```
rtinit0() is called at time t=: 0.000
                via
                      3
   D0 1
                 2
           1
               999
                      999
         999
                 3
                      999
dest 2|
     3|
        999
               999
                      7
At time t=0.000, node 0 sends packet to node 1 with: (0 1
At time t=0.000, node 0 sends packet to node 2 with: (0 1 3 7)
At time t=0.000, node 0 sends packet to node 3 with: (0 1 3 7)
rtinit1() is called at time t=: 0.000
             via
   D1
           0
     0|
               999
           1
dest 2
         999
                 1
     3 | 999
               999
At time t=0.000, node 1 sends packet to node 0 with: (1 0 1 999)
At time t=0.000, node 1 sends packet to node 2 with: (1 0 1 999)
rtinit2() is called at time t=: 0.000
                via
   D2 |
           0
                 1
                      3
     0 j
               999
                      999
dest 1|
         999
                      999
     3 | 999
               999
                       2
At time t=0.000, node 2 sends packet to node 0 with: (3 1 0
At time t=0.000, node 2 sends packet to node 1 with: (3\ 1\ 0\ At time t=0.000, node 2 sends packet to node 3 with: (3\ 1\ 0\ 
                                                                 2)
rtinit3() is called at time t=: 0.000
             via
           0
   D3 |
           7
               999
     0|
         999
               999
dest 1|
     2 İ
         999
                2
At time t=0.000, node 3 sends packet to node 0 with: (7 999 2 0)
At time t=0.000, node 3 sends packet to node 2 with: (7 999 2 0)
                                                                 1 3
MAIN: rcv event, t=0.420, at 3 src: 0, dest: 3, contents: 0
rtupdate3() is called at time t=: 0.420 as node 0 sent a pkt with (0 1 3 7)
             via
           0
   D3
                 2
               999
     0
dest 1|
           8
               999
     2|
          10
                 2
At time t=0.420, node 3 sends packet to node 0 with: (7 8 2 0)
At time t=0.420, node 3 sends packet to node 2 with: (7 \ 8 \ 2 \ 0)
MAIN: rcv event, t=0.689, at 3 src: 2, dest: 3, contents: 3 1
rtupdate3() is called at time t=: 0.689 as node 2 sent a pkt with (3 1 0 2)
             via
   D3 |
           0
                 2
           7
                 5
     0 |
           8
                 3
dest 1|
     2|
At time t=0.689, node 3 sends packet to node 0 with: (5 3 2 0)
At time t=0.689, node 3 sends packet to node 2 with: (5 3 2 0)
MAIN: rcv event, t=0.697, at 1 src: 0, dest: 1, contents: 0 1
rtupdate1() is called at time t=: 0.697 as node 0 sent a pkt with (0 1 3 7)
                 2
           0
   D1 |
     0
               999
```

