Data Structure and Algorithm

Quiz #6

Tuesday, April 9, 2013

Student Name :

Student ID :

Problem 1.

1. Please give the order of the vertices encountered on a breadth-first search of the graph in figure 1 starting from vertex 1.

   Note that when there are two or more outgoing edges, pick the edge to the vertex with smaller id first.

2. Please give the topological sort of the directed acyclic graph in figure 1.

   The DFS algorithm you use must start from vertex 1.

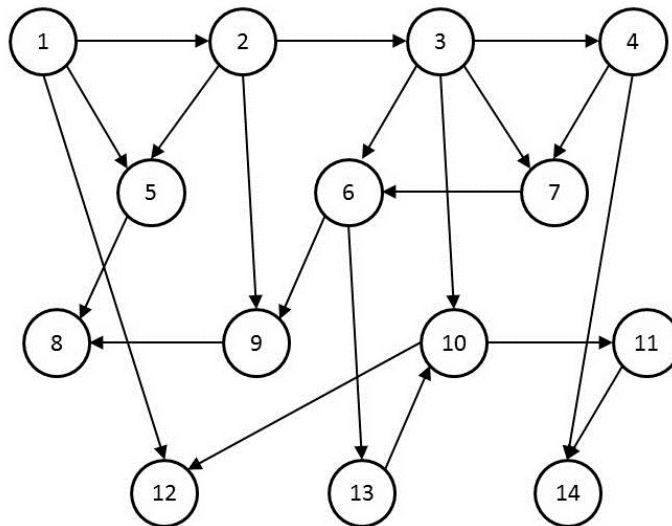   In your DFS algorithm, when there are two or more outgoing edges, pick the edge to the vertex with smaller id first.

Figure 1: a directed acyclic graph