

## CSE 326b DATA STRUCTURES HOMEWORK 8 - The Final Homework!

Due: **Friday, March 14** at the beginning of class. Please put your quiz section (BA, BB) in addition to your name at the top of your homework

### **Problem 1. Dijkstra's Algorithm**

- a) Weiss, problem 9.5(a). Use Dijkstra's algorithm and show the results of the algorithm in the form used in lecture — a table showing for each vertex its known distance from the starting vertex and its predecessor vertex on the path. Also show the order in which the vertices are added to the “cloud” of known vertices as the algorithm progresses.
- b) Weiss, problem 9.7(a). Explain why Dijkstra's algorithm fails on the particular example you provide.

### **Problem 2. Minimum Spanning Trees**

Weiss, problem 9.15 parts a and b.