# Lab 7 Graph Lab

# Week beginning 12/11/2018

## Graph

We will look at code to implement an unweighted graph.

We have discussed two different implementations of a graph: adjacency matrix and adjacency lists. To allow for these two implementations we will use an interface Graph and a class Edge.

Both representations of a graph will have data fields numVertices (number of vertices) and directed (a boolean to indicate whether graph is directed) so will have an abstract class AbstractGraph with these two properties.

We will implement adjacency matrix representation. See MatrixGraph class. Complete the code for this class. i.e. methods insert, remove and isEdge.

Use JUnit to test this class. Also write a driver program to use/test this class.

Instantiate the following directed graph:

Also, instantiate the following undirected graph: