Lab 6 Answer Sheet.

Please complete this answer sheet and turn it in before the due date posted in LEARN.

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| Question | Answer |
| 1  (10 pts) | Screen capture attached separately. After the changes made, the graph can be best described as a kite with no edges crossing each other. |
| 2  (10 pts) | The graph now shows a name on each node |
| 3  (8 pts) | Betty was assigned the largest value due to having heavy importance. Her name shows up in the list more than others. |
| 4  (8 pts) | The density of the graph is 0.3111 |
| 5  (6 pts) | Closeness Centrality for Connor =  1/(2+1+1+3+2+1+1+2+2)= 0.0667 |
| 6  (6 pts) | Closeness Centrality for Betty =  1/(1+1+1+2+1+1+2+1+3)= 0.0769 |
| 7  (6 pts) | Betty, because she is more centralized and doesn’t have to intervene a lot with others. |
| 8  (6 pts) | Screen capture attached separately. The connection I observed is that those visualization properties make it easier to analyze the data. |

Question 9

(10 pts) **Write up a report to discuss your social network (50-200 words)**:

1. The name and a description of the social network that you chose to examine.
2. The layout algorithm used for the graph.
3. Two observations from the social network analysis and visualization.

The social network that I chose to examine from the gallery was the Breast Cancer Awareness social network. The request start date was Thursday November 01, 2018 and the maximum days going backwards was 14. The maximum number of tweets collected was 5,000. The tweets in the network were tweeted over 6 days, 1 hour and 27-minute period from October 25, 2018 to October 31, 2018. The layout algorithm used to lay out this graph was the Harel-Koren fast multiscale layout algorithm. One observation from the graph can be made is that all of it is connected going from larger groups to smaller groups. The group G1 starts very large and then it starts to shrink down. Another observation is that the whole graph is color coded to make the analysis of the graph easier.