3. Compare your centrality measures across your categorical groups.

- We set 1 for each edge's weight so that we can calculate the degree centrality for each node and sort them from highest to lowest. From here, we can see that the first 10 teams that play 12 games also have the highest rank of **degree centrality**. (Of course, their degree centralities are very similar.) It also proves that the node has more neighbors to connect, its degree will be higher. In this case, I think teams who play 12 games not only play within their own conference, they may also play with other teams outside their conferences. That's the reason why they can have higher degree centrality because they not only connect with teams in their own conferences, but they also can connect with teams outside their conferences.

- For the **closeness**, the more central the node is, the closer it is to all other nodes. For our case, the higher closeness may show that the game may have more games with other teams in other conference group. For example, Louisiana Tech has the highest the closeness centrality. In our networks of conference, we find out Louisiana Tech is in the conference of Western Athletic, and it only had 2 games with Hawaii and Tulsa in the Western Athletic. We know that each team had 7 games to 12 games so Louisiana Tech will have other 5 to 10 games with teams from other conference. That's the reason why Louisiana Tech has the highest closeness centrality.

- For the **betweenness**, nodes with high betweenness may have considerable influence within a network. In the football game, it means that the team play most of games with it neighbor within the same conference. So the team such as Louisiana Tech may not have high betweenness since it only played 2 games within its conference.

- Unlike the degree centrality, the **eigenvector centrality** is that a node is important if it is linked to by other important nodes. It means that a node with high degree centrality does not meant that it also has high eigenvector centrality. For example, BrighamYoung has the highest degree centrality, but it does not have the highest eigenvector centrality accordingly. In this case, it means that Brigham Young may have games with other teams that do not have high eigenvector centrality as well. Conversely, Nevada had the highest eigenvector centrality because it connected with other high eigenvector centrality teams and it also played the most number of game as well.