CSc 21200
Homework 6

Name your implementation file as LastName(3 to 5 letters)_FirstNameInitial_HW6_QX.cpp
Note: You can only use iostream, cassert, cctype, cmath, cstdio, and cstdlib.

1. Create a temple class called graph as an adjacency matrix with the following:
   a. Private member variables for label/name for the vertices, **weighted** edges, and number of vertices
   b. Constructors (default and copy)
   c. Add a vertex
   d. Add an edge
   e. Remove an edge
   f. Print the edges as a matrix (neatly)
   g. Return the number of vertices
   h. Return the number of edges
   i. Return is there an edge between two vertices
   j. Return a dynamic array of the neighbors of a vertex
2. Same as question one but implemented as an adjacency list.
   a. Instead of printing the edges as a matrix, print it as a list
   b. Instead of returning a dynamic array of the neighbors of a vertex, return a linked list.

Note:
Assume a weight of zero is no edge.
Assume label/name are only one char long for printing.
Assume when the user enters vertices, they are all unique.