```
1 Network Simulator v1.0
 2 Enter trace level (>= 0): \lceil 0 \rceil Enter seed (>= 0): \lceil 3322 \rceil
 3 Function rtinit() has been called at t=0.000000 to initialize node
  0.
 4
 5 A packet has been sent from node 0 to node 1, contents = 0 1 1 9999
 6 A packet has been sent from node 0 to node 2, contents = 0 1 1 9999
 8 Distance table of node 0 is:
                   via
10
     DØ 1
             1
                    2
11
    ----
                  9999
12
       11
             1
13 dest 21
           9999
                     1
14
       3 I
           9999
                   9999
15
16 Function rtinit() has been called at t=0.000000 to initialize node
  1.
17
18 A packet has been sent from node 1 to node 0, contents = 1 0 10 7
19 A packet has been sent from node 1 to node 2, contents = 1 0 10 7
20 A packet has been sent from node 1 to node 3, contents = 1 0 10 7
21
22 Distance table of node 1 is:
23
                   via
24
     D1 |
             0
                    2
                         3
25
    ----
26
       01
             1
                 9999
                         9999
27 dest 21
           9999
                    10
                         9999
28
       31
           9999
                   9999
                            7
29
30 Function rtinit() has been called at t=0.000000 to initialize node
  2.
31
32 A packet has been sent from node 2 to node 0, contents = 1 10 0 2
33 A packet has been sent from node 2 to node 1, contents = 1 10 0 2
34 A packet has been sent from node 2 to node 3, contents = 1 10 0 2
35
36 Distance table of node 2 is:
37
                   via
```

```
38
     D2 |
             0
                         3
39
    ----
40
                 9999
       0 I
             1
                         9999
41 dest 1
           9999
                    10
                         9999
42
       3 I
           9999
                  9999
                            2
43
44 Function rtinit() has been called at t=0.000000 to initialize node
  3.
45
46 A packet has been sent from node 3 to node 1, contents = 9999 7 2 0
47 A packet has been sent from node 3 to node 2, contents = 9999 7 2 0
48
49 Distance table of node 3 is:
50
                  via
51
     D3 I
             1
                    2
    ----|-----
52
53
       0 I
           9999
                  9999
54 dest 11
             7
                 9999
       21
           9999
                     2
56 MAIN: rcv event, t=0.055, at 1 src: 0, dest: 1, contents:
                                                                0 9999
  1 9999
57 Distance table has been updated.
59 Distance table of node 1 is:
60
                  via
61
     D1 |
             0
                    2
                         3
62
    ----
63
       0 I
             1
                 9999
                         9999
64 dest 21
             2
                  10
                        9999
       3 I
           9999
                  9999
66 Routing table for node 1.
67
          next hop
68
    ----
69
       0 I
             0
70
       11
             1
71 dest 21
             0
72
       3 I
             3
73
74 A packet has been sent from node 1 to node 0, contents = 9999 0 9999
  7
```

