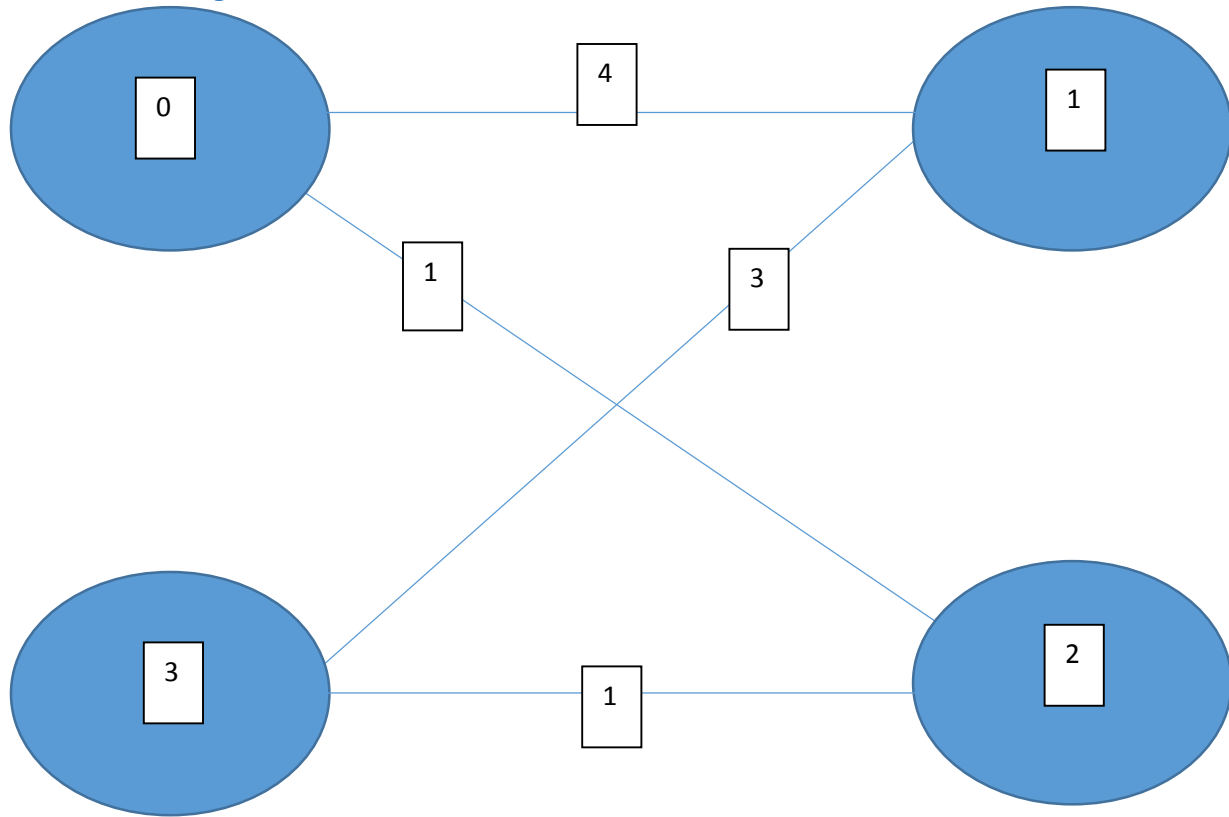


Challenge – working with an arbitrary 4-node network configuration

Network Configuration



NodeConfiguration file

```
4
0, 4, 1, 9999
4, 0, 9999, 3
1, 9999, 0, 1
9999, 3, 1, 0
```

Copied this into NodeConfigurationFile, ran the project3 executable.

