**Project Description**

In this project, we will examine the impact of Donald Trumps recent statements on his supporters. Trump is highly active on Twitter, so we will examine the relationships of his Twitter friends and followers. The analysis will include the following:

1. **1. Friends of Trump**

Find 20 friends of Trump that have the most followers. Use only people, not Trump’s company twitter handles. Examine the twitter accounts and summarise the types of people.

**2. Followers of Trump**

Find the 20 people who follow Trump and have the most followers and examine if they have a positive or negative relationship with Trump based on their tweets. To obtain this set of followers, download a large number of followers and select the 20 that have the greatest number of followers. Examine the twitter accounts and summarise the types of people.

**3. Bypassing Trump**

Plot the graph containing Trump’s 20 friends and 20 followers. Identify if any of the found friends or followers are friends with each other and add these edges to the graph. Then determine if any of the friends and followers should be friends, based on their background, and add those edges to the graph.

**4. Graph Statistics**

Compute the diameter and density of the graph, and neighbourhood overlap of each edge and determine which nodes have the greatest social capital. State if the results are obvious from the graph structure and why.

**5. Graph Homophily**

Compute if there is homophily in the graph. To do this, label each node as either a supporter or non- supporter of Trump using the information gathered in parts 1, 2 and 3. Write out the hypotheses, the test statistic and a conclusions of the test. Use a significance level of 𝛼 = 0.05.

**6. Structural Balance**

Finally, determine if the signed network is weakly balanced (using hierarchical clustering) and identify if any within or between signed relationships are not as expected. To perform this analysis, first label all existing edges as either positive or negative, based on their association to Trump.