COMM 645, LAB 1: DUE SEPTEMBER 12, 2012

Please e-mail your lab to comm645@ognyanova.net before 2pm on Wednesday.

In this assignment you will have to demonstrate your understanding of network formats and representation. The tasks you will have to perform involve the following two small networks:

Figure 1: Network 1 (actor-actor adjacency network)

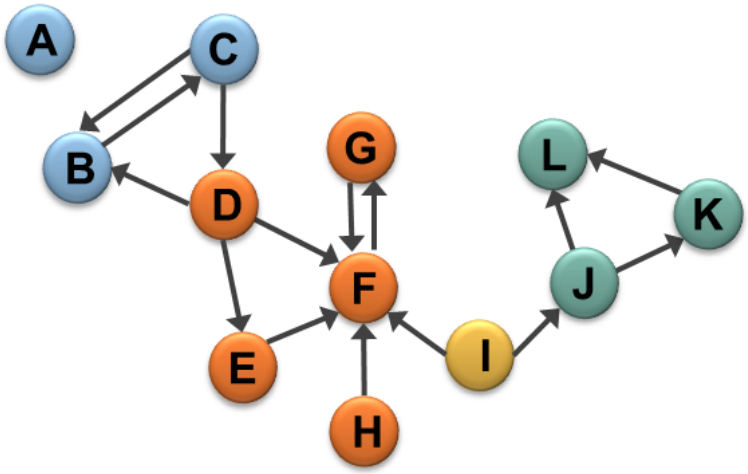
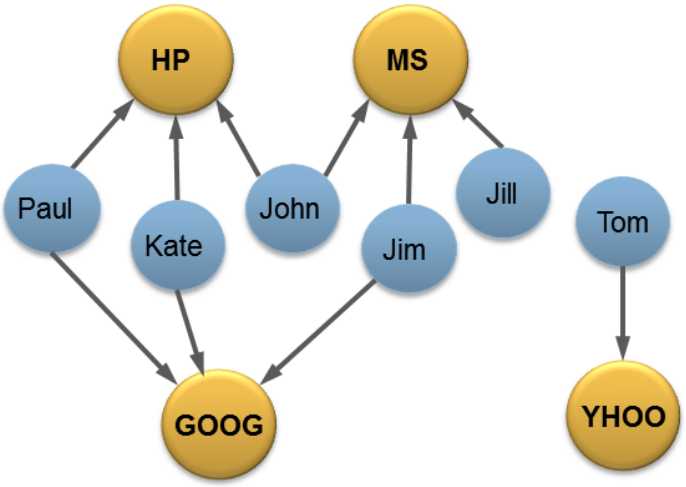


Figure 2: Network 2 (actor-event affiliation network)



1. Describe **Network 1** in an edge list format:

2. Describe **Network 1** in a node list format:

3. Describe **Network 1** in a matrix format:

4. Describe **Network 2** in an edge list format:

5. Describe **Network 2** in a node list format:

6. Describe **Network 2** in a matrix format:

7. If the matrix representing Network 2 is called M, calculate the following:

    a. M^T (M transposed)

    b. M x M^T (matrix multiplication of M and M transposed)

    c. M^T x M (matrix multiplication of M transposed and M)