

Our Solution(s)Run Code

Solution 1Solution 2

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class BST:
4     def __init__(self, value):
5         self.value = value
6         self.left = None
7         self.right = None
8
9     # Average: O(log(n)) time | O(1) space
10    # Worst: O(n) time | O(1) space
11    def insert(self, value):
12        currentNode = self
13        while True:
14            if value < currentNode.value:
15                if currentNode.left is None:
16                    currentNode.left = BST(value)
17                    break
18                else:
19                    currentNode = currentNode.left
20            else:
21                if currentNode.right is None:
22                    currentNode.right = BST(value)
23                    break
24                else:
25                    currentNode = currentNode.right
26        return self
27
28    # Average: O(log(n)) time | O(1) space
29    # Worst: O(n) time | O(1) space
30    def contains(self, value):
31        currentNode = self
32        while currentNode is not None:
33            if value < currentNode.value:
```

Your SolutionsRun Code

Solution 1Solution 2Solution 3

```
1 # Do not edit the class below except for
2 # the insert, contains, and remove methods.
3 # Feel free to add new properties and methods
4 # to the class.
5 class BST:
6     def __init__(self, value):
7         self.value = value
8         self.left = None
9         self.right = None
10
11    def insert(self, value):
12        # Write your code here.
13        # Do not edit the return statement of this method.
14        return self
15
16    def contains(self, value):
17        # Write your code here.
18        pass
19
20    def remove(self, value):
21        # Write your code here.
22        # Do not edit the return statement of this method.
23        return self
24
```