```
75 \, \text{A} packet has been sent from node 1 to node 2, contents = 1 0 2 7
 76 A packet has been sent from node 1 to node 3, contents = 1 0 2 9999
 77 MAIN: rcv event, t=0.625, at 0 src: 1, dest: 0, contents: 9999
   10
 78 Distance table has been updated.
 79
 80 Distance table of node 0 is:
 81
                     via
 82
      DØ 1
               1
                      2
 83
     ----
 84
         11
               1
                   9999
 85 dest 21
              11
                      1
 86
         3 I
               8
                   9999
 87 Routing table for node 0.
 88
            next hop
 89
     ----|------
 90
        01
               0
 91
        11
               1
 92 dest 21
               2
 93
        31
               1
94
95 A packet has been sent from node 0 to node 1, contents = 0 9999 1
96 A packet has been sent from node 0 to node 2, contents = 0 \cdot 1 \cdot 9999 \cdot 8
97 MAIN: rcv event, t=1.393, at 2 src: 0, dest: 2, contents:
                                                                         1
   9999 9999
98 Distance table has been updated.
99
100 Distance table of node 2 is:
101
                     via
102
      D2 |
               0
                      1
                           3
103
     ----|-----
104
        0 I
               1
                    9999
                           9999
105 dest 11
               2
                     10
                          9999
106
         3 I
             9999
                     9999
107 Routing table for node 2.
108
            next hop
109
     ----|-----
110
        0 I
               0
        11
111
               0
```

```
112 dest 21
               2
113
        31
               3
114
115 A packet has been sent from node 2 to node 0, contents = 9999 9999 0
116 A packet has been sent from node 2 to node 1, contents = 1 2 0 2
117 A packet has been sent from node 2 to node 3, contents = 1 \ 2 \ 0 \ 9999
118 MAIN: rcv event, t=1.577, at 3 src: 1, dest: 3, contents:
   10 9999
119 Distance table has been updated.
120
121 Distance table of node 3 is:
122
                    via
123
      D3 |
               1
                     2
124
     ----|-----
125
        0 I
               8
                   9999
126 dest 11
               7
                   9999
        21
              17
127
                     2
128 Routing table for node 3.
129
            next hop
130
     ----
131
        01
               1
132
        11
               1
133 dest 21
               2
               3
134
        31
135
136 A packet has been sent from node 3 to node 1, contents = 9999 9999 2
   0
137 A packet has been sent from node 3 to node 2, contents = 8799990
138 MAIN: rcv event, t=1.885, at 1 src: 2, dest: 1, contents:
                                                                  1 9999
139 Distance table has been updated.
141 Distance table of node 1 is:
142
                    via
143
      D1 |
               0
                     2
                          3
144
     ----
145
        0 I
               1
                    11
                         9999
146 dest 21
               2
                    10
                         9999
                     12
147
        3 I
             9999
                            7
```

```
148 Routing table for node 1.
149
            next hop
150
     ----
151
        0 I
               0
         11
152
               1
153 dest 21
               0
154
        3 I
               3
155
156 MAIN: rcv event, t=2.181, at 2 src: 1, dest: 2, contents:
                                                                       0
   9999
157 Distance table has been updated.
159 Distance table of node 2 is:
160
                    via
161
      D2 I
               0
                     1
                           3
162
     ----
               1
163
        01
                    11
                          9999
               2
                    10
                          9999
164 dest 11
             9999
165
        3 I
                     17
                             2
166 Routing table for node 2.
167
            next hop
168
169
        0 I
               0
        11
170
               0
               2
171 dest 21
172
        3 I
               3
173
174 MAIN: rcv event, t=2.279, at 0 src: 2, dest: 0, contents: 9999 10
   0
       2
175 Distance table has been updated.
176
177 Distance table of node 0 is:
178
                    via
179
      DØ 1
               1
                     2
180
     ----
181
         11
               1
                    11
182 dest 21
              11
                     1
183
         3 I
               8
                     3
184 Routing table for node 0.
185
            next hop
```

```
186
     ----
187
        01
               0
188
        11
               1
               2
189 dest 21
               2
190
        31
191
192 A packet has been sent from node 0 to node 1, contents = 0 9999 1 3
193 A packet has been sent from node 0 to node 2, contents = 0 1 9999
   9999
194 MAIN: rcv event, t=3.124, at 1 src: 3, dest: 1, contents: 9999 9999
195 Distance table has been updated.
196
197 Distance table of node 1 is:
198
                    via
      D1 |
199
               0
                     2
                          3
200
201
        0 I
               1
                    11
                         9999
202 dest 21
               2
                    10
                           9
203
        3 I
             9999
                     12
                            7
204 Routing table for node 1.
205
            next hop
     ----
206
207
        0 I
               0
208
        11
               1
209 dest 21
               0
210
        3 I
               3
211
212 MAIN: rcv event, t=3.278, at 3 src: 2, dest: 3, contents:
                                                                  1 10
   0 9999
213 Distance table has been updated.
214
215 Distance table of node 3 is:
216
                    via
217
      D3 |
               1
                     2
218
219
        0 I
               8
                     3
220 dest 11
               7
                    12
221
        21
              17
                     2
222 Routing table for node 3.
```

