

# DFS.java

```
1  /*
2   * To change this license header, choose License Headers in Project
   Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6
7  /**
8   *
9   * @author user23
10  */
11  import java.util.HashMap;
12  import java.util.LinkedList;
13
14  public class DFS {
15      public void dfs(Node n, Graph g){
16          n.visit();
17          System.out.print(n.getName()+" ");
18
19
20
21          LinkedList <Node> neg = g.getAdjacencyMap().get(n);
22          if(neg==null)
23              return;
24          else{
25              for(Node w:g.getAdjacencyMap().get(n)){
26                  if(!w.isVisited())
27                      dfs(w,g);
28              }
29          }
30
31
32
33
34
35      }
36      public static void main(String[] args){
37          Graph g = new Graph(false);
38
39          Node n1 = new Node(1,"Arad");
40          Node n2 = new Node(2,"Sibiu");
```

```
41     Node n3 = new Node(4, "Timisoara");
42     //Node n4 = new Node(2, "Zerind");
43     //Node n5 = new Node(3, "Oradea");
44
45
46     g.insertEdge(n1, n2);
47     g.insertEdge(n1, n3);
48     g.insertEdge(n2, n3);
49     //    g.insertEdge(n3, n1);
50
51
52
53     g.printEdge();
54
55     DFS d = new DFS();
56     d.dfs(n1, g);
57
58 }
59 }
60
61
62
```