Final Tables

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 8 1

dest 3| 7 2

via

D1 | 0 3

----|-----

dest 0| 4 5

dest 2| 5 4

dest 3| 6 3

via

D2 | 0 3

----|-----

dest 0| 1 3

dest 1| 5 4

dest 3| 3 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

Output trace

```
tnarayan@CCCWORK3 project3-test] $ ./project3 1 > out2
```

```
tnarayan@CCCWORK3 project3-test] $ emacs out2
```

At time t=0.000000, rtinit0() called.

```
      via
D0 |  1  2
----|-----
dest 1|  4 9999
dest 2| 9999  1
dest 3| 9999 9999
```

At time t=0.000000, node 0 sends packet to node 1 with: 0 4 1 9999

At time t=0.000000, node 0 sends packet to node 2 with: 0 4 1 9999

At time t=0.000000, rtinit1() called.

```
      via
D1 |  0  3
----|-----
dest 0|  4 9999
dest 2| 9999 9999
dest 3| 9999  3
```

At time t=0.000000, node 1 sends packet to node 0 with: 4 0 9999 3

At time t=0.000000, node 1 sends packet to node 3 with: 4 0 9999 3

At time t=0.000000, rtinit2() called.

```
      via
D2 |  0  3
----|-----
dest 0|  1 9999
```

dest 1| 9999 9999

dest 3| 9999 1

At time t=0.000000, node 2 sends packet to node 0 with: 1 9999 0 1

At time t=0.000000, node 2 sends packet to node 3 with: 1 9999 0 1

At time t=0.000000, rtinit3() called.

via

D3 | 1 2

----|-----

dest 0| 9999 9999

dest 1| 3 9999

dest 2| 9999 1

At time t=0.000000, node 3 sends packet to node 1 with: 9999 3 1 0

At time t=0.000000, node 3 sends packet to node 2 with: 9999 3 1 0

At time t=0.124745, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

----|-----

dest 0| 1 9999

dest 1| 5 9999

dest 3| 9999 1

At time t=0.124745, node 2 sends packet to node 0 with: 1 5 0 1

At time t=0.124745, node 2 sends packet to node 3 with: 1 5 0 1

At time t=0.348497, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 3

----|-----

dest 0| 1 9999

dest 1| 5 4

dest 3| 9999 1

At time t=0.348497, node 2 sends packet to node 0 with: 1 4 0 1

At time t=0.348497, node 2 sends packet to node 3 with: 1 4 0 1

At time t=0.586824, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

----|-----

dest 1| 4 9999

dest 2| 9999 1

dest 3| 7 9999

At time t=0.586824, node 0 sends packet to node 1 with: 0 4 1 7

At time t=0.586824, node 0 sends packet to node 2 with: 0 4 1 7

At time t=0.745790, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 9999

dest 1| 3 9999

dest 2| 9999 1

At time t=0.745790, node 3 sends packet to node 1 with: 7 3 1 0

At time t=0.745790, node 3 sends packet to node 2 with: 7 3 1 0

At time t=1.071769, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

```

----|-----
dest 1|  4 9999
dest 2| 9999  1
dest 3|  7  2

```

At time t=1.071769, node 0 sends packet to node 1 with: 0 4 1 2

At time t=1.071769, node 0 sends packet to node 2 with: 0 4 1 2

At time t=1.080034, rtupdate1() called. node 1 receives a packet from node 0

```

      via
D1 |  0  3
----|-----
dest 0|  4 9999
dest 2|  5 9999
dest 3| 9999  3

```

At time t=1.080034, node 1 sends packet to node 0 with: 4 0 5 3

At time t=1.080034, node 1 sends packet to node 3 with: 4 0 5 3

At time t=1.224738, rtupdate3() called. node 3 receives a packet from node 2

```

      via
D3 |  1  2
----|-----
dest 0|  7  2
dest 1|  3 9999
dest 2| 9999  1