```
223
           next hop
224
     ----
225
        01
               2
226
        11
               1
               2
227 dest 21
               3
228
        31
229
230 A packet has been sent from node 3 to node 1, contents = 3 9999 2 0
231 A packet has been sent from node 3 to node 2, contents = 9999 7 9999
232 MAIN: rcv event, t=3.866, at 0 src: 1, dest: 0, contents: 9999
   9999
233 Distance table has been updated.
234
235 Distance table of node 0 is:
236
                    via
237
      DØ 1
               1
                     2
238
     ----
239
        11
               1
                    11
240 dest 21
            9999
                      1
        3 I
241
               8
                     3
242 Routing table for node 0.
243
           next hop
244
     ----
245
        01
               0
246
        11
               1
247 dest 21
               2
               2
248
        3 I
249
250 MAIN: rcv event, t=4.001, at 1 src: 0, dest: 1, contents:
                                                                  0 9999
   1 9999
251 Distance table has not been updated.
253 Distance table of node 1 is:
254
                    via
255
      D1 |
               0
                     2
                          3
256
     ----
257
        0 I
               1
                    11
                         9999
258 dest 21
               2
                    10
                           9
                     12
                            7
259
        3 I
            9999
```

```
260 Routing table for node 1.
261
           next hop
262
     ----
263
        0 I
               0
        11
264
               1
265 dest 21
               0
266
        31
               3
267
268 MAIN: rcv event, t=4.041, at 3 src: 1, dest: 3, contents:
                                                                     0
   2 9999
269 Distance table has been updated.
270
271 Distance table of node 3 is:
272
                    via
273
      D3 I
               1
                     2
274
     ----
275
               8
                     3
        01
               7
                    12
276 dest 11
277
        21
               9
                     2
278 Routing table for node 3.
279
           next hop
280
     ----
281
        0 I
               2
        11
               1
282
               2
283 dest 21
284
        3 I
               3
285
286 MAIN: rcv event, t=4.167, at 2 src: 3, dest: 2, contents: 9999
                                                                      7
   9999
          0
287 Distance table has been updated.
288
289 Distance table of node 2 is:
290
                    via
291
      D2 |
               0
                     1
                          3
292
     ----
293
        0 I
               1
                    11
                         9999
294 dest 11
               2
                    10
295
        3 I
            9999
                     17
                            2
296 Routing table for node 2.
297
           next hop
```

```
298
     ----
299
        0 I
              0
300
        11
              0
301 dest 21
              2
302
        3 I
              3
303
304 MAIN: rcv event, t=4.428, at 0 src: 2, dest: 0, contents: 9999 9999
       2
305 Distance table has been updated.
306
307 Distance table of node 0 is:
308
                   via
309
      D0 I
              1
                     2
310
    ----|------
311
        11
              1
                   9999
312 dest 21
            9999
                      1
                     3
313
        3 I
              8
314 Routing table for node 0.
315
           next hop
316
     ----
317
        01
              0
318
        11
              1
319 dest 21
              2
              2
320
        3 I
321
322 MAIN: rcv event, t=5.026, at 3 src: 2, dest: 3, contents: 1 2
   0 9999
323 Distance table has been updated.
324
325 Distance table of node 3 is:
326
                   via
327
      D3 I
              1
                     2
328
     ----
329
        0 I
              8
                     3
330 dest 11
              7
                     4
        21
                     2
331
              9
332 Routing table for node 3.
333
           next hop
334
335
              2
        0 I
```

```
336
        11
               2
               2
337 dest 21
338
        3 I
               3
339
340 A packet has been sent from node 3 to node 1, contents = 3 4 2 0
341 A packet has been sent from node 3 to node 2, contents = 9999 9999
   9999 0
342 MAIN: rcv event, t=5.088, at 1 src: 2, dest: 1, contents:
                                                                      2
343 Distance table has not been updated.
344
345 Distance table of node 1 is:
346
                    via
347
      D1 |
               0
                     2
                          3
348
     ----|-----
349
        0 I
               1
                    11
                         9999
350 dest 21
               2
                    10
                           9
        3 I
                     12
                            7
351
            9999
352 Routing table for node 1.
353
            next hop
354
     ----
355
        0 I
               0
356
        11
               1
357 dest 21
               0
               3
358
        31
359
360 MAIN: rcv event, t=5.228, at 1 src: 3, dest: 1, contents: 9999 9999
   2
361 Distance table has not been updated.
363 Distance table of node 1 is:
364
                    via
365
      D1 |
               0
                     2
                          3
366
     ----
367
        0 I
               1
                    11
                         9999
368 dest 21
               2
                    10
                           9
369
        3 I
            9999
                     12
                            7
370 Routing table for node 1.
371
            next hop
372
     ----
```

