## **Project P1**

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## **Degree Distribution**

- **1.** Tried creating 3 random graphs using NetworkX. None of them depicted power law. Refer graphs
- **2.** Amazon.small yes it is scale free graph, as lambda values for the top 50% of large K lies between 1.9 and 2.4 Refer the graph

Amazon.large – yes it is scale free, as lambda values for the top 50% of large K lies between 2 and 2.7 - Refer the graph

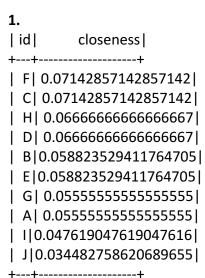
dblp.small – yes it is scale free, as lambda values for the top 20% of large K lies between 2 and 2.6 - Refer the graph

dblp.large – yes it is scale free, as lambda values for the top 50% of large K lies between 2 and 2.5 - Refer the graph

Youtube.small – yes it is scale free, as lambda values for the top 50% of large K lies between 2.3 and 3.1 - Refer the graph

Youtube.large – Yes it is scale free, as for very large K values. - Refer the graph

## **Closeness centrality**



2. Machine F and C would be the best as they have the highest closeness to all other nodes.

## **Articulation Points**

1.

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