CSC 225: Spring 2018: Lab 7

March 1, 2018

1 Adjacency List and Matrix

1. Take the graph in "tinyEWG.txt". The first integer is the number n of vertices and the second number is the number m of edges. The next m lines contain the edges and their weights.
2. Write down the adjacency list assuming that the graph is undirected. How about if the graph is directed? Don't worry about the weights for now.
3. Now write down the adjacency matrix of the same graph, for both the directed and undirected version.

2 programming Exercise

Write a code to convert an edge list like above into an adjacency matrix. You can use the given template "EdgeToMatrix.java". In that case fill out the following functions.

1. `getMatrix` converts the edge list representation of a graph to the adjacency matrix representation.
2. `checkMatrix` reads from the output file and returns *true* if the matrix matches with the given output. Otherwise it returns *false*.

you can assume that the input graphs are undirected.