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) | The graph looks like a lolly-pop. |
| 2  (10 pts) | Each node got a name |
| 3  (8 pts) | Because Betty’s node has the most ties, therefore Betty is the most important. |
| 4  (8 pts) | Density = 2\*14/10\*(10-1) = 0.3111 |
| 5  (6 pts) | C(C) = 1/(3+2+2+2+1+1+1+1+2) = 0.0667 |
| 6  (6 pts) | C(B) = 1/(3+1+1+1+1+1+1+2+2) = 0.0769 |
| 7  (6 pts) | Betty could get a message out most quickly to all others through the fewest intervening ties because she has the highest closeness centrality |
| 8  (6 pts) | I was able to change the color, shape, and size of the nodes. |

Question 9

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

* The name and a description of the social network that you chose to examine.

The name of the social network that I chose was “tnwconference OR #TNWEurope\_2018-11-05\_05-32-26.xlsx”. The graph represents a network of 21 Twitter users whose tweets in the requested range contained "tnwconference" or "#TNWEurope", or who were replied to or mentioned in those tweets. The maximum number of tweets collected was 5,000.

* The layout algorithm used for the graph.

The graph was laid out using the Harel-Koren Fast Multiscale layout algorithm.

* Two observations from the social network analysis and visualization.

Observations: The visualization looks like spider web. Different people have different connections. Some people have multiple connections to others while some people only have one connection to others. One person is even not connected to anyone.