Our Solution(s) Run Code

Solution 1

```go
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package main

type Node struct {
  Name     string
  Children []*Node
}

// O(v + e) time | O(v) space
func (n *Node) BreadthFirstSearch(array []string) []string {
  queue := []*Node{n}
  for len(queue) > 0 {
    current := queue[0]
    queue = queue[1:]
    array = append(array, current.Name)
    for _, child := range current.Children {
      queue = append(queue, child)
    }
  }
  return array
}

```

Your Solutions Run Code

Solution 1 Solution 2 Solution 3

```go
package main

// Do not edit the class below except
// for the breadthFirstSearch method.
// Feel free to add new properties
// and methods to the class.
type Node struct {
  Name     string
  Children []*Node
}

func (n *Node) BreadthFirstSearch(array []string) []string {
  // Write your code here.
  return nil
}

```

Our Tests

Custom Output Submit Code

```
import (

  "github.com/stretchr/testify/require"
)

func NewNode(name string) *Node {
  return &Node{
    Name:     name,
    Children: []*Node{},
  }
}

func (n *Node) addChildren(names ...string) *Node {
  for _, name := range names {
    child := NewNode(name)
    n.Children = append(n.Children, child)
  }
  return n
}
```

**Run or submit code when you're ready.**