

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 // Do not edit the class below except
6 // for the depthFirstSearch method.
7 // Feel free to add new properties
8 // and methods to the class.
9 type Node struct {
10     Name string
11     Children []*Node
12 }
13
14 // O(v + e) time | O(v) space
15 func (n *Node) DepthFirstSearch(array []string) []string {
16     array = append(array, n.Name)
17     for _, child := range n.Children {
18         array = child.DepthFirstSearch(array)
19     }
20     return array
21 }
22
```

Solution 1 Solution 2 Solution 3

```
1 package main
2
3 // Do not edit the class below except
4 // for the depthFirstSearch method.
5 // Feel free to add new properties
6 // and methods to the class.
7 type Node struct {
8     Name string
9     Children []*Node
10 }
11
12 func (n *Node) DepthFirstSearch(array []string) []string {
13     // Write your code here.
14     return nil
15 }
16
```

Our Tests

```
1 package main
2
3 import (
4
5
6     "github.com/stretchr/testify/require"
7 )
```

Custom Output

Submit Code

```
8
9 func NewNode(name string) *Node {
10     return &Node{
11         Name:     name,
12         Children: []*Node{},
13     }
14 }
15
16 func (n *Node) AddChildren(names ...string) *Node {
17     for _, name := range names {
18         child := Node{Name: name}
19         n.Children = append(n.Children, &child)
20     }
21     return n
22 }
```

Run or submit code when you're ready.