Enter TRACE:2

```
dest 2|
     3
           8
               999
At time t=0.697, node 1 sends packet to node 0 with: (1 0 1 8)
At time t=0.697, node 1 sends packet to node 2 with: (1 0 1 8)
MAIN: rcv event, t=0.980, at 0 src: 1, dest: 0, contents: 1 0
                                                                      1 999
rtupdate0() is called at time t=: 0.980 as node 1 sent a pkt with (1 0 1 999)
                via
   D0 I
           1
                 2
                      3
     1
               999
                     999
           1
           2
                 3
                      999
dest 2|
     3|
        999
               999
                       7
At time t=0.980, node 0 sends packet to node 1 with: (0 1 2
At time t=0.980, node 0 sends packet to node 2 with: (0
At time t=0.980, node 0 sends packet to node 3 with: (0
                                                                 7)
MAIN: rcv event, t=1.270, at 2 src: 0, dest: 2, contents: 0
                                                                1
rtupdate2() is called at time t=: 1.270 as node 0 sent a pkt with (0 1 3 7)
                via
                      3
   D2 |
           0
                 1
               999
                      999
     01
           3
dest 1
           4
                 1
                      999
     3|
          10
               999
                        2
Minimum cost didn't change. No new packets are sent
MAIN: rcv event, t=1.532, at 1 src: 2, dest: 1, contents: 3
rtupdate1() is called at time t=: 1.532 as node 2 sent a pkt with (3 \, 1 \, 0 \, 2)
             via
           0
   D1
     0 |
           1
                 4
           4
                 1
dest 2|
At time t=1.532, node 1 sends packet to node 0 with: (1 0 1 3)
At time t=1.532, node 1 sends packet to node 2 with: (1 0 1 3)
MAIN: rcv event, t=2.007, at 2 src: 1, dest: 2, contents: 1 0
rtupdate2() is called at time t=: 2.007 as node 1 sent a pkt with (1 0 1 999)
                via
           0
   D2
                 1
                      3
     0 j
           3
                 2
                      999
dest 1|
           4
                      999
     3|
          10
               999
                      2
At time t=2.007, node 2 sends packet to node 0 with: (2 1 0 2)
At time t=2.007, node 2 sends packet to node 1 with: (2 \, 1 At time t=2.007, node 2 sends packet to node 3 with: (2 \, 1
                                                                 2)
MAIN: rcv event, t=2.147, at 0 src: 2, dest: 0, contents:
                                                             3 1
rtupdate0() is called at time t=: 2.147 as node 2 sent a pkt with (3 1 0 2)
                via
   D0
           1
                 2
                       3
                 4
                      999
     1
           1
dest 21
                 3
                      999
         999
                 5
     3|
At time t=2.147, node 0 sends packet to node 1 with: (0
At time t=2.147, node 0 sends packet to node 2 with: (0 1
                                                                 5)
At time t=2.147, node 0 sends packet to node 3 with: (0 1 2
                                                                 5)
MAIN: rcv event, t=2.336, at 1 src: 0, dest: 1, contents:
rtupdate1() is called at time t=: 2.336 as node 0 sent a pkt with (0 1 2 7)
             via
   D1 |
           0
     0 İ
           1
                 4
dest 2|
           3
                 1
     3|
```

MAIN: rcv event, t=2.786, at 3 src: 0, dest: 3, contents: 0 1 2 rtupdate3() is called at time t=: 2.786 as node 0 sent a pkt with (0 1 2 7)

D3	3 I	0	V1a 2
dest	0	7	5
	1	8	3
	2	9	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=3.045, at 0 src: 3, dest: 0, contents: 7 999 rtupdate0() is called at time t=: 3.045 as node 3 sent a pkt with (7 999 2 0)

		V 10	٠ _
D0	1	2	3
	i		
1	1	4	999
dest 2	j 2	3	9
3	999	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=3.485, at 1 src: 2, dest: 1, contents: 2 1 0 rtupdate1() is called at time t=: 3.485 as node 2 sent a pkt with (2 1 0 2)

$$\begin{array}{c|cccc} & & & & & & \\ & D1 & & & & 2 \\ ---- & ---- & & & & \\ 0 & & 1 & & 3 \\ dest & 2 & & 3 & & 1 \\ & & 3 & & 8 & & 3 \end{array}$$

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=3.488, at 1 src: 0, dest: 1, contents: 0 1 rtupdate1() is called at time t=: 3.488 as node 0 sent a pkt with (0 1 2 5)

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=3.613, at 2 src: 3, dest: 2, contents: 7 999 2 rtupdate2() is called at time t=: 3.613 as node 3 sent a pkt with (7 999 2 0)

D2		0	1	а 3
	0	3	2	9
dest	1	4	1	999
	3	10	999	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=4.725, at 3 src: 2, dest: 3, contents: 2 1 rtupdate3() is called at time t=: 4.725 as node 2 sent a pkt with (2 $\,$ 1 $\,$ 0 $\,$ 2)

At time t=4.725, node 3 sends packet to node 0 with: $(4\ 3\ 2\ 0)$ At time t=4.725, node 3 sends packet to node 2 with: $(4\ 3\ 2\ 0)$ MAIN: rcv event, t=4.940, at 0 src: 3, dest: 0, contents: 7 8 rtupdate0() is called at time t=: 4.940 as node 3 sent a pkt with (7 8 2 0)

D0	1	2	3
1	1	4	15
dest 2	2	3	9
3 İ	999	5	7

MAIN: rcv event, t=5.234, at 2 src: 3, dest: 2, contents: 7 8 rtupdate2() is called at time t=: 5.234 as node 3 sent a pkt with (7 8 2 0)

D2	0	1	3
dest 1	3	2	9
	4	1	10
	10	999	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=5.264, at 0 src: 3, dest: 0, contents: 5 3 2 rtupdate0() is called at time t=: 5.264 as node 3 sent a pkt with (5 3 2 0)

