「モデリングとシミュレーション特論」課題（解答例)

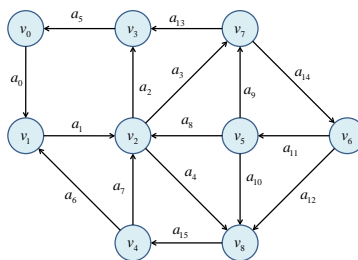2019/7/2

1 Network

課題 1

図 1　Sample Graph

Implement the Depth-First-Search algorithm in `searchSub()` method of `graphAlgorithm/DepthFirstSearch.java`. and perform a simulation for a graph (Fig. 1) starting from v_0.

解答例

Source Code 1　searchSub() method

```
1    private void searchSub(Node v) {
2        List<Edge> edges = network.getEdges(v);
3        if (edges != null) {
4            for (Edge e : edges) {
5                Node w = e.getAnotherEnd(v);
6                if (!visitedNodes.contains(w)) {
```

```
 7                    visitedNodes.add(w);
 8                    tree.add(e);
 9                    searchSub(w);
10                }
11            }
12        }
13
14    }
```