

# Lab #3

New Attempt

- Due May 8 by 11:59pm
- Points 100
- Submitting a website url or a file upload
- Available Jan 25, 2024 at 12am - May 10 at 11:59pm

## QMSS- Networks Lab Report #3

Find a complete social network, preferably one with at least some attributes about the nodes with it.

1. Describe the social network(s) to me, in terms of how it was collected, what it represents and so forth. Also give me basic topography of the network: the nature of the ties; direction of ties; overall density; and if attributes are with the network, the distribution of the categories and variables of those attributes.
2. Run the Girvan-Newman community detection algorithm. Then run the random walk community detection algorithm.
3. Tell me how many groups each algorithm finds. Analyze how similar the two partitioning algorithms are in terms of putting nodes into groups with each other.
4. Visualize the network (either in R or Gephi), coloring the nodes by either Girvan-Newman grouping or the random walk grouping.
5. Tell me anything else about whether the partitioning makes sense, based on attributes or who the nodes are, and so on.