CS221 Project Phase-II

Submission deadline: <u>13 January 2022</u>

Group size 3 individuals

Phase-II

In this phase, your software should take as input a source node (i.e., its number, like 2, 44, or 55) and compute following:

- Compute the MST considering the abovementioned node as the source/starting node
- Find the shortest path to this source node from all other nodes.

Display the following:

- Draw the extracted MST
- List the distance of the source node from all other nodes

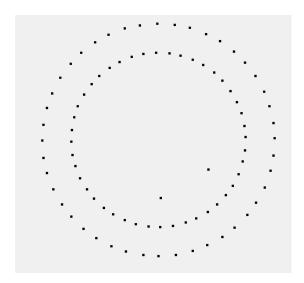
Phase-I

In this phase of the project, you have to create an application for graph processing which should have following features:

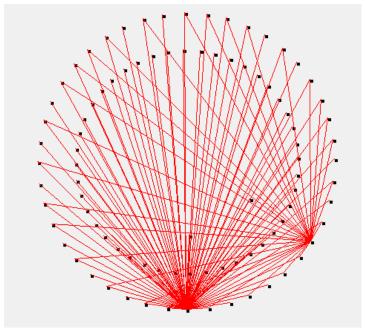
- 1. Read the PPI-1 data (you can reduce its size)
- 2. Count the number of nodes in the graph
- 3. Store the graph in an adjacency matrix.
- 4. Add following features/function to your application
 - a. Give a node show its degree
 - b. Find the node with maximum degree
 - c. Find the node with minimum degree
 - d. Display the raw adjacency matrix
 - e. Give a node find all its neighbours

Develop your assignment using GUI

Visually draw the graph with just nodes, put nodes on the screen in a circular way. Sample given as follows



Visually draw the graph with nodes and edges, Sample given as follows



Enjoy!