Homework 6

PS 398 - Computational Frameworks for Social Science

This homework is designed to introduce you the Twitter API and understand their data structures. Due to the fact that tweets themselves are pretty simple, we will be looking at the social graph.

Problem Description

You are going to do some simple analysis on a small portion of the twitter graph. First identify a *target* twitter account that has more than 100 followers and followed but less than 1000 (you can do 1000 but it will just take a lot longer). If your own account meets these criteria, use yourself. If not, my following is paltry enough that you can use @josh_cutler or @zistle. Starting with the account that you have chosen you will need to determine the people in this person network who meet the following criteria:

- The most followed user that follows your *target*
- The most followed user that has at most 2 degrees of separation from your *target*
- The most active user that has at most 2 degrees of separation from your *target*. You can define most active however you wish, but present your algorithm for computing this explicitly.
- The most active user that your *target* follows. use the same definition of active that you define above.

Before you get started think about how you wish to define active. It could mean many things.

It is possible that you will hit your twitter API rate limit while doing your calculations. Think about how you can store the state of your application and then restart when your rate limit is reset. If you find that this is a problem for you and you can't figure out how to get around it talk to me and we will work out a solution.