CSCI 6250: HW5

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Question 2

Facebook

Type: Undirected Graph

Number of nodes: 4039

Number of edges: 88234

Average degree: 43.6910

For this dataset I analyzed the social network Facebook which contains the data of 4039 users which is denoted by Number of nodes in the table above. Each row has two numbers, a user in the dataset which is followed the user id# of the second user to keep it anonymous. The second number in the row implies friendship between two users which is also the number of edges which is in total 88234 of all users. Finally, average degree represents average number of friends each user has. Figure 1 depicts different clusters of users by blue color. Different clusters are even though connected but more mutual friends are observed by the shaded region.

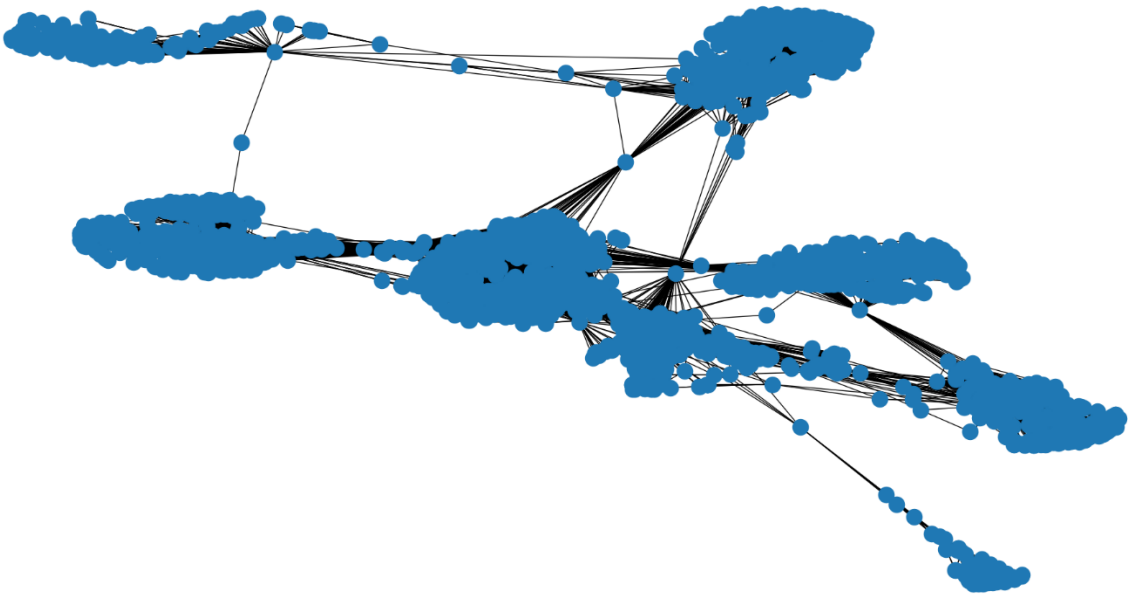

Figure 1

Whereas Figure 2 is a histogram which depicts the total number of connections of each user. Since there were 4039 users, so it was unfeasible for the script to show huge number of users in x-axis. But the figure gives us the estimate how many friends each user has.

