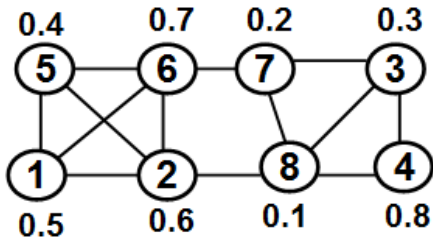


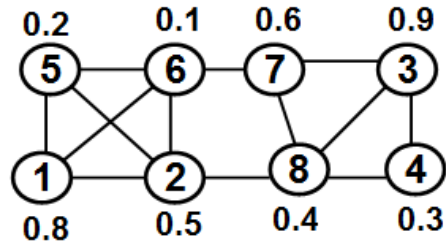
CSC 641 Network Science, Fall 2016
Quiz 1 (Take Home: Due: Sept. 27, 2016: 6 PM)

Total: 100 pts

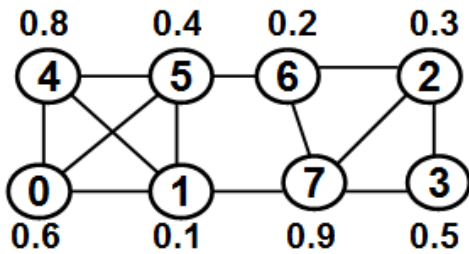
1) (25, 35 pts) Determine the **maximal node matching** and **maximal assortative matching** for the following graph. Determine the following for each of the above: (i) the set of edges constituting the matching (ii) the % of node matches (iii) assortative index of the matching.



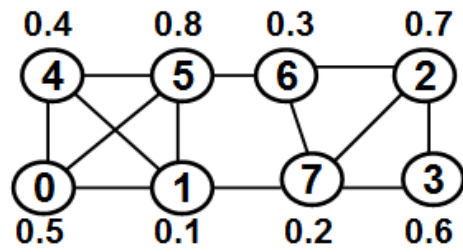
Li-Jing A. Chang



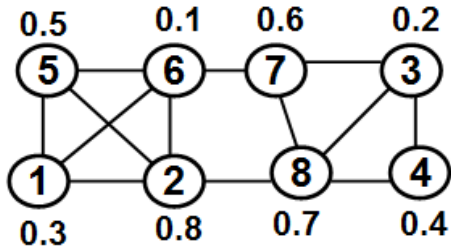
Fang Chen



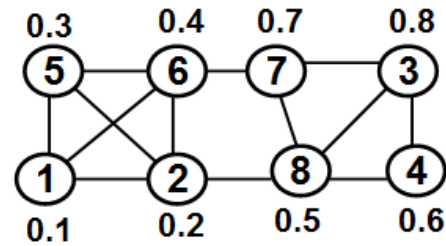
Alnazer Elbedairy



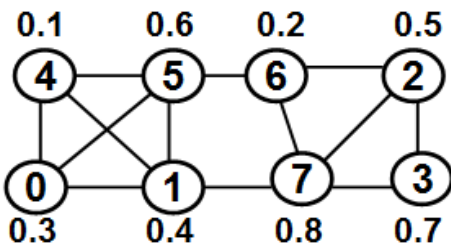
Carlos Martinez



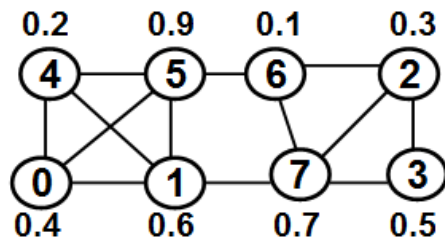
Oyeyemi Osho



Di Wu

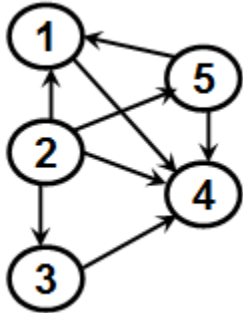


Fei Yang

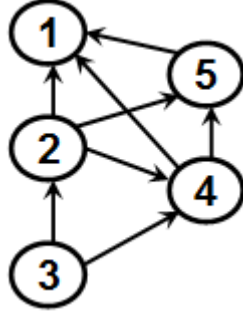


Student # 8

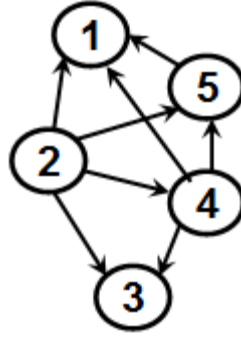
- 2) (20 pts, 20 pts) For the directed graph assigned to you below, determine the following:
 i) Cocitation coupling matrix. Determine the pair(s) of vertices that are most strongly coupled.
 ii) Bibliographic coupling matrix. Determine the pair(s) of vertices that are most strongly coupled.



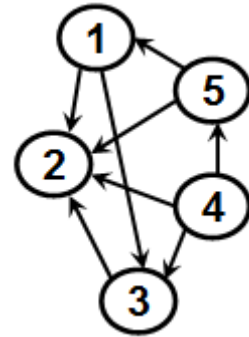
Li-Jing A. Chang



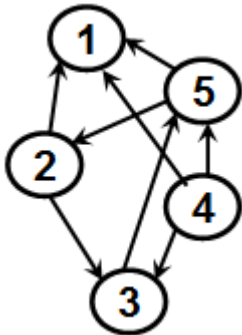
Fang Chen



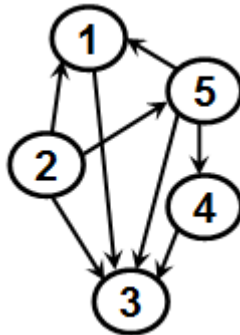
Alnazer Elbedairy



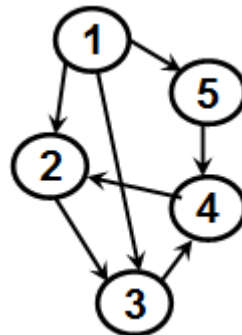
Carlos Martinez



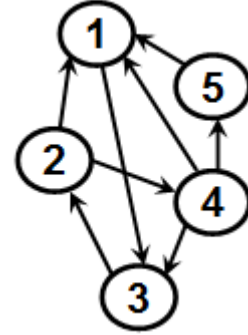
Oyeyemi Osho



Di Wu



Fei Yang



Student # 8