Your Solutions

Run Code

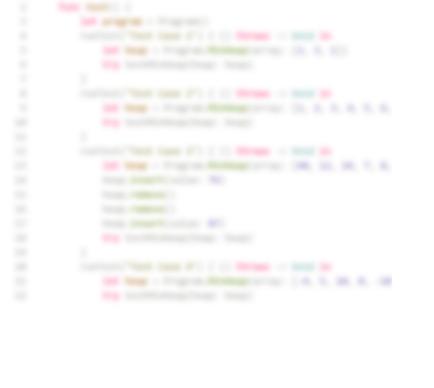
```
Solution 1
 1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
 3
   class Program {
        class MinHeap {
 5
           var heap = [Int]()
6
 7
            init(array: [Int]) {
                var array = array
9
                heap = buildHeap(array: &array)
10
11
12
            // O(n) time | O(1) space
            func buildHeap(array: inout [Int]) -> [Int] {
13
14
                var firstParentIndex = Double((array.count - 2) / 2)
15
                firstParentIndex = firstParentIndex.rounded(.down)
16
17
                for var currentIndex in (0 ... Int(firstParentIndex)
18
                    var endIndex = array.count - 1
19
                    siftDown(currentIndex: &currentIndex, endIndex:
20
21
                return array
23
            }
24
25
            // O(log(n)) time | O(1) space
26
            func siftDown(currentIndex: inout Int, endIndex: inout I
27
                var firstChildIndex = (2 * currentIndex) + 1
28
                while firstChildIndex < endIndex {</pre>
29
                    var secondChildIndex = -1
                    let potentialSecondChild = (2 * currentIndex) +
30
                    if potentialSecondChild <= endIndex {</pre>
31
                        secondChildIndex = potentialSecondChild
32
33
```

```
Solution 1
             Solution 2
 1
   class Program {
        class MinHeap {
            var heap = [Int]()
            init(array: [Int]) {
 6
                var array = array
                heap = buildHeap(array: &array)
9
10
            func buildHeap(array: inout [Int]) -> [Int] {
11
                // Write your code here.
12
                return []
13
15
            func siftDown(currentIndex: inout Int, endIndex: inout
                // Write your code here.
17
18
            func siftUp(currentIndex: inout Int, heap: inout [Int])
20
                // Write your code here.
21
23
            func peek() -> Int {
24
                // Write your code here.
25
                return -1
26
27
28
            func remove() -> Int {
                // Write your code here.
30
                return -1
31
32
```

func insert(value: Int) {

Run Code

33



Run or submit code when you're ready.