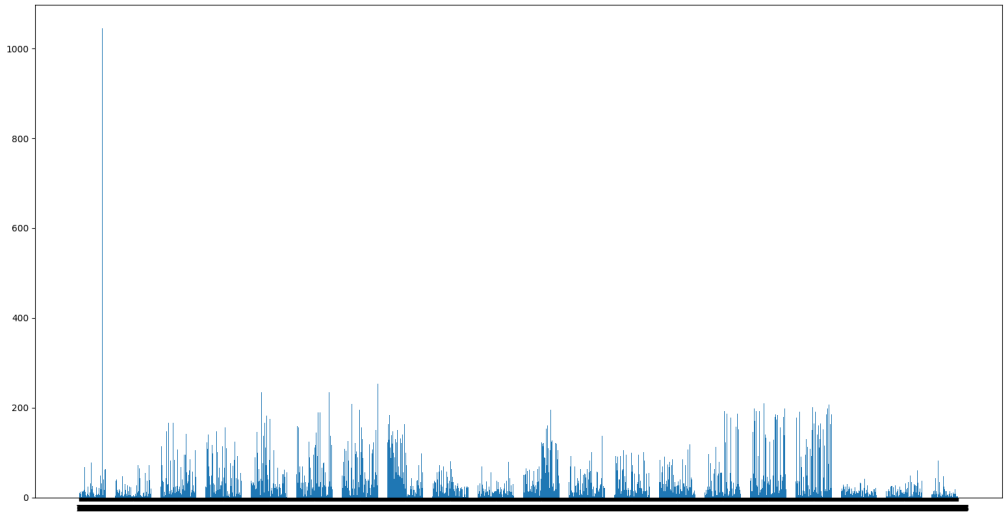

Figure 2

Wiki Votes for Administrator position

Type: Undirected Graph

Number of nodes: 7115

Number of edges: 100762

Average degree: 28.3238

For this dataset I analyzed Wiki Votes for administrator dataset. Where each user is casting vote for an administrator position. There are 7115 candidates and 100762 votes casted. The average vote per candidate is 28.3 votes. In figure 1 shows the spread of votes on the histogram of different candidates. As it can be observed one long line represents the candidate with the most votes. So, in figure 2 I zoomed in figure 1 to see who got the most votes that is user number 457.

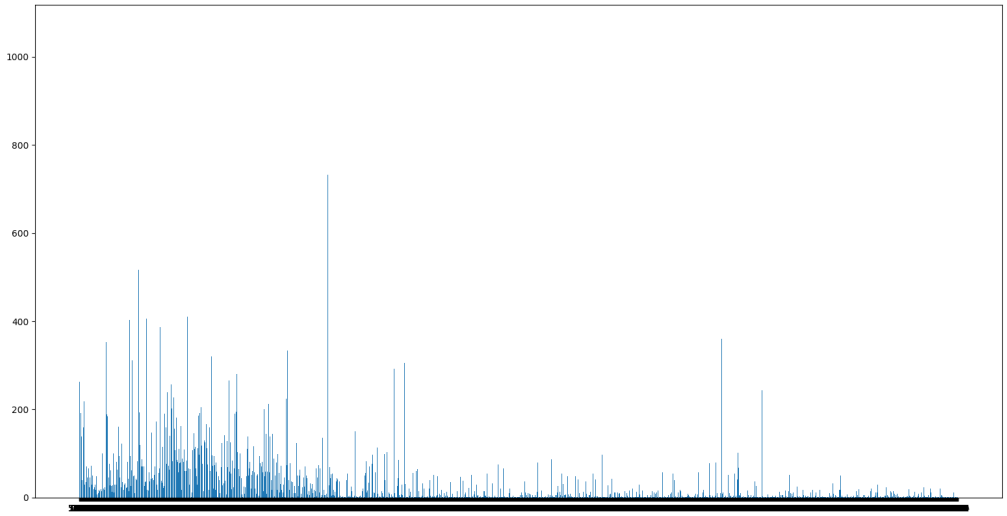

Figure 1

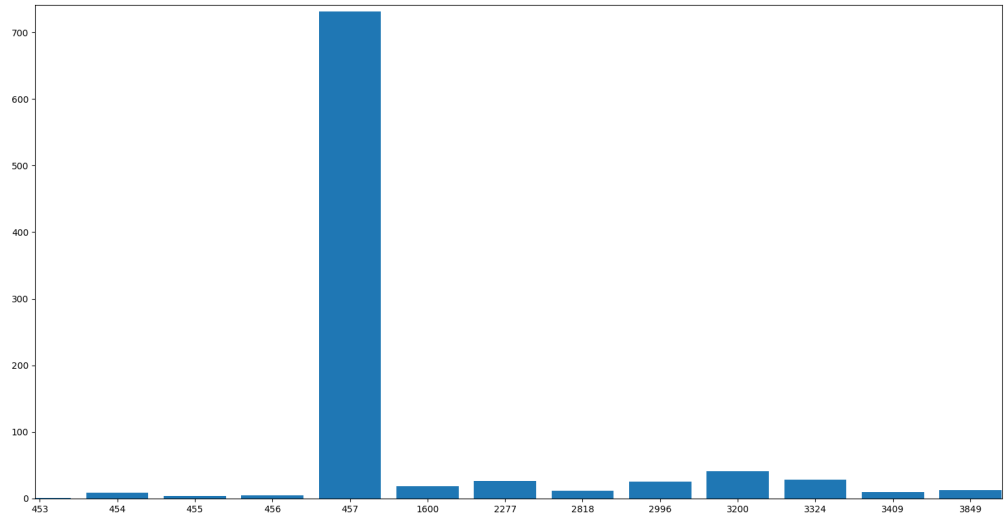

Figure 2