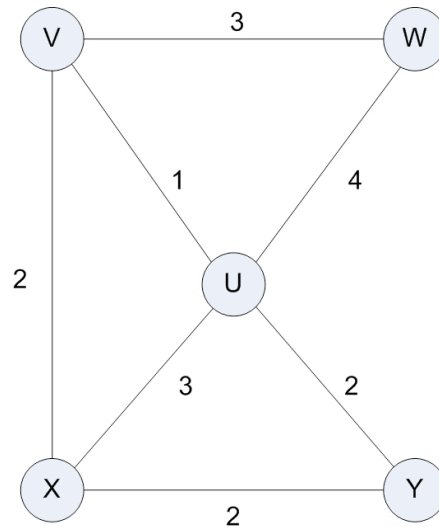# Lab 14

1. Must every dense graph be connected? Prove your answer.

2. Carry out the steps of Dijkstra's algorithm to compute the length of the shortest path between vertex V and vertex Y in the graph I gave in class (reproduced below). Display the evolution of the values for D[] in a table.

3. Carry out the steps of Kruskal's algorithm to compute a minimum spanning tree for the graph shown below. Express the tree as a set of edges, and display the evolution of clusters in a table.