D0	I	1	2	3
	-			
1	.	1	4	10
dest 2	? j	2	3	9
3	sj 99	99	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=6.173, at 3 src: 0, dest: 3, contents: 0 1 2 rtupdate3() is called at time t=: 6.173 as node 0 sent a pkt with (0 1 2 5)

D3	0	2
0 dest 1		 4 3 2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=6.887, at 0 src: 1, dest: 0, contents: 1 0 1 8 rtupdate0() is called at time t=: 6.887 as node 1 sent a pkt with (1 0 1 8)

D0	1	2	3
1	1	4	10
dest 2	2	3	9
3 أ	9	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=6.921, at 0 src: 1, dest: 0, contents: 1 0 1 3 rtupdateO() is called at time t=: 6.921 as node 1 sent a pkt with (1 0 1 3)

D0	1	v1a 2	3
1 dest 2	1 2	 4 3	10 2
3 j	4	5	7

At time t=6.921, node 0 sends packet to node 1 with: (0 1 2 4)

At time t=6.921, node 0 sends packet to node 2 with: (0 1 2 4)

At time t=6.921, node 0 sends packet to node 3 with: (0 1 2 4) MAIN: rcv event, t=6.969, at 3 src: 0, dest: 3, contents: 0 1 rtupdate3() is called at time t=: 6.969 as node 0 sent a pkt with (0 1 2 4)

D3	0	v 1 a 2
 0	 7	 4
dest 1	8	3

MAIN: rcv event, t=7.168, at 2 src: 3, dest: 2, contents: 5 3 2 rtupdate2() is called at time t=: 7.168 as node 3 sent a pkt with (5 3 2 0)

D2		0	1	3
dest 1) 	3 4	2 1	7 5
3	3 j	10	999	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=8.227, at 1 src: 0, dest: 1, contents: 0 1 2 4 rtupdate1() is called at time t=: 8.227 as node 0 sent a pkt with (0 1 2 4)

		V1	.a
D:	L	0	2
	i		
	0	1	3
dest	2	3	1
	3 j	5	3

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=8.244, at 0 src: 2, dest: 0, contents: 2 1 rtupdateO() is called at time t=: 8.244 as node 2 sent a pkt with (2 1 0 2)

DØ	1	2	a 3
1 dest 2	1 2	4	10
3	4	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=9.069, at 2 src: 1, dest: 2, contents: 1 0 1 8 rtupdate2() is called at time t=: 9.069 as node 1 sent a pkt with (1 0 1 8)

D2	0	1	3
dest 1	3	2	7
	4	1	5
	10	9	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=9.320, at 0 src: 3, dest: 0, contents: 4 3 2 rtupdate0() is called at time t=: 9.320 as node 3 sent a pkt with (4 3 2 0)

DØ	1	2	3
1	1	4	10
dest 2	2	3	9
3	4	5	7

via

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=11.022, at 2 src: 0, dest: 2, contents: 0 1 2 7 rtupdate2() is called at time t=: 11.022 as node 0 sent a pkt with (0 1 2 7)

D2	0	via 1	3
 0	3		 7
dest 1	4	1	5
3 j	10	9	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=12.792, at 2 src: 1, dest: 2, contents: 1 0 1

rtupdate2() is called at time t=: 12.792 as node 1 sent a pkt with (1 0 1 3)

D2	0	via 1	3
- 0	3	2	 7
dest 1	4	1	5
3 j	10	4	2

MAIN: rcv event, t=13.977, at 2 src: 0, dest: 2, contents: rtupdate2() is called at time t=: 13.977 as node 0 sent a pkt with (0 1 2 5)

D2	0	1	3
0 dest 1	 3 4	2 1	7 5
3	8	4	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=15.855, at 2 src: 3, dest: 2, contents: 4 3 2 rtupdate2() is called at time t=: 15.855 as node 3 sent a pkt with (4 3 2 0)

D2	ļ	0	1	3
	- · 0	3	2	6
dest	3 1	8	4	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=17.443, at 2 src: 0, dest: 2, contents: 0 1 2 rtupdate2() is called at time t=: 17.443 as node 0 sent a pkt with (0 1 2 4)

D2	0) 1	3
0	3	2	6
dest 1	. 4	1	5
3	7	' 4	2

via

Minimum cost didn't change. No new packets are sent

D0 | 1 2 3

At time t=10000.000, node 0 sends packet to node 1 with: (0 4 3 5) At time t=10000.000, node 0 sends packet to node 2 with: (0 4 3 5) At time t=10000.000, node 0 sends packet to node 3 with: (0 4 3 5)

