## CSE 5311 Lab Assignment 2

Due July 28, 2004

## Goals:

- 1. Understanding of minimum spanning trees.
- 2. Review of Warshall's algorithm.
- Understanding of the MST technique based on reachability (http://reptar.uta.edu/NOTES5311/MSTWarshall.c).

## **Requirements:**

- 1. Modify the provided program to correct its notable flaws:
  - a. The input graph is expected to have unique edge weights. Tie-breaking should be implemented so that your program finds one MST.
  - b. The input graph is expected to be connected. Disconnected graphs should be detected and reported as an error.
- 2. E-mail your program to ozcan@cse.uta.edu before 2:45 pm on July 28.

## **Getting Started:**

- 1. As in the original program, the input edge weights will be in the range 1 . . . 998.
- 2. Due to the tie-breaking, your program will need to carry along the two vertex numbers in addition to the edge weight.