**Practical 6: Write a program to exhibit structural equivalence, automorphic equivalence, and regular equivalence from a network.**

Codes:

# Install and load necessary packages

install.packages("sna")

library(sna)

library(igraph)

# Read data from file

links2 <- read.csv("edges1.csv", header = TRUE, row.names = 1)

# Equivalence clustering

eq <- equiv.clust(links2)

plot(eq)

# Automorphic equivalence

g.se <- sedist(links2)

plot(cmdscale(as.dist(g.se)))

# Blockmodeling

b <- blockmodel(links2, eq, h = 10)

plot(b)

**OUTPUT**



