json&api_key=DEMO_KEY').json()
12
13 # Print the data
14 print(data)
15
16 # Get the data from the API
17 data = requests.get('https://api.nasa.gov/planetary/earthquakes?format=json&api_key=DEMO_KEY').json()
18
19 # Print the data
20 print(data)
21
22 # Get the data from the API
23 data = requests.get('https://api.nasa.gov/planetary/earthquakes?format=json&api_key=DEMO_KEY').json()
24
25 # Print the data
26 print(data)
```

Run or submit code when you're ready.