

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class ContinuousMedianHandler {
4   constructor() {
5     this.lower = new Heap(MAX_HEAP_FUNC, []);
6     this.greater = new Heap(MIN_HEAP_FUNC, []);
7     this.median = null;
8   }
9
10  // O(log(n)) time | O(n) space
11  insert(number) {
12    if (!this.lower.length || number < this.lower.peek()) {
13      this.lower.insert(number);
14    } else {
15      this.greater.insert(number);
16    }
17    this.rebalanceHeaps();
18    this.updateMedian();
19  }
20
21  rebalanceHeaps() {
22    if (this.lower.length - this.greater.length === 2) {
23      this.greater.insert(this.lower.remove());
24    } else if (this.greater.length - this.lower.length === 2) {
25      this.lower.insert(this.greater.remove());
26    }
27  }
28
29  updateMedian() {
30    if (this.lower.length === this.greater.length) {
31      this.median = (this.lower.peek() + this.greater.peek()) / 2;
32    } else if (this.lower.length > this.greater.length) {
33      this.median = this.lower.peek();
```

Solution 1   Solution 2   Solution 3

```
1 // Do not edit the class below except for
2 // the insert method. Feel free to add new
3 // properties and methods to the class.
4 class ContinuousMedianHandler {
5   constructor(value) {
6     // Write your code here.
7     this.median = null;
8   }
9
10  insert(number) {
11    // Write your code here.
12  }
13
14  getMedian() {
15    return this.median;
16  }
17 }
18
19 // Do not edit the line below.
20 exports.ContinuousMedianHandler = ContinuousMedianHandler;
21
```

Our Tests

Custom Output

Submit Code