```

At time t=1.224738, node 3 sends packet to node 1 with: 2 3 1 0

At time t=1.224738, node 3 sends packet to node 2 with: 2 3 1 0

At time t=1.577118, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 6

dest 2| 9999 1

At time t=1.577118, node 3 sends packet to node 1 with: 2 3 1 0

At time t=1.577118, node 3 sends packet to node 2 with: 2 3 1 0

At time t=1.673801, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 6

dest 2| 9999 1

dest 3| 7 2

At time t=1.673801, node 0 sends packet to node 1 with: 0 4 1 2

At time t=1.673801, node 0 sends packet to node 2 with: 0 4 1 2

At time t=1.774665, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

----|-----

dest 0| 1 9999

dest 1| 5 4

dest 3| 8 1

At time t=1.774665, node 2 sends packet to node 0 with: 1 4 0 1

At time t=1.774665, node 2 sends packet to node 3 with: 1 4 0 1

At time t=1.995568, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 9999 1

At time t=1.995568, node 3 sends packet to node 1 with: 2 3 1 0

At time t=1.995568, node 3 sends packet to node 2 with: 2 3 1 0

At time t=2.122806, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 9999 1

dest 3| 7 2

At time t=2.122806, node 0 sends packet to node 1 with: 0 4 1 2

At time t=2.122806, node 0 sends packet to node 2 with: 0 4 1 2

At time t=2.177531, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 8 1

At time t=2.177531, node 3 sends packet to node 1 with: 2 3 1 0

At time t=2.177531, node 3 sends packet to node 2 with: 2 3 1 0

At time t=2.768510, rtupdate1() called. node 1 receives a packet from node 3

via

D1 | 0 3

----|-----

dest 0| 4 9999

dest 2| 5 4

dest 3| 9999 3

At time t=2.768510, node 1 sends packet to node 0 with: 4 0 4 3

At time t=2.768510, node 1 sends packet to node 3 with: 4 0 4 3

At time t=2.938072, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 9 1

dest 3| 7 2

At time t=2.938072, node 0 sends packet to node 1 with: 0 4 1 2

At time t=2.938072, node 0 sends packet to node 2 with: 0 4 1 2

At time t=3.214154, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 8 1

At time t=3.358197, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 9 1

dest 3| 7 2

At time t=3.485620, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 3

----|-----

dest 0| 1 8

dest 1| 5 4

dest 3| 8 1

At time t=3.485620, node 2 sends packet to node 0 with: 1 4 0 1

At time t=3.485620, node 2 sends packet to node 3 with: 1 4 0 1

At time t=3.659162, rtupdate1() called. node 1 receives a packet from node 0

via

D1 | 0 3

----|-----

dest 0| 4 9999

dest 2| 5 4

dest 3| 11 3

At time t=3.659162, node 1 sends packet to node 0 with: 4 0 4 3

At time t=3.659162, node 1 sends packet to node 3 with: 4 0 4 3

At time t=3.716383, rtupdate1() called. node 1 receives a packet from node 3

via

D1	0 3
dest 0| 4 10
dest 2| 5 4
dest 3| 11 3

At time t=3.716383, node 1 sends packet to node 0 with: 4 0 4 3
At time t=3.716383, node 1 sends packet to node 3 with: 4 0 4 3
At time t=3.719762, rtupdate1() called. node 1 receives a packet from node 0

via
D1	0 3
dest 0| 4 10
dest 2| 5 4
dest 3| 6 3

At time t=3.719762, node 1 sends packet to node 0 with: 4 0 4 3
At time t=3.719762, node 1 sends packet to node 3 with: 4 0 4 3
At time t=3.964821, rtupdate1() called. node 1 receives a packet from node 3

via
D1	0 3
dest 0| 4 5
dest 2| 5 4
dest 3| 6 3

At time t=3.964821, node 1 sends packet to node 0 with: 4 0 4 3
At time t=3.964821, node 1 sends packet to node 3 with: 4 0 4 3
At time t=4.275101, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

----|-----

dest 0| 1 8

dest 1| 5 4

dest 3| 3 1

At time t=4.275101, node 2 sends packet to node 0 with: 1 4 0 1

At time t=4.275101, node 2 sends packet to node 3 with: 1 4 0 1

At time t=4.721433, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 8 1

dest 3| 7 2

At time t=4.721433, node 0 sends packet to node 1 with: 0 4 1 2

At time t=4.721433, node 0 sends packet to node 2 with: 0 4 1 2

At time t=4.985729, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 3

----|-----

dest 0| 1 3

dest 1| 5 4

dest 3| 3 1

At time t=4.985729, node 2 sends packet to node 0 with: 1 4 0 1

At time t=4.985729, node 2 sends packet to node 3 with: 1 4 0 1

At time t=5.123524, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=5.123524, node 3 sends packet to node 1 with: 2 3 1 0

