**Software Challenge Instructions**

Along with these instructions you should have received a file called SocialNetwork.zip. Please extract the compressed file.

The file represents an imaginary social network of people. Each line in the file provides the names of two people who are friends. Write a program that

1. determines the total number of people in the social network
2. determines the distance between A and B where the distance between two members of the network can be defined as the minimum number of ties required to connect two people in the social network

For this challenge, the values of A and B are as follows: A = STACEY\_STRIMPLE, B = RICH\_OMLI

You should prepare the code and any related artifacts as you would any piece of professionally written software.

You can use a programming language of your choice, but please heed the following:

* the program must compile and execute in windows environments
* if you want to use a programming language that isn't mainstream, please check with us so we can be sure we have someone that can evaluate your submission

As we are interested in your choice and implementation of data structures and algorithms to solve this challenge, please avoid using libraries that largely solve this problem for you. Please rely on the selected core language as much as is reasonable. The purpose of this exercise is to demonstrate your programming skills in an exercise that should not take more than a few hours of your time. When you feel it is appropriate to use a library outside of the standard libraries, then please notate that library declaration with a comment explaining motivation for use.

As we are also interested in your thought process and work method, when you submit the challenge, please include the source control repository that you used so that we may inspect the commit history.

Do not use file sharing services such as Dropbox. These kinds of sites are blocked at UTRC. GitHub is the preferred submission mechanism.