

Assesment-5

Part-1

1. Using R programming (igraph package) implement these following
 - a) Construction of a directed graph and undirected graph with nodes(plot function)
 - b) Colour the edges and nodes(plot)
 - c) Name the nodes
 - d) Print adjacency matrix of undirected graph
 - e) Add few extra nodes to the network and name them as well
 - f) Print diameter of the graph
 - g) Find degree of all nodes
 - h) Find in-degrees of all nodes and out degrees of all nodes
 - i) Find density of any nodes
 - j) Find closeness centrality of all nodes
 - k) Create network from a given data set. You can choose any one of the data sets from the following link.
<https://snap.stanford.edu/data/>
 - l) Prepare a histogram of 'Frequency' vs 'Degree of Vertices'