```
373
        0 I
               0
374
         11
               1
375 dest 21
               0
376
         31
               3
377
378 MAIN: rcv event, t=5.269, at 1 src: 0, dest: 1, contents:
                                                                   0 9999
   1
       3
379 Distance table has been updated.
381 Distance table of node 1 is:
382
                    via
      D1 |
383
               0
                      2
                           3
     ----|----
384
385
        01
               1
                    11
                          9999
386 dest 21
               2
                    10
                            9
387
         31
               4
                    12
                            7
388 Routing table for node 1.
389
            next hop
     ----
390
391
        0 I
               0
               1
392
        11
393 dest 21
               0
394
         3 I
395
396 A packet has been sent from node 1 to node 0, contents = 9999 0 9999
   9999
397 A packet has been sent from node 1 to node 2, contents = 1 0 2 4
398 A packet has been sent from node 1 to node 3, contents = 1024
399 MAIN: rcv event, t=6.074, at 2 src: 1, dest: 2, contents:
400 Distance table has not been updated.
401
402 Distance table of node 2 is:
403
                    via
404
      D2 I
               0
                      1
                           3
405
406
        0 I
               1
                    11
                          9999
407 dest 11
               2
                    10
                            9
408
         3 I
             9999
                     17
                             2
409 Routing table for node 2.
```

```
410
           next hop
411
     ----
412
        01
               0
413
        11
               0
               2
414 dest 21
               3
415
        3 I
416
417 MAIN: rcv event, t=6.216, at 3 src: 1, dest: 3, contents:
                                                                      0
418 Distance table has not been updated.
419
420 Distance table of node 3 is:
421
                    via
422
      D3 I
               1
                     2
423
     ----
424
        0 I
               8
                     3
425 dest 11
               7
                     4
        21
               9
                     2
426
427 Routing table for node 3.
428
            next hop
429
     ----
430
               2
        0 I
431
        11
               2
               2
432 dest 21
433
        31
               3
434
435 MAIN: <u>rcv</u> event, t=6.363, at 1 <u>src</u>: 3, <u>dest</u>: 1, contents:
                                                                 3 9999
   2
436 Distance table has been updated.
437
438 Distance table of node 1 is:
439
                    via
440
      D1 |
               0
                     2
                          3
441
     ----
442
        0 I
               1
                    11
                          10
443 dest 21
               2
                    10
                           9
444
        3 I
               4
                    12
                           7
445 Routing table for node 1.
446
            next hop
447
     ----
```

```
448
        0 I
               0
449
         11
               1
450 dest 21
               0
451
         31
               0
452
453 MAIN: rcv event, t=6.457, at 0 src: 1, dest: 0, contents: 9999
   9999 9999
454 Distance table has been updated.
455
456 Distance table of node 0 is:
457
                    via
458
      D0 I
               1
                     2
459
     ----
460
        11
               1
                   9999
461 dest 21
             9999
                      1
462
         3 I
             9999
                      3
463 Routing table for node 0.
464
            next hop
465
     ----
466
        0 I
               0
               1
467
        11
               2
468 dest 21
469
        3 I
               2
470
                                                                    1
471 MAIN: rcv event, t=6.721, at 2 src: 0, dest: 2, contents:
   9999
472 Distance table has been updated.
473
474 Distance table of node 2 is:
475
                    via
476
      D2 |
               0
                     1
                          3
477
     ----
478
        0 I
               1
                    11
                         9999
479 dest 11
               2
                    10
                           9
                           2
480
         31
               9
                    17
481 Routing table for node 2.
482
            next hop
     ----|-----
483
484
        01
               0
        11
               0
485
```

