

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 using System.Collections.Generic;
4
5 public class Program {
6     // O(n) time | O(n) space
7     public static List<int> InOrderTraverse(BST tree, List<int> array) {
8         if (tree.left != null) {
9             InOrderTraverse(tree.left, array);
10        }
11        array.Add(tree.value);
12        if (tree.right != null) {
13            InOrderTraverse(tree.right, array);
14        }
15        return array;
16    }
17
18    // O(n) time | O(n) space
19    public static List<int> PreOrderTraverse(BST tree, List<int> array) {
20        array.Add(tree.value);
21        if (tree.left != null) {
22            PreOrderTraverse(tree.left, array);
23        }
24        if (tree.right != null) {
25            PreOrderTraverse(tree.right, array);
26        }
27        return array;
28    }
29
30    // O(n) time | O(n) space
31    public static List<int> PostOrderTraverse(BST tree, List<int> array) {
32        if (tree.left != null) {
33            PostOrderTraverse(tree.left, array);
34        }
35        if (tree.right != null) {
36            PostOrderTraverse(tree.right, array);
37        }
38        array.Add(tree.value);
39        return array;
40    }
41
42    public class BST {
43        public int value;
44        public BST left;
45        public BST right;
46
47        public BST(int value) {
48            this.value = value;
49        }
50    }
51 }
52
```

Solution 1 Solution 2 Solution 3

```
1 using System.Collections.Generic;
2
3 public class Program {
4     public static List<int> InOrderTraverse(BST tree, List<int> array) {
5         // Write your code here.
6         return null;
7     }
8
9     public static List<int> PreOrderTraverse(BST tree, List<int> array) {
10        // Write your code here.
11        return null;
12    }
13
14    public static List<int> PostOrderTraverse(BST tree, List<int> array) {
15        // Write your code here.
16        return null;
17    }
18
19    public class BST {
20        public int value;
21        public BST left;
22        public BST right;
23
24        public BST(int value) {
25            this.value = value;
26        }
27    }
28 }
29
```

Run or submit code when you're ready.
