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Course - Algorithms for Data Guided Business Intelligence

### Network Properties

Question 1)

i)

- a) Random Graph GNM 1 is not scale free.
- b) Random Graph GNM 2 is not scale free.
- c) Random Graph GNP 1 is not scale free.
- d) Random Graph GNP 2 is not scale free.

ii)

- a) Amazon Graph Small is not scale free.
- b) Amazon Graph Large is not scale free.
- c) DHL Graph Small is not scale free.
- d) DHL Graph Large is scale free.
- e) Youtube Graph Small is scale free.
- f) Youtube Graph Large is scale free.

Question 2)

i) Ranking of the nodes in order of decreasing centrality is

C  
F  
D  
H  
B  
E  
A  
G  
I  
J

ii) C and F would be the best candidates for holding data since they are the most central nodes.

Question 3)

Members that should be targeted to best disrupt communication are

- a) Mohamed Atta
- b) Usman Bandukra
- c) Mamoun Darkazanli
- d) Essid Sami Ben Khemais
- e) Djamal Beghal
- f) Nawaf Alhazmi
- g) Raed Hijazi