

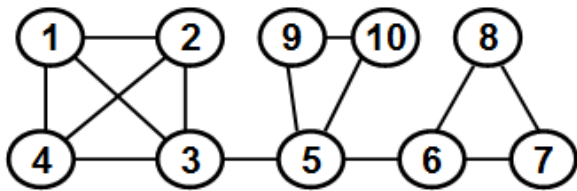
**CSC 641 Network Science**  
**Fall 2016**  
**Instructor: Dr. Natarajan Meghanathan**  
**Quiz 2 (Take Home)**

**Due: October 18, 2016** (6 PM, in class). Submit a printed hardcopy in class (with this quiz sheet as a cover page and your name and J# on the top of the sheet).

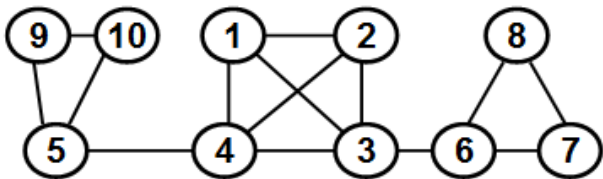
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 For the graph assigned to you, determine the following:

- (1: 5 pts) Degree centrality
- (2: 10 pts) Eigenvector centrality
- (3: 15 pts) Closeness centrality
- (4: 10 pts) Farness centrality
- (5: 10 pts) LCCDC of the vertices having the largest degree and the smallest degree
- (6: 10 pts) The centrality metric that you surveyed for Assignment 1 for an undirected graph.
- (7: 15 pts) Determine the rank-based correlation coefficient between centrality metrics (1) and (2)

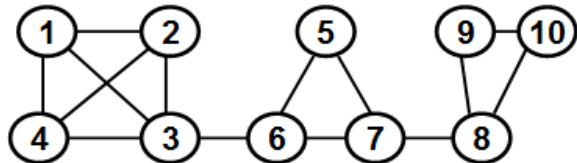
For (2) and (4), you could use the Spectral analysis Java program given to you.



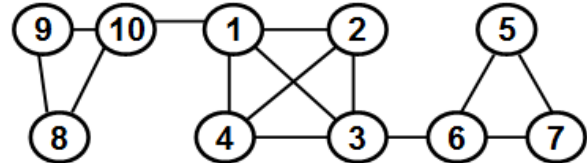
Li-Jing Chang



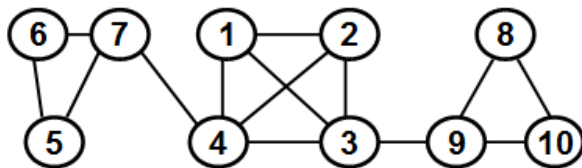
Alnazer Elbedairy



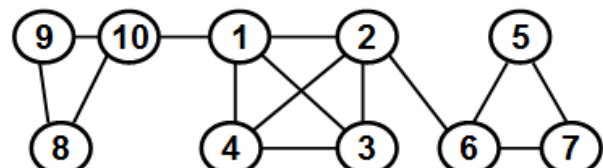
Carlos Martinez



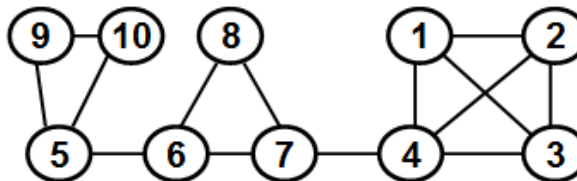
Osho Oyeyemi



Di Wu



Fei Yang



Chen Fang