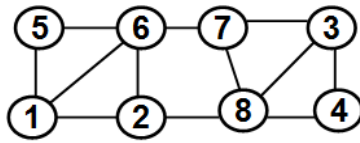Student Name: _____   J#: _____

CSC 641 Network Science
Fall 2017
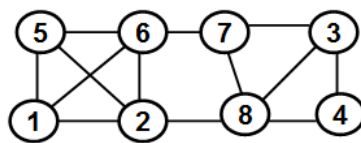## Instructor: Dr. Natarajan Meghanathan
Quiz 3 (Take Home)

Due: Nov. 7, 2017 (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).

Given a graph below, run the complete linkage clustering algorithm to determine a modular partitioning of the graph into communities.
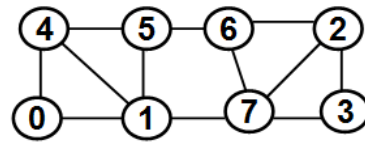(a) Show the entire hierarchy
(b) Run the pairwise modularity program to compute the modularity of each of your clusters and prune the branches of the hierarchy and determine the modularity score of the final partition.
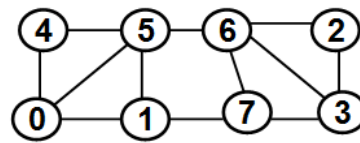(c) Determine the internal and external densities of each of the communities of the final partition.
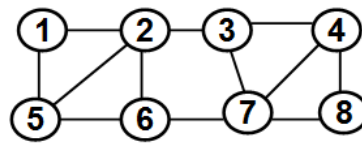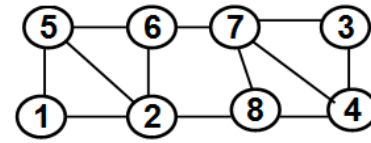

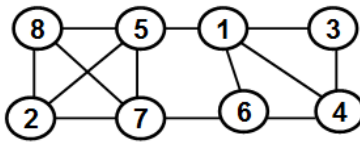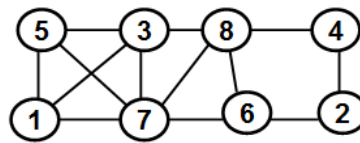Alton Franklin

Chirone Gamble

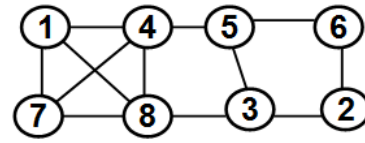Robin Ghosh

Eric Jackson

Jonathan Townes

Shengtan Wu

Roman Zubatiuk

Jamoris Miller

Cheronika Manyfield-Donald