		Vla	1
D:	1	0	2
	0	20	3
dest	2	22	1
	3	24	3

At time t=10000.000, node 1 sends packet to node 0 with: (3 0 1 3)

At time t=10000.000, node 1 sends packet to node 2 with: (3 0 1 3)
MAIN: rcv event, t=10000.404, at 3 src: 0, dest: 3, contents: 0 4 rtupdate3() is called at time t=: 10000.404 as node 0 sent a pkt with (0 4 3 5)

via 0 D3 | 0 j dest 1| 11 3 2|

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10001.101, at 2 src: 0, dest: 2, contents: 0 4 3 5 rtupdate2() is called at time t=: 10001.101 as node 0 sent a pkt with (0 4 3 5)

D2	0	1	3
0 dest 1	3 7	2 1 4	 6 5 2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10001.105, at 2 src: 1, dest: 2, contents: 3 0 1 3 rtupdate2() is called at time t=: 10001.105 as node 1 sent a pkt with (3 0 1 3)

D2		0	V18	a 3
dest			4 1	6 5
	3	8	4	2

At time t=10001.105, node 2 sends packet to node 0 with: $(3\ 1\ 0\ 2)$ At time t=10001.105, node 2 sends packet to node 1 with: $(3\ 1\ 0\ 2)$

At time t=10001.105, node 2 sends packet to node 3 with: (3 1 0 2)

MAIN: rcv event, t=10001.834, at 1 src: 0, dest: 1, contents: 0 4 3 5 rtupdate1() is called at time t=: 10001.834 as node 0 sent a pkt with (0 4 3 5)

		V T	a
D1		0	2
	-		
	0 j	20	3
dest	2	23	1
	3	25	3

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10001.995, at 0 src: 1, dest: 0, contents: 3 0 1 3 rtupdate0() is called at time t=: 10001.995 as node 1 sent a pkt with (3 0 1 3)

D0	1	2	3
1 dest 2	20 21	4 3	 10 9
3	23	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10002.765, at 3 src: 2, dest: 3, contents: 3 1 0 2 rtupdate3() is called at time t=: 10002.765 as node 2 sent a pkt with (3 1 0 2)

At time t=10002.765, node 3 sends packet to node 0 with: $(5 \ 3 \ 2 \ 0)$

At time t=10002.765, node 3 sends packet to node 2 with: (5 3 2 0)

MAIN: rcv event, t=10003.097, at 1 src: 2, dest: 1, contents: 3 1 0 2 rtupdate1() is called at time t=: 10003.097 as node 2 sent a pkt with (3 1 0 2)

At time t=10003.097, node 1 sends packet to node 0 with: (4 0 1 3)

At time t=10003.097, node 1 sends packet to node 2 with: (4 0 1 3) MAIN: rcv event, t=10003.245, at 0 src: 2, dest: 0, contents: 3 1

rtupdateO() is called at time t=: 10003.245 as node 2 sent a pkt with (3 1 0 2)

1	20	4	10
dest 2	21	3	9
3	j 23	5	7

MAIN: rcv event, t=10003.936, at 0 src: 3, dest: 0, contents: 5 3 rtupdate0() is called at time t=: 10003.936 as node 3 sent a pkt with (5 3 2 0)

DØ	1	2	3
1 dest 2	20 21 23	 4 3 5	10 9 7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10003.952, at 2 src: 3, dest: 2, contents: 5 3 2 rtupdate2() is called at time t=: 10003.952 as node 3 sent a pkt with (5 3 2 0)

D2	0	1	3
0	3	4	7
dest 1	7	1	5
3 į	8	4	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10004.443, at 0 src: 1, dest: 0, contents: 4 0 rtupdate0() is called at time t=: 10004.443 as node 1 sent a pkt with (4 0 1 3)

D0	1	2	3
1 dest 2	20 21	4 3	 10 0
3	23	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=10004.712, at 2 src: 1, dest: 2, contents: 4 0 rtupdate2() is called at time t=: 10004.712 as node 1 sent a pkt with (4 0 1 3)

D2	0	1	3
0	3	5	7
dest 1	7	1	5
3 İ	8	4	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=20000.000, at 0 via

