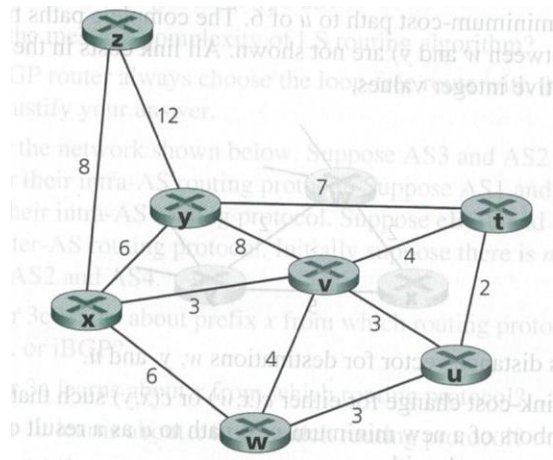
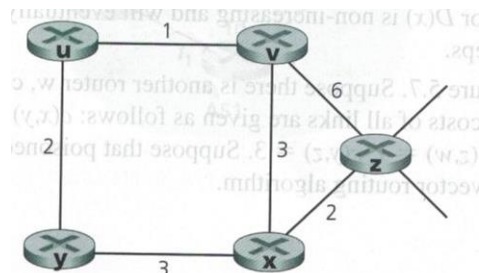


1, Consider the following network. With the indicated link costs, use Dijkstra's shortest-path algorithm to compute the shortest path from x to all network nodes. Show how the algorithm works by computing a table as follows.



Step	N'	$D(t), p(t)$	$D(u), p(u)$	$D(v), p(v)$	$D(w), p(w)$	$D(y), p(y)$	$D(z), p(z)$
0							
1							
2							
3							
4							
5							
6							

2, Consider the network shown below, and assume that each node initially knows the costs to each of its neighbors. Consider the distance vector algorithm and show the distance table entries at node z.



Step 1

Cost to
u v x y z

From v
x
z

Step 2

Cost to
u v x y z

From v
x
z

Step 3

Cost to
u v x y z

From v
x
z

Step 4

Cost to
u v x y z

From v
x
z