Our Solution(s) Run Code

Solution 1

```swift
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class Program {
    class Node {
        let name: String
        var children: [Node]

        init(name: String) {
            self.name = name
            children = []
        }

        func addChild(name: String) -> Node {
            let childNode = Node(name: name)
            children.append(childNode)

            return self
        }

        // O(v + e) time | O(v) space
        func depthFirstSearch(array: inout [String]) -> [String] {
            array.append(name)

            for child in children {
                child.depthFirstSearch(array: &array)
            }

            return array
        }
    }
}

```

Your Solutions Run Code

Solution 1 Solution 2 Solution 3

```swift
class Program {
    class Node {
        let name: String
        var children: [Node]

        init(name: String) {
            self.name = name
            children = []
        }

        func addChild(name: String) -> Node {
            let childNode = Node(name: name)
            children.append(childNode)

            return self
        }

        func depthFirstSearch(array: inout [String]) -> [String] {
            // Write your code here.
            return []
        }
    }
}

```

Custom Output Raw Output Submit Code

Run or submit code when you're ready.