D0	1	2	3
1	1	4	10
dest 2	2	3	9
3	4	5	7

At time t=20000.000, node 0 sends packet to node 1 with: (0 1 2 4) At time t=20000.000, node 0 sends packet to node 2 with: (0 1 2 4) At time t=20000.000, node 0 sends packet to node 3 with: (0 1 2 4)

	٧.	та
D1 	0	2
0	1	4
dest 2	4	1
3 i	6	3

At time t=20000.000, node 1 sends packet to node 0 with: (1 0 1 3)

At time t=20000.000, node 1 sends packet to node 2 with: (1 0 1 3)
MAIN: rcv event, t=20000.312, at 2 src: 0, dest: 2, contents: 0 1 rtupdate2() is called at time t=: 20000.312 as node 0 sent a pkt with (0 1 2 4)

D2	vi 0 1		3
 0	3	5	 7
dest 1	4	1	5
3 j	7	4	2

MAIN: rcv event, t=20000.504, at 3 src: 0, dest: 3, contents: 0 1 2 4 rtupdate3() is called at time t=: 20000.504 as node 0 sent a pkt with (0 1 2 4)

D:	3	0	2
dest	0 1	7 8	5 3
ucse	2	9	2

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=20001.441, at 1 src: 0, dest: 1, contents: 0 1 2 4 rtupdate1() is called at time t=: 20001.441 as node 0 sent a pkt with (0 1 2 4)

D	1	0	2
dest	- 0 2	1 3	 4 1
	3	5	3

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=20001.516, at 0 src: 1, dest: 0, contents: 1 0 1 3 rtupdate0() is called at time t=: 20001.516 as node 1 sent a pkt with (1 0 1 3)

D0	1	2	3
1	1	4	10
dest 2	2	3	9
3	4	5	7

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=20001.648, at 2 src: 1, dest: 2, contents: 1 0 1 3 rtupdate2() is called at time t=: 20001.648 as node 1 sent a pkt with (1 0 1 3)

D2	0	via 1	3
0 dest 1	3 4	2 1	 7 5
3 İ	7	4	2

At time t=20001.648, node 2 sends packet to node 0 with: (2 1 0 2)

At time t=20001.648, node 2 sends packet to node 1 with: $(2 \ 1 \ 0 \ 2)$

At time t=20001.648, node 2 sends packet to node 3 with: (2 1 0 2) MAIN: rcv event, t=20001.729, at 0 src: 2, dest: 0, contents: 2 1 0

rtupdateO() is called at time t=: 20001.729 as node 2 sent a pkt with (2 1 0 2)

D	0	1	2	3
dest	1 2	1 2	4 3 5	 10 9

Minimum cost didn't change. No new packets are sent

MAIN: rcv event, t=20002.449, at 3 src: 2, dest: 3, contents: 2 1 0 2 rtupdate3() is called at time t=: 20002.449 as node 2 sent a pkt with (2 1 0 2)

	via	3
D3	0	2
0	7	4
dest 1	8	3
2	9	2

At time t=20002.449, node 3 sends packet to node 0 with: (4 3 2 0)
At time t=20002.449, node 3 sends packet to node 2 with: (4 3 2 0)
MAIN: rcv event, t=20003.146, at 1 src: 2, dest: 1, contents: 2 1 0 2
rtupdate1() is called at time t=: 20003.146 as node 2 sent a pkt with (2 1 0 2)

	v:	La
D1	0	2
0 j	1	3
dest 2	3	1
3	5	3

Minimum cost didn't change. No new packets are sent MAIN: rcv event, t=20003.852, at 0 src: 3, dest: 0, contents: 4 3 2 0 rtupdate0() is called at time t=: 20003.852 as node 3 sent a pkt with (4 3 2 0)

		vıa	
D0	1	2	3
1	1	4	10
dest 2	2	3	9
3	4	5	7

Minimum cost didn't change. No new packets are sent MAIN: rcv event, t=20004.211, at 2 src: 3, dest: 2, contents: 4 3 2 0 rtupdate2() is called at time t=: 20004.211 as node 3 sent a pkt with (4 3 2 0)

		via	
D2	0	1	3
i			
0 j	3	2	6
dest 1	4	1	5
3	7	4	2

Minimum cost didn't change. No new packets are sent

Simulator terminated at t=20004.210938, no packets in medium

Minimum cost from 0 to other nodes are: 0 1 2 4 Minimum cost from 1 to other nodes are: 1 0 1 3 Minimum cost from 2 to other nodes are: 2 1 0 2 Minimum cost from 3 to other nodes are: 4 3 2 0