GDM Project 1: Network Properties in GraphFrames

Team Members:
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Degree Distribution:

1-> Generated some random graph from the networkx package using the gnm_random_graph routine. All the graph generated from the run was found not to be scale free.

2-> The stanford graph given all the graph are found to be scale free except the youtube large and youtube small were scale free. It can be verified from the resultant output generated by the program.

Centrality:

1. Nodes ranked as per closeness centrality (from highest to lowest):
   F, C, D, H, B, E, A, G, I, J

2. If we had to place shared data on two machines, machine F and C would be the best candidates as having the highest closeness centrality means they are the nearest/closest accessible nodes in context to all the nodes of the network

Articulation Points:

On executing the articulations.py file the following are the names retrieved as articulation points from the file 9_11_edgelist.txt:

- Usman Bandukra
- Raed Hijazi
- Nawaf Alhazmi
- Mohamed Atta
- Mamoun Darkazanli
- Djmal Beghal
- Essid Sami Ben Khemais