IT350 Data Analytics

Assignment 4

Part 1:

The Girvan Newman technique for the detection and analysis of community structure depends upon the iterative elimination of edges with the highest number of the shortest paths that pass through them. By getting rid of the edges, the network breaks down into smaller networks, i.e. communities.

1. Consider any real-time supervised (social network) dataset and cluster it using the Girvan Newman technique.
2. Write a code to evaluate the clusters
3. Print the clusters graphically use a different colour for different communities.
4. Extend the code and consider to accept that the user can give any input network (Max 10 nodes and 20 Edges) and draw the betweenness value and the communities automatically.