**Practical 5: Write a program to distinguish between a network as a matrix, a network as an edge list, and a network as a sociogram (or “network graph”) using 3 distinct networks representatives of each.**

Code:

# Load igraph package

library(igraph)

# Define network using graph formula notation

ng <- graph.formula(Andy ++ Garth,

                    Garth -+ Bill,

                    Bill -+ Elena,

                    Elena ++ Frank,

                    Carol -+ Andy,

                    Carol -+ Elena,

                    Carol ++ Dan,

                    Carol ++ Bill,

                    Dan ++ Andy,

                    Dan ++ Bill)

# Plot the network

plot(ng)

# Display adjacency matrix of the network

get.adjacency(ng)

# Display edges of the network

E(ng)

**OUTPUT**