At time t=5.123524, node 3 sends packet to node 2 with: 2 3 1 0

At time t=5.481798, rtupdate1() called. node 1 receives a packet from node 3

via

D1 | 0 3

----|-----

dest 0| 4 5

dest 2| 5 4

dest 3| 6 3

At time t=5.647227, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 8 1

dest 3| 7 2

At time t=6.632125, rtupdate1() called. node 1 receives a packet from node 0

via

D1 | 0 3

---|-----
dest 0| 4 5
dest 2| 5 4
dest 3| 6 3

At time t=6.812655, rtupdate2() called. node 2 receives a packet from node 3

via
D2	0 3
dest 0| 1 3
dest 1| 5 4
dest 3| 3 1

At time t=6.888050, rtupdate0() called. node 0 receives a packet from node 1

via
D0	1 2
dest 1| 4 5
dest 2| 8 1
dest 3| 7 2

At time t=6.948075, rtupdate3() called. node 3 receives a packet from node 2

via
D3	1 2
dest 0| 7 2
dest 1| 3 5
dest 2| 7 1

At time t=7.167467, rtupdate1() called. node 1 receives a packet from node 3

via

D1 | 0 3

----|-----

dest 0| 4 5

dest 2| 5 4

dest 3| 6 3

At time t=7.446311, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=8.347857, rtupdate1() called. node 1 receives a packet from node 0

via

D1 | 0 3

----|-----

dest 0| 4 5

dest 2| 5 4

dest 3| 6 3

At time t=8.372387, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

----|-----

dest 0| 1 3

dest 1| 5 4

dest 3| 3 1

At time t=8.511608, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=8.729964, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 8 1

dest 3| 7 2

At time t=9.194467, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

----|-----

dest 1| 4 5

dest 2| 8 1

dest 3| 7 2

At time t=9.396809, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=9.849818, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 3

----|-----

dest 0| 1 3

dest 1| 5 4

dest 3| 3 1

At time t=9.918024, rtupdate3() called. node 3 receives a packet from node 1

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=9.981966, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 1 2

----|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=10.059130, rtupdate1() called. node 1 receives a packet from node 3

via

D1 | 0 3

---|-----

dest 0| 4 5

dest 2| 5 4

dest 3| 6 3

At time t=10.244391, rtupdate3() called. node 3 receives a packet from node 2

via

D3 | 1 2

---|-----

dest 0| 7 2

dest 1| 3 5

dest 2| 7 1

At time t=10.669103, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

---|-----

dest 0| 1 3

dest 1| 5 4

dest 3| 3 1

At time t=10.752539, rtupdate0() called. node 0 receives a packet from node 1

via

D0 | 1 2

---|-----

dest 1| 4 5
dest 2| 8 1
dest 3| 7 2

At time t=10.826559, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 5
dest 2| 8 1
dest 3| 7 2

At time t=10.827645, rtupdate0() called. node 0 receives a packet from node 2

via

D0 | 1 2

----|-----

dest 1| 4 5
dest 2| 8 1
dest 3| 7 2

At time t=10.831429, rtupdate1() called. node 1 receives a packet from node 0

via

D1 | 0 3

----|-----

dest 0| 4 5
dest 2| 5 4
dest 3| 6 3

At time t=11.506788, rtupdate1() called. node 1 receives a packet from node 0

via
D1	0 3
dest 0| 4 5
dest 2| 5 4
dest 3| 6 3

At time t=12.037662, rtupdate2() called. node 2 receives a packet from node 3

via
D2	0 3
dest 0| 1 3
dest 1| 5 4
dest 3| 3 1

At time t=12.075915, rtupdate2() called. node 2 receives a packet from node 0

via
D2	0 3
dest 0| 1 3
dest 1| 5 4
dest 3| 3 1

At time t=12.095455, rtupdate1() called. node 1 receives a packet from node 3

via
D1	0 3
dest 0| 4 5
dest 2| 5 4

dest 3 | 6 3

At time t=12.836551, rtupdate2() called. node 2 receives a packet from node 0

via

D2 | 0 3

----|-----

dest 0 | 1 3

dest 1 | 5 4

dest 3 | 3 1

At time t=14.564416, rtupdate2() called. node 2 receives a packet from node 3

via

D2 | 0 3

----|-----

dest 0 | 1 3

dest 1 | 5 4

dest 3 | 3 1

Simulator terminated at t=14.564416, no packets in medium