CSCI 4190: Introduction to social network

SNAP Exercise 1

Deadline: 23:59, Mar 10th , 2019

Questions

Please use the provided graph data which is stored in ***"exercise_graph.txt"*** to complete the exercise. This 'txt' file define a directed graph ***G***. You should load this graph and complete the questions.

Q1: Get a subgraph of ***G*** induced on nodes {0,1,2,3,4,5,6,7}. Then use GraphViz to draw this subgraph.

Q2: Get the in-degree and out-degree for each node in ***G***.

Q3: Output the pagerank value of each node in ***G***.

Q4: Compute the average clustering coefficient of the overall graph ***G***.

Q5: Convert G into undirected graph. Then compute the degree centrality for each node.

Please submit your source code on the blackboard and ensure that there is no error in your code. We strongly recommend you to use SNAP.py to complete this exercise. If you use other programming languages, please declare which language and system (windows, linux, macOS) you use. No report is need while Plagiarism or copy is never allowed.