COS226 Week 8 Activity

1. Consider the weighted graph below. Give the order in which the edges are added to the minimum spanning tree using Kruskal's algorithm and then using Prim's algorithm starting at vertex A.



- 2. How are the results of Kruskal's and Prim's algorithms the same? How are they different?
- 3. What is the difference between Prim's eager and lazy approach?

4. Consider the directed weighted graph below. Give the shortest path using Dijkstra's algorithm and then using the Acyclic Network algorithm (shown in lecture) starting at vertex A.



v distTo[] edgeTo[]
- -----A
B
C
D

v distTo[] edgeTo[]
_ _____
A
B
C
D