```
486 dest 21
                2
         31
                3
487
488
489 MAIN: <u>rcv</u> event, t=6.764, at 2 <u>src</u>: 3, <u>dest</u>: 2, contents:
                                                                        8 7
    9999
490 Distance table has been updated.
491
492 Distance table of node 2 is:
493
                      via
494
       D2 |
                0
                       1
                             3
495
      ----
496
         0 I
                1
                      11
                             10
497 dest 11
                2
                      10
                              9
                              2
         3 I
                      17
498
                9
499 Routing table for node 2.
500
             next hop
501
      ----
502
         0 I
                0
503
         11
                0
504 dest 21
                2
         31
                3
505
506
507 MAIN: <u>rcv</u> event, t=6.871, at 2 <u>src</u>: 0, <u>dest</u>: 2, contents:
                                                                             1
    9999 9999
508 Distance table has been updated.
509
510 Distance table of node 2 is:
511
                      via
512
       D2 I
                0
                       1
                             3
513
      ---|--
514
         0 I
                1
                      11
                             10
515 dest 11
                2
                      10
                              9
         3 I
              9999
                       17
                               2
517 Routing table for node 2.
518
             next hop
519
520
         0 I
                0
521
         11
                0
                2
522 dest 21
523
         31
                3
```

```
524
525 MAIN: rcv event, t=7.792, at 1 src: 3, dest: 1, contents:
                                                                       4
   2
526 Distance table has not been updated.
528 Distance table of node 1 is:
529
                    via
530
      D1 |
               0
                     2
                           3
531
     ----
532
         0 I
               1
                    11
                           10
               2
                    10
533 dest 21
                            9
534
         3 I
               4
                    12
                            7
535 Routing table for node 1.
536
            next hop
537
538
         0 I
               0
539
         11
               1
540 dest 21
               0
541
         3 I
               0
542
543 MAIN: rcv event, t=8.698, at 2 src: 3, dest: 2, contents: 9999
                                                                       7
   9999
           0
544 Distance table has been updated.
545
546 Distance table of node 2 is:
547
                    via
548
      D2 |
               0
                     1
                           3
549
     ----
550
        0 I
               1
                    11
                          9999
551 dest 1
               2
                    10
                             2
552
         3 I
             9999
                     17
553 Routing table for node 2.
554
            next hop
555
     ----
556
         0 I
               0
         11
557
               0
558 dest 21
               2
559
         3 I
               3
560
561 MAIN: rcv event, t=9.708, at 2 src: 3, dest: 2, contents: 9999 9999
```

```
9999
562 Distance table has been updated.
563
564 Distance table of node 2 is:
565
                    via
566
      D2 I
               0
                     1
                           3
567
     ----
568
        01
               1
                    11
                         9999
               2
569 dest 11
                    10
                         9999
570
        3 I
             9999
                     17
                             2
571 Routing table for node 2.
572
            next hop
573
     ----
574
        01
               0
575
        11
               0
576 dest 21
               2
577
        3 I
               3
578
579 MAIN: rcv event, t=9.896, at 2 src: 1, dest: 2, contents:
                                                                   1
                                                                       0
580 Distance table has been updated.
581
582 Distance table of node 2 is:
583
                    via
      D2 |
584
               0
                     1
                           3
585
     ----
586
        01
               1
                    11
                         9999
               2
587 dest 11
                    10
                         9999
588
        3 I
             9999
                     14
                             2
589 Routing table for node 2.
590
            next hop
591
592
        0 I
               0
593
        11
               0
594 dest 21
               2
        31
595
               3
596
597 MAIN: rcv event, t=10000.000, at -1
598 Function linkhandler() has been called at t=10000.000000 for node 0
   since link cost from node 0 to 1 has been changed to 20.
```

```
599
600 Distance table has been updated.
601
602
603 Distance table of node 0 is:
604
                    via
605
      D0 I
               1
                     2
606
     ----
607
        11
              20
                   9999
608 dest 21
            9999
                      1
        3 I
609
            9999
                      3
610 Routing table for node 0.
611
           next hop
612
     ----
613
        01
               0
614
        11
               1
               2
615 dest 21
        31
               2
616
617
618 A packet has been sent from node 0 to node 1, contents = 0 9999 1 3
619 A packet has been sent from node 0 to node 2, contents = 0 20 9999
   9999
620 Function linkhandler() has been called at t=10000.000000 for node 1
   since link cost from node 1 to 0 has been changed to 20.
621
622 Distance table has been updated.
623
624
625 Distance table of node 1 is:
626
                    via
627
      D1 |
               0
                     2
                          3
628
     ----
629
        0 I
             20
                    11
                          10
630 dest 21
            9999
                     10
                            9
631
        3 I
            9999
                     12
632 Routing table for node 1.
633
            next hop
634
      ----|-------
635
        01
               3
        11
               1
636
```

```
637 dest 21
               3
               3
638
         31
639
640 \, \text{A} packet has been sent from node 1 to node 0, contents = 10 \, 0 \, 9 \, 7
641 A packet has been sent from node 1 to node 2, contents = 10 0 9 7
642 A packet has been sent from node 1 to node 3, contents = 9999 0 9999
   9999MAIN: rcv event, t=10000.796, at 1 src: 0, dest: 1, contents:
