Complex Network Analysis

1. Installation

You may use the Python Library NetworkX to help you complete this Lab. For the network dataset, you may refer to

https://snap.stanford.edu/

You can also download the dataset from other publish sources.

2. Scores

The scores are made up of 2 parts: your report and the program you write. You must submit your report and program together. I will check every program. If anyone copies a program from the Internet or its classmates, he/she (or both of them) may get 0 points in this experiment.

You need to analyze at least three network properties (tasks)and visualize the results (Tables, figure，etc.) in your experiments. The related network properties maybe

1. Average path length
2. Degree distribution
3. Clustering Coefficient
4. Assortativity
5. Network community
6. Visualize the whole graph connectivity.
7. ………..

Complete more tasks will get bonus points. Please show your creativity and imagination as you will!