

lab 9 distance vector algorithm to find suitable path for transmission.

Distance-vector Routing C1:

$D[\text{myself}] = 0$

for $y = 1$ to n

if y is neighbour

$D[y] = c[\text{myself}][y]$

else $D[y] = \infty$

Send vector $\{D[1], D[2], \dots, D[n]\}$ to all neighbours

repeat (forever)

wait vector D_w for a neighbour w or any change in a link

for $y = 1$ to n

$D[y] = \min \{D[y], (D[\text{myself}][w] + D_w[y])\}$

if any change in vector

send vector $\{D[1], D[2], \dots, D[n]\}$ to all neighbours

O/P

Enter the no. of nodes required (less than 10 pls): 4

Enter adjacency matrix:

0	3	2	99
3	0	1	4
2	1	0	99
99	4	99	0



routing table for node 1 is :

	1	2	3	4
1	0	2	2	7

routing table for node 2 is

	1	2	3	4
2	3	0	1	4

routing table for node 3 is

	1	2	3	4
3	2	1	0	5

routing table for node 4 is

	1	2	3	4
4	7	4	5	0

Enter the nodes b/w which shortest path
is to found

A D

Shortest path is 7