

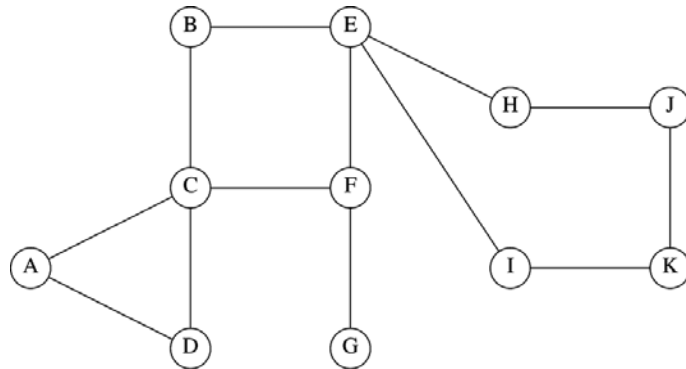
CSC 2300 – Data Structures and Algorithms

Homework 9

Due in Class on Tuesday, May 1

Late Policy is Three Late Days for the whole term

1. Give an algorithm to find a maximum spanning tree.
2. Give the depth-first spanning tree of the following graph:



Start your depth-first search at K and visit adjacent vertices alphabetically (that is, you will visit node I next). Give the values of Num and Low for each vertex, and find all the articulation points.

3. Give an algorithm to find the minimum number of edges that need to be removed from an undirected graph so that the resulting graph is acyclic.
4. Give an algorithm to decide whether an edge (v,w) in a depth-first spanning tree is a tree edge.
5. Problem 9.52.