Homework 1

HON120, Fall 2015

Problems

1. Consider the graphs in Figure 1.

   - Write the **adjacency matrix** for both (a) and (b). Use the row-to-column convention.
   - Write the **incidence matrix** of graph (b).
   - Find the **degree** of nodes 2, 4, b, and d.
   - How many **components** are in (a)? How many **SCC**s?

2. Conduct an Ego search on Google for your name. Try with and without your middle initial.

   - What are the first page of links returned? Are the images returned of you?
   - Consider these links. Do these links provide an accurate portrayal of you and who you are? Do they provide the information that you would like a future employer to have? Future spouse? If not, how might you change or influence Google's results?

3. Go to the www.klout.com website and register for a Klout account. Link as many of your social media tools to the account. What is your Klout score? Consider – what could you do to manipulate your Klout score?
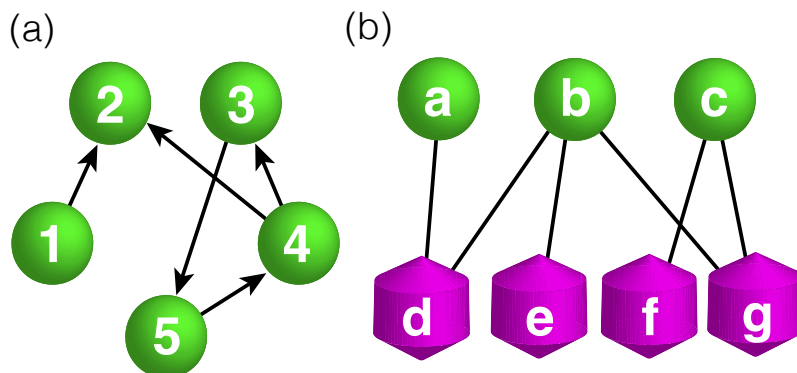
(a)   (b)

Figure 1: Example Networks