

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(1) space
4 // Average: O(nlog(n)) time | O(1) space
5 // Worst: O(nlog(n)) time | O(1) space
6 function heapSort(array) {
7   buildMaxHeap(array);
8   for (let endIdx = array.length - 1; endIdx > 0; endIdx--) {
9     swap(0, endIdx, array);
10    siftDown(0, endIdx - 1, array);
11  }
12  return array;
13 }
14
15 function buildMaxHeap(array) {
16   const firstParentIdx = Math.floor((array.length - 2) / 2);
17   for (let currentIdx = firstParentIdx; currentIdx >= 0; currentIdx--) {
18     siftDown(currentIdx, array.length - 1, array);
19   }
20 }
21
22 function siftDown(currentIdx, endIdx, heap) {
23   let childOneIdx = currentIdx * 2 + 1;
24   while (childOneIdx <= endIdx) {
25     const childTwoIdx = currentIdx * 2 + 2 <= endIdx ? currentIdx * 2
26     let idxToSwap;
27     if (childTwoIdx !== -1 && heap[childTwoIdx] > heap[childOneIdx]) {
28       idxToSwap = childTwoIdx;
29     } else {
30       idxToSwap = childOneIdx;
31     }
32     if (heap[idxToSwap] > heap[currentIdx]) {
33       swap(currentIdx, idxToSwap, heap);
```

Our Tests

Solution 1

Solution 2

Solution 3

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

Custom Output

Submit Code

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```
10 # Get the data from the API
11 data = requests.get('https://api.nasa.gov/data?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/data?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/data?api_key=DEMO_KEY').json()
24
25 # Print the data
26 print(data)
```

Run or submit code when you're ready.