CSE 521: Design and Analysis of Algorithms
Assignment #0
January 3, 2005
Due: Wednesday, January 5

Reading Assignment: Kleinberg and Tardos, Chapters 1 and 4

Questions:

1. For each of the following topics, indicate your level of comfort on a scale of 1-5, where 1 means "I've never been exposed to this" and 5 means "I'm completely comfortable and knowledgeable about this material".

   - basic graph traversal and algorithms, such as depth-first search and breadth-first search, connected components, finding an articulation point in an undirected graph, etc.

   - Dijsktra's shortest path algorithm

   - Minimum spanning tree algorithms (Prim's and Kruskal's)

   - the technique of divide and conquer

   - dynamic programming

   - basics of maximum flow, such as max-flow=min-cut and augmenting path algorithms

   - randomized algorithms (what have you been exposed to here?)

- linear programming (definition, simplex algorithm, duality theory)

2. What book did you use in your undergraduate algorithms course?

3. What do you hope to get out of this class (other than fulfilling a quals requirement)? Are there any particular topics you'd like to see covered?