CSE 332 Summer 2010

Section Worksheet 6 - Graphs

1. Draw the following graph: V={a,b,c,d,e,f,g,h,i}
E={(a,b):4,(a,e):1,(a,d):10, (b,e):11,(b,c):3, (c,e):12,(c,f):4, (d,e):7,(d,g):6, (e,g):5,(e,h):7,(e,i):2,(e,f):8, (f,i):3, (g,h):9, (h,i):6}
where (x,y):z represents an undirected edge between x & y with weight z.

2. Find a minimal spanning tree using Prim's algorithm.
3. Find a minimal spanning tree using Kruskal's algorithm.
4. Find the shortest path from a to each vertex using Dijkstra's algorithm.