CS490 Quiz 1 Instructions

This is the written part of Quiz 1. The quiz is closed book; in particular, no notes, calculators and cell phones are allowed.

Not all questions are of the same difficulty, so be sure to pick up the easy points first, before tackling hard problems. The quiz is divided into two parts:

Part 1: [15]

Answers in part 1 should be succinct. Erroneous "extra" comments may decrease your score.

Part 2: [30]

When designing algorithms in part 2, the use of pseudo-code is greatly encouraged! Feel free to quote algorithms we described in class, but make sure you describe how the algorithm is used. (e.g. to quote Dijkstra, you should specify your source node and where the results are stored, say an array. Then, go on to explain what you do with those results.)

NOTE:

Since graph data structures affect the run time of many graphs, it is important to specify which one you're using (adjacency list, adjacency matrix, edge list). Assume you have access to all three data structures on all the questions.