CS3205 LAB REPORT - 5

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Here is the report of the results obtained by running the algorithm on two different input network topologies.

Input 1:

9 20
0 1 3 5
0 2 7 9
0 3 10 11
1 2 1 3
1 3 10 12
1 4 6 9
7 5 0 5
7 8 6 8
7 6 0 2
2 8 1 3
8 6 5 7
2 3 6 8
2 4 5 12
2 5 3 5
2 7 9 15
8 5 11 13
6 5 1 3
3 5 13 15
3 4 8 10
5 4 9 11

So now at a instant 120s timestamp if we check the updated routing tables then the outputs are of the form

Routing Table for Node No. 0 at Time 120

Destination	Path	Cost
1	0 1	4
2	0 1 2	6
3	0 3	10
4	0 1 4	11
5	0 1 2 5	10
6	0 1 2 5 6	13
7	0 1 8 7	15
8	0 1 8	7

Routing Table for Node No. 1 at Time 120

Destination	Path	Cost
0	1 0	4
2	1 2	2
3	1 2 3	10
4	1 4	7
5	1 2 5	6
6	1 2 5 6	9
7	1 2 8 7	11
8	1 2 8	3

Routing Table for Node No. 2 at Time 120

Destination	Path	Cost
0	2 1 0	7
1	2 1	3
3	2 3	8
4	2 1 4	10
5	2 5	4
6	2 5 6	7
7	2 8 7	9
8	2 8	1

Routing Table for Node No. 3 at Time 120

Destination	Path	Cost
0	3 0	11
1	3 2 1	10
2	3 2	7
4	3 4	8
5	3 2 5	11
6	3 2 5 6	14
7	3 2 8 7	16
8	3 2 8	8

Routing Table for Node No. 4 at Time 120

Destination	Path	Cost
0	4 1 0	12
1	4 1	8
2	4 1 2	10
3	4 3	9
5	4 5	9
6	4 5 6	12
7	4 8 7	17
8	4 8	9

Routing Table for Node No. 5 at Time 120

Destination	Path	Cost
0	5 2 1 0	10
1	5 2 1	6
2	5 2	3
3	5 2 3	11
4	5 4	11
6	5 6	3
7	5 2 8 7	12
8	5 2 8	4

Routing Table for Node No. 6 at Time 120

Destination	Path	Cost
0	6 5 2 1 0	12
1	6 5 2 1	8
2	6 5 2	5
3	6 5 2 3	13
4	6 5 4	13
5	6 5	2
7	6 5 8 7	12
8	6 5 8	4

Routing Table for Node No. 7 at Time 120

Destination	Path	Cost
0	7 6 8 2 1 0	11
1	7 6 8 2 1	7
2	7 6 8 2	4
3	7 6 8 2 3	12
4	7 6 5 4	14
5	7 6 5	3
6	7 6	1
8	7 6 8	2

Routing Table for Node No. 8 at Time 120

Destination	Path	Cost
0	8 2 1 0	9
1	8 2 1	5
2	8 2	2
3	8 2 3	10
4	8 2 1 4	12
5	8 2 5	6
6	8 6	7
7	8 7	8

The second input is:

```
10 21
0 1 3 5
9 0 1 3
9 1 5 6
0 2 7 9
9 2 6 8
0 3 9 11
1 2 1 3
1 3 10 12
9 4 9 11
9 7 8 12
1 4 6 9
9 8 2 4
7 5 0 5
7 8 6 8
7 6 0 2
2 8 1 3
8 6 5 7
2 3 6 8
2 4 5 12
2 5 3 5
2 7 9 15
```

The corresponding routing tables are:-

Routing Table for Node No. 0 at Time 120

Destination	Path	Cost
1	0 1	5
2	0 2	7
3	0 3	9
4	0 9 4	12
5	0 2 5	11
6	0 9 8 6	13
7	0 9 7	11

8	0 9 8	6
9	0 9	3

Routing Table for Node No. 1 at Time 120

Destination	Path	Cost
0	1 2 9 0	4
2	1 2	2
3	1 2 3	8
4	1 4	7
5	1 2 5	6
6	1 2 8 6	11
7	1 2 9 7	11
8	1 2 8	4
9	1 2 9	3

Routing Table for Node No. 2 at Time 120

Destination	Path	Cost
0	2 8 9 0	5
1	2 1	1
3	2 3	6
4	2 1 4	8
5	2 5	4
6	2 8 6	9
7	2 8 7	9
8	2 8	2
9	2 8 9	4

Routing Table for Node No. 3 at Time 120

Destination	Path	Cost
0	3 9 0	9
1	3 2 1	9
2	3 2	8
4	3 2 1 4	16
5	3 2 5	12
6	3 2 8 6	17
7	3 9 7	16

8	3 2 8	10
9	3 9	8

Routing Table for Node No. 4 at Time 120

Destination	Path	Cost
0	4 1 2 9 0	11
1	4 1	7
2	4 1 2	9
3	4 1 2 3	15
5	4 1 2 5	13
6	4 1 2 8 6	18
7	4 1 2 9 7	18
8	4 1 2 8	11
9	4 1 2 9	10

Routing Table for Node No. 5 at Time 120

Destination	Path	Cost
0	5 9 0	5
1	5 2 1	4
2	5 2	3
3	5 2 3	9
4	5 2 1 4	11
6	5 2 8 6	12
7	5 9 7	12
8	5 2 8	5
9	5 9	4

Routing Table for Node No. 6 at Time 120

Destination	Path	Cost
0	6 9 0	6
1	6 7 5 2 1	6
2	6 7 5 2	5
3	6 7 5 2 3	11
4	6 7 5 2 1 4	13
5	6 7 5	2
7	6 7	1
8	6 8	5

9	6 9	5

Routing Table for Node No. 7 at Time 120

Destination	Path	Cost
0	7 5 2 9 0	6
1	7 5 2 1	5
2	7 5 2	4
3	7 5 2 3	10
4	7 5 2 1 4	12
5	7 5	1
6	7 5 2 8 6	13
8	7 5 2 8	6
9	7 5 2 9	5

Routing Table for Node No. 8 at Time 120

Destination	Path	Cost
0	8 9 0	3
1	8 2 1	4
2	8 2	3
3	8 2 3	9
4	8 9 4	11
5	8 2 5	7
6	8 6	7
7	8 7	7
9	8 9	2

Routing Table for Node No. 9 at Time 120

Destination	Path	Cost
0	9 0	1
1	9 1	5
2	9 8 2	6
3	9 0 3	10
4	9 4	9
5	9 7 5	9
6	9 8 6	10
7	9 7	8
8	9 8	3