   0 9999
             1
643 Distance table has been updated.
644
645 Distance table of node 1 is:
646
                     via
647
      D1 |
               0
                      2
                            3
648
     ----
649
         0 I
              20
                     11
                           10
650 dest 21
              21
                     10
                            9
              23
                            7
651
         31
                     12
652 Routing table for node 1.
653
            next hop
654
655
         01
               3
656
         11
               1
657 dest 21
               3
658
         3 I
               3
659
660 MAIN: rcv event, t=10001.503, at 3 src: 1, dest: 3, contents: 9999
   0 9999 9999
661 Distance table has been updated.
662
663 Distance table of node 3 is:
664
                     via
665
      D3 I
               1
                      2
666
      ----
667
         0 I
             9999
                       3
668 dest 11
               7
                      4
669
         21
             9999
                       2
670 Routing table for node 3.
671
            next hop
672
               2
673
         0 I
```

```
674
         11
               2
               2
675 dest 21
676
         31
               3
677
678 MAIN: rcv event, t=10001.695, at 2 src: 0, dest: 2, contents:
                                                                          0
   20 9999 9999
679 Distance table has been updated.
680
681 Distance table of node 2 is:
682
                     via
       D2 |
683
               0
                      1
                            3
684
      ----
685
         0 I
               1
                     11
                          9999
686 dest 11
              21
                     10
                          9999
687
         31
             9999
                      14
                              2
688 Routing table for node 2.
689
            next hop
690
      ----|------
691
         01
               0
692
         11
               1
               2
693 dest 21
               3
694
         31
695
696 A packet has been sent from node 2 to node 0, contents = 9999 10 0 2
697 \text{ A} packet has been sent from node 2 to node 1, contents = \frac{1}{9999} \frac{999}{0} \frac{0}{2}
698 \text{ A packet has been sent from node 2 to node 3, contents} = 1 10 0 9999
699 MAIN: rcv event, t=10001.915, at 0 src: 1, dest: 0, contents:
   0
        9
700 Distance table has been updated.
702 Distance table of node 0 is:
703
                     via
704
      D0 I
               1
                      2
705
      ----
706
         11
              20
                    9999
707 dest 21
              29
                      1
              27
708
         3 I
                      3
709 Routing table for node 0.
710
            next hop
711
      ----
```

```
712
       0 I
             0
713
        11
             1
714 dest 21
             2
715
        31
             2
716
717 MAIN: rcv event, t=10002.221, at 3 src: 2, dest: 3, contents:
                                                                1
   10
        0 9999
718 Distance table has been updated.
719
720 Distance table of node 3 is:
721
                  via
722
      D3 I
             1
                   2
723
     ----
724
        0 I
           9999
                    3
725 dest 11
             7
                  12
726
        21
           9999
                    2
727 Routing table for node 3.
728
          next hop
729
     ----
730
       01
             2
             1
731
       11
             2
732 dest 21
             3
733
        31
734
735 A packet has been sent from node 3 to node 1, contents = 3 9999 2 0
737 MAIN: rcv event, t=10002.457, at 0 src: 2, dest: 0, contents: 9999
   10
        0
           2
738 Distance table has been updated.
740 Distance table of node 0 is:
741
                  via
742
      D0 I
             1
                   2
743
     ----
744
        11
            20
                  11
745 dest 21
            29
                   1
746
        3 I
            27
                   3
747 Routing table for node 0.
748
          next hop
```

```
749
     ----|-----
750
         01
               0
               2
751
         11
               2
752 dest 21
               2
753
         31
754
755 A packet has been sent from node 0 to node 1, contents = 0.1113
756 A packet has been sent from node 0 to node 2, contents = 0 9999 9999
   9999
757 MAIN: rcv event, t=10002.909, at 1 src: 2, dest: 1, contents:
                                                                        1
   9999
758 Distance table has not been updated.
759
760 Distance table of node 1 is:
761
                    via
      D1 |
762
               0
                      2
                           3
763
764
        0 I
              20
                     11
                           10
765 dest 21
              21
                     10
                            9
                            7
766
         3 I
              23
                    12
767 Routing table for node 1.
768
            next hop
769
      ----
               3
770
         0 I
771
         11
               1
772 dest 21
               3
773
         31
               3
774
775 MAIN: rcv event, t=10003.078, at 2 src: 1, dest: 2, contents:
                                                                       10
776 Distance table has been updated.
777
778 Distance table of node 2 is:
779
                    via
780
      D2 I
               0
                      1
                           3
781
782
         0 I
               1
                     20
                          9999
783 dest 11
              21
                     10
                          9999
784
         3 I
             9999
                      17
                             2
```

