## **CSE 211 - Data Structures**

## Labwork 4

Write a C++ class which implements an undirected graph using matrix representation. The class should have the following features:

- 1. A constructor which takes the number of vertices, and initializes the matrix. The matrix can be stored in any structure you want.
- 2. An insert function which modifies the matrix to add a new edge between the vertices provided as parameter.
- 3. A function which prints the vertices visited using debth-first traversal. Starting vertex should be provided as a parameter. Use an STL queue structure. When traversing, your function should choose the next smaller vertex. Also you should be careful about printing the visited vertices once.