

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Node:
4     def __init__(self, name):
5         self.children = []
6         self.name = name
7
8     def addChild(self, name):
9         self.children.append(Node(name))
10        return self
11
12 # O(v + e) time | O(v) space
13 def depthFirstSearch(self, array):
14     array.append(self.name)
15     for child in self.children:
16         child.depthFirstSearch(array)
17     return array
18
```

Solution 1 Solution 2 Solution 3

```
1 # Do not edit the class below except
2 # for the depthFirstSearch method.
3 # Feel free to add new properties
4 # and methods to the class.
5 class Node:
6     def __init__(self, name):
7         self.children = []
8         self.name = name
9
10    def addChild(self, name):
11        self.children.append(Node(name))
12        return self
13
14    def depthFirstSearch(self, array):
15        # Write your code here.
16        pass
17
```

Run or submit code when you're ready.

Our Tests

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1 // Write your code here
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