## Analysis and Modeling of Social and Information Networks CIS 4524/5524, Spring 2021

## Assignment 2, due February 4 by 5pm on Canvas

## Problem 1.

Download Amazon product dataset from <a href="http://snap.stanford.edu/data/com-Amazon.html">http://snap.stanford.edu/data/com-Amazon.html</a>, and

## compute:

- a) the size of the network largest connected component,
- b) the number of connected components,
- c) degree distribution,
- d) path length and
- e) clustering coefficient.

All metrics can be calculated using Python library NetworkX, but you can use any specialized freely available packages to compute these properties or you develop your own code. Use visual displays (graphs/plots generated in a software of your choice, e.g. gnuplot) for a clear presentation.