

Our Solution(s)	Run Code	Your Solutions	Run Code
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Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Node {
4   constructor(name) {
5     this.name = name;
6     this.children = [];
7   }
8
9   addChild(name) {
10    this.children.push(new Node(name));
11    return this;
12  }
13
14  // O(v + e) time | O(v) space
15  breadthFirstSearch(array) {
16    const queue = [this];
17    while (queue.length > 0) {
18      const current = queue.shift();
19      array.push(current.name);
20      for (const child of current.children) {
21        queue.push(child);
22      }
23    }
24    return array;
25  }
26 }
27
28 exports.Node = Node;
29
```

Solution 1 Solution 2 Solution 3

```
1 // Do not edit the class below except
2 // for the breadthFirstSearch method.
3 // Feel free to add new properties
4 // and methods to the class.
5 class Node {
6   constructor(name) {
7     this.name = name;
8     this.children = [];
9   }
10
11   addChild(name) {
12     this.children.push(new Node(name));
13     return this;
14   }
15
16   breadthFirstSearch(array) {
17     // Write your code here.
18   }
19 }
20
21 // Do not edit the line below.
22 exports.Node = Node;
23
```

Run or submit code when you're ready.