The init routines for the four nodes are called first.

At the start of the init routine, the costs for the neighboring nodes are calculated. The distance table for the node is then initialized using the neighbor costs. If a specific node is not a directly neighboring node, then the distance to that node is set to *INFINITY* (represented by 9999).

For each destination node, the minimum distance is then calculated using the distance table and a list of minimum distances is maintained.

The node then sends out a packet with the minimum distances for its destination nodes to all the nodes in the network, by preparing the packet and sending it to Layer 2. The distance table is printed out.

When the update functions are called with a packet, the node uses the cost information from the packet to calculate costs using paths between nodes. If a smaller distance path is found, the distance table is updated with that value.

If the distance table is updated, the minimum distance is calculated once again and stored. An update packet is prepared once again with the minimum distances, and the packet is sent out to all the nodes in the network. The distance table is printed out.

If the distance table is not updated, no action is taken with respect to the network. The distance table is printed out.

The code for each node is essentially the same, with minor modifications made to print differently for each node and use the variables specific to that node.

The output trace will contain messages indicating the time at which each routine is called. The time is printed using the global variable *clocktime*. The distance table is also printed in both the init and update routines. If an update packet is sent across the network, the information about that packet is printed as well. All of these messages are printed when using a *TraceLevel* value that is greater than 1.