

CSC 2300 – Data Structures and Algorithms

Homework 7

Due in Class on Tuesday, April 17

Late Policy is Three Late Days for the whole term

1. Find a topological ordering for the graph in Figure 9.3.
2. Find the shortest weighted paths from s to all other vertices for the graph in Figure 9.79.
3. Find the shortest weighted paths from C to all other vertices for the graph in Figure 9.80.
4. Consider a single-destination shortest-paths problem: find the shortest paths to a given vertex from all other vertices of a weighted graph. Explain how you would modify Dijkstra's algorithm to solve this problem. .
5. Consider Figure 9.80 and select node F as the single destination. Find the shortest weighted paths from all other vertices to node F .