

Our Solution(s)

Run Code

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Node:
4     def __init__(self, name):
5         self.name = name
6         self.children = []
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 breadthFirstSearch(self, array):
14        queue = [self]
15        while len(queue) > 0:
16            current = queue.pop(0)
17            array.append(current.name)
18            for child in current.children:
19                queue.append(child)
20        return array
21
```

Our Tests

Your Solutions

Run Code

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     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 breadthFirstSearch(self, array):
15        # Write your code here.
16        pass
17
```

Custom Output

Submit Code

```
1 # Import pandas as pd
2
3 # Import data from file
4 df = pd.read_csv('data.csv')
5
6 # Print out the first 5 rows
7 print(df.head())
8
9 # Print out the last 5 rows
10 print(df.tail())
11
12 # Print out the first 5 rows of the 'name' column
13 print(df['name'].head())
14
15 # Print out the last 5 rows of the 'name' column
16 print(df['name'].tail())
17
18 # Print out the first 5 rows of the 'age' column
19 print(df['age'].head())
20
21 # Print out the last 5 rows of the 'age' column
22 print(df['age'].tail())
23
24 # Print out the first 5 rows of the 'height' column
25 print(df['height'].head())
26
27 # Print out the last 5 rows of the 'height' column
28 print(df['height'].tail())
29
30 # Print out the first 5 rows of the 'weight' column
31 print(df['weight'].head())
32
33 # Print out the last 5 rows of the 'weight' column
34 print(df['weight'].tail())
35
36 # Print out the first 5 rows of the 'gender' column
37 print(df['gender'].head())
38
39 # Print out the last 5 rows of the 'gender' column
40 print(df['gender'].tail())
41
42 # Print out the first 5 rows of the 'team' column
43 print(df['team'].head())
44
45 # Print out the last 5 rows of the 'team' column
46 print(df['team'].tail())
47
48 # Print out the first 5 rows of the 'coach' column
49 print(df['coach'].head())
50
51 # Print out the last 5 rows of the 'coach' column
52 print(df['coach'].tail())
53
54 # Print out the first 5 rows of the 'player' column
55 print(df['player'].head())
56
57 # Print out the last 5 rows of the 'player' column
58 print(df['player'].tail())
59
60 # Print out the first 5 rows of the 'game' column
61 print(df['game'].head())
62
63 # Print out the last 5 rows of the 'game' column
64 print(df['game'].tail())
65
66 # Print out the first 5 rows of the 'score' column
67 print(df['score'].head())
68
69 # Print out the last 5 rows of the 'score' column
70 print(df['score'].tail())
71
72 # Print out the first 5 rows of the 'date' column
73 print(df['date'].head())
74
75 # Print out the last 5 rows of the 'date' column
76 print(df['date'].tail())
77
78 # Print out the first 5 rows of the 'time' column
79 print(df['time'].head())
80
81 # Print out the last 5 rows of the 'time' column
82 print(df['time'].tail())
83
84 # Print out the first 5 rows of the 'location' column
85 print(df['location'].head())
86
87 # Print out the last 5 rows of the 'location' column
88 print(df['location'].tail())
89
90 # Print out the first 5 rows of the 'venue' column
91 print(df['venue'].head())
92
93 # Print out the last 5 rows of the 'venue' column
94 print(df['venue'].tail())
95
96 # Print out the first 5 rows of the 'weather' column
97 print(df['weather'].head())
98
99 # Print out the last 5 rows of the 'weather' column
100 print(df['weather'].tail())
```

Run or submit code when you're ready.