Assignment 8

CSE 326: Data Structures and Algorithms

Autumn Quarter, 1999, University of Washington.

Steven Tanimoto, Instructor

Due Monday, Dec. 6, in class.

1. On page 464 of the text, do problem 1.
2. On page 464 of the text, do problem 2.
3. On page 464 of the text, do problem 3.
4. On page 465 of the text, do problem 4.
5. Consider the graph below. Give a possible preordering of the vertices in a depth first search that starts from A.
6. Give a possible ordering in which vertices are reached in a breadth-first search starting from A.
7. Give a possible ordering in which Dijkstra's single-source shortest paths algorithm adds vertices to the set for which distances from the source are known.
8. Show a possible ordering of vertices for which Prim's algorithm adds to a minimum spanning tree starting with vertex A.
9. Show a possible order in which merging takes place when building a minimum spanning tree using Kruskal's algorithm