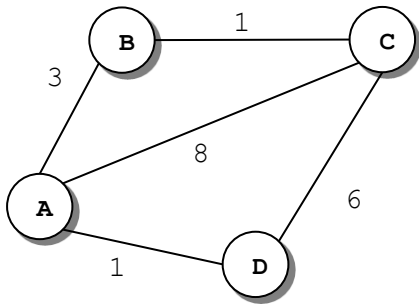


Example:

Apply the distance-vector routing algorithm to the network shown below and determine the stable distance vector for each node after convergence. Show all intermediate steps and provide a summary of your answer.



Answer:

A	B	C	D
0	3	8	1
3	0	1	∞
8	1	0	6
1	∞	6	0

	+3	+8	+1
A	B	C	D
0	3	8	1
3	0	1	4
8	1	0	6
1	4	6	0

+3		+1	
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	6
1	4	6	0

+8	+1		+6
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	6
1	4	6	0

+1		+6	
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	6
1	4	6	0

L
E
G
E
N
D

Iteration 1

Iteration 2

Iteration 3

+3		+1	
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	6
1	4	5	0

+1		+6	
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	6
1	4	5	0

	+3	+4	+1
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	5
1	4	5	0

+4	+1		+6
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	5
1	4	5	0

+4	+1		+5
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	5
1	4	5	0

+1		+5	
A	B	C	D
0	3	4	1
3	0	1	4
4	1	0	5
1	4	5	0

→ Convergence

stable distance vectors