

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     class ContinuousMedianHandler {
5         var median: Double
6         var lowers: Heap
7         var greater: Heap
8
9         init() {
10             median = 0.0
11
12             lowers = Heap(array: [], comparisonFunction: Program.maxHeap)
13             greater = Heap(array: [], comparisonFunction: Program.minHeap)
14         }
15
16         func getMedian() -> Double {
17             return median
18         }
19
20         // O(log(n)) time | O(n) space
21         func insert(number: Int) {
22             if lowers.length == 0 || number < Int(lower.peek()) {
23                 lowers.insert(value: number)
24             } else {
25                 greater.insert(value: number)
26             }
27
28             rebalanceHeaps()
29             updateMedian()
30         }
31
32         func rebalanceHeaps() {
33             if lowers.length - greater.length == 2 {
```

Solution 1 Solution 2 Solution 3

```
1 class Program {
2     class ContinuousMedianHandler {
3         var median: Double
4         // Feel free to add fields and methods.
5
6         init() {
7             median = 0.0
8             // Write your code here
9         }
10
11         func getMedian() -> Double {
12             return median
13         }
14
15         func insert(number: Int) {
16             // Write your code here.
17         }
18     }
19 }
20
```

Our Tests

Custom Output

Submit Code

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
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24             } else {
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27
28             rebalanceHeaps()
29             updateMedian()
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31
32         func rebalanceHeaps() {
33             if lowers.length - greater.length == 2 {
```

```
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2
3 class Program {
4     class ContinuousMedianHandler {
5         var median: Double
6         // Feel free to add fields and methods.
7
8         init() {
9             median = 0.0
10            // Write your code here
11        }
12
13        func getMedian() -> Double {
14            return median
15        }
16
17        func insert(number: Int) {
18            // Write your code here.
19        }
20    }
21}
```

```
10         assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
11         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
12     except AssertionError:
13         pass
14     finally:
15         test_case = Test Case 075 (1/1) Success -> Test 00
16         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
17         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
18         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
19         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
20     except AssertionError:
21         pass
22     finally:
23         test_case = Test Case 075 (1/1) Success -> Test 00
24         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
25         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
26         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
27         result = assertAlmostEqual(0, 10, err=1e-5, msg=msg, funcName=funcName)
```

Run or submit code when you're ready.