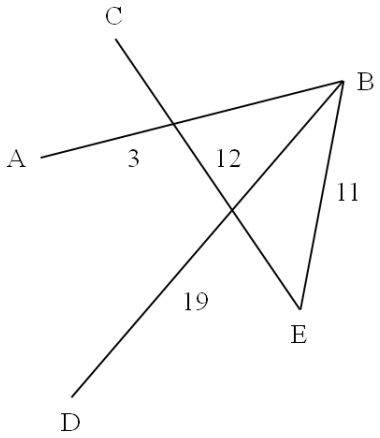
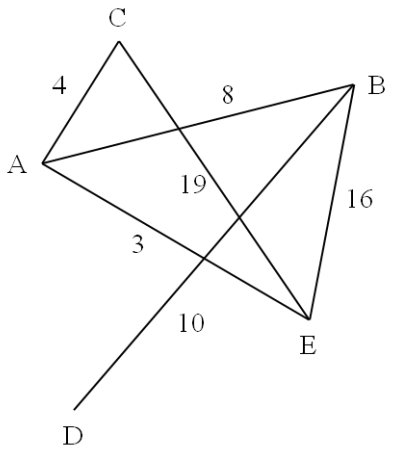
Tutorial: Searching

1. Determine the minimum spanning tree in each case below. Show all your working in each case.

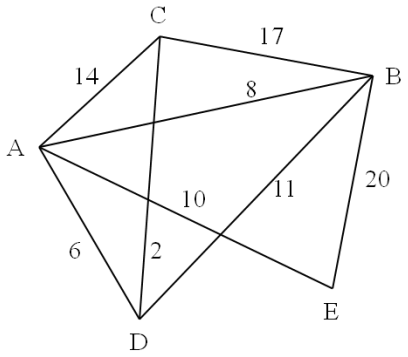
a.



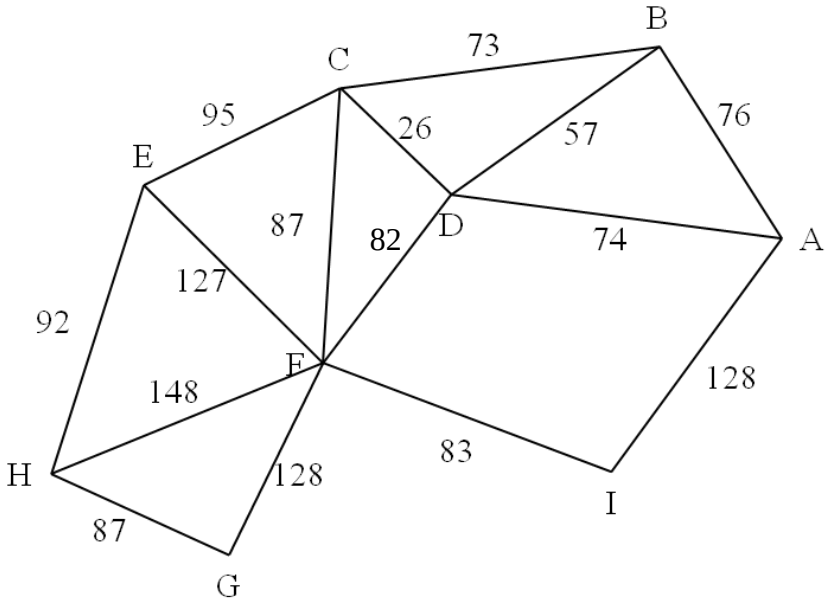
b.



c.



2. Use Dijkstra's algorithm to find the shortest path from A to all other destinations by hand. Show your working.



3.

a. Modify the *SLinkedList.zip* file (provided earlier in the course) to create a BST that contains the following information at each node:

name
address
tel number
link to left node
link to right node

b. Extend the get and set methods to enable the personal details to be entered. Create a BST and populate the tree with data for ten made up people and their details using the *name* information as the key.

c. Create a method that will search the BST for a given name and will then print out all their details.