## 1. You explored a Twitter network. Tell me what it was about. What constitutes the nodes and edges, and how many of each are included in your network?

With the increase in tuition and the news of Arizona State University receiving the largest amount of the CARES Act, I wanted to see how much chatter was on Twitter about ASU. I searched @ASUonline, #asu, or #arizonastate. The nodes are the various users that mention either of the keywords. On the analysis, they are the "names found". The edges are the conversations connecting the keywords, along with original messages and retweets of those original message. On the analysis, they are the ties (incl. self-loops)". I have only one connection in this network, that is the user @asuonline. I could have others from previous social media classes, but I do not remember their usernames. I have one or two edges with @asuonline that does not mention the tuition hike or the CARES Act. Also, they aren't that recent.



2. Include image graphs with a relevant caption that explains what each image represents. Your first image must be the Name Network Graph,

with a corresponding caption. Your second image must be a Chain Network Graph, with a corresponding caption. Add any additional images you like to support your analyses, but those two are required. <u>Here's a reminder on how to add images to your</u> <u>assignment.(Links to an external site.) (Links to an external site.)</u>



Chain Network Graph Zoomed Out (TotalDegree)





o ⊨ ► ● ▲ Name Network Graph (OutDegree)



Chain Network Graph (InDegree)



Chain Network Graph (OutDegree)

## 3. Describe the characteristics of the Name Network and Chain Network. Are the overall structures similar or different between the two networks?

A Name Network is building a social network from mining the names of the nodes (people). The graph could be a word cloud of the users' names, or just the dots of the users' names. It will have more connections than the chain network.

A Chain Network is built from a social network of the node(s)' behavior in tweeting. The graph shows the pattern of replying to or retweeting another user's post, or a thread between the users. It should have less connections.

On Netlytic, the graphs seem very similar to me. There are choices and manipulations you can make to "narrow" down the clusters. To be honest, I am new to the analytics. Both diagrams seem similar, except the Chain Network graph is more sectioned out in connections than the Name Network graph.

4. Carefully review the in-degree and out-degree based representations of each network. Who do you think are the influential nodes within the Twitter network you're exploring, and why do you think they are influential? Take a closer look at who they are. For example, you could review the user information from the csv data file (as we did in the last module), or you could search their profile directly from Twitter. Who are they? Does it surprise you that a certain user is being identified as an influential node? Why or why not?

With the Name Network, the InDegree seems to be mostly the schools themselves (@ASU, @ASUonline), with the addition of a user from another cluster named @jonrahmpga. The OutDregee is @asuopendoor. For the Chain Network, the InDegree is dominated by @ASUOnline. The OutDegree is mostly non-ASU "official" Twitter handles. The most influential is @athetonickoo, the cluster that this user and their edges, are not discussing the university at all. They are a BTS fan group, speaking in a foreign language. For conversational threads about the university is @asuonline. It is surprising, since I do listen to K-Pop, that this cluster would show up on my graph. However, I had not considered foreign languages or phrases in my search.