785 Routing table for node 2.

```
786
            next hop
     ----
787
788
        0 I
               0
789
        11
               1
               2
790 dest 21
791
        3 I
               3
792
793 MAIN: rcv event, t=10003.514, at 2 src: 3, dest: 2, contents: 9999
   7 9999
794 Distance table has been updated.
795
796 Distance table of node 2 is:
797
                    via
798
      D2 |
               0
                     1
                           3
     ----|-----
799
800
        0 I
               1
                    20
                         9999
801 dest 11
              21
                    10
                            9
        3 I
             9999
                     17
                             2
802
803 Routing table for node 2.
804
            next hop
805
     ----
806
        0 I
               0
807
        11
               3
               2
808 dest 21
               3
809
        3 I
810
811 A packet has been sent from node 2 to node 0, contents = 9999 9 0 2
812 A packet has been sent from node 2 to node 1, contents = 1 \ 9 \ 0 \ 2
813 A packet has been sent from node 2 to node 3, contents = 1 9999 0
   9999
814 MAIN: rcv event, t=10003.537, at 1 src: 3, dest: 1, contents:
                                                                       3
   9999
           2
815 Distance table has not been updated.
816
817 Distance table of node 1 is:
818
                    via
      D1 |
819
               0
                     2
                           3
820
     ----
821
        01
              20
                    11
                           10
                    10
                           9
822 dest 21
              21
```

```
823
         31
              23
                     12
824 Routing table for node 1.
825
            next hop
826
      ----
827
         01
               3
828
         11
               1
829 dest 21
               3
830
         3 I
               3
831
832 MAIN: <u>rcv</u> event, t=10003.553, at 1 <u>src</u>: 0, <u>dest</u>: 1, contents:
                                                                          0
   11
         1
833 Distance table has not been updated.
834
835 Distance table of node 1 is:
836
                     via
837
      D1 |
               0
                      2
                            3
838
      ----
839
         0 I
              20
                     11
                            10
840 dest 21
              21
                     10
                             9
                             7
841
         31
              23
                     12
842 Routing table for node 1.
843
            next hop
844
      ----
               3
845
         0 I
846
         11
               1
847 dest 21
               3
848
         31
               3
849
850 MAIN: rcv event, t=10003.745, at 2 src: 0, dest: 2, contents:
                                                                          0
   9999 9999 9999
851 Distance table has been updated.
852
853 Distance table of node 2 is:
854
                     via
855
      D2 I
               0
                      1
                            3
856
857
         0 I
               1
                     20
                          9999
858 dest 11
             9999
                      10
                              9
                              2
859
         3 I
             9999
                      17
860 Routing table for node 2.
```

```
861
           next hop
862
     ----
863
        01
              0
864
        11
              3
              2
865 dest 21
              3
866
        3 I
867
868 MAIN: rcv event, t=10004.351, at 3 src: 2, dest: 3, contents:
   9999
          0 9999
869 Distance table has been updated.
870
871 Distance table of node 3 is:
872
                   via
873
      D3 I
              1
                    2
874
     ----
875
        0 I
            9999
                     3
876 dest 11
              7
                  9999
        21
            9999
877
                     2
878 Routing table for node 3.
879
           next hop
880
     ----
              2
881
        0 I
882
        11
              1
              2
883 dest 21
        31
              3
884
885
886 MAIN: rcv event, t=10004.758, at 0 src: 2, dest: 0, contents: 9999
   9
       0
           2
887 Distance table has been updated.
889 Distance table of node 0 is:
890
                   via
891
      D0 I
              1
                    2
892
     ----
893
        11
             20
                   10
894 dest 21
             29
                    1
895
        3 I
             27
                    3
896 Routing table for node 0.
897
           next hop
     ----|------
898
```

```
899
         01
               0
               2
900
         11
               2
901 dest 21
               2
902
         31
903
904 A packet has been sent from node 0 to node 1, contents = 0 10 1 3
905 A packet has been sent from node 0 to node 2, contents = 0 9999 9999
   9999
906 MAIN: rcv event, t=10005.182, at 2 src: 0, dest: 2, contents:
                                                                         0
   9999 9999 9999
907 Distance table has not been updated.
908
909 Distance table of node 2 is:
910
                     via
911
      D2 I
               0
                      1
                           3
912
      ----
               1
913
         01
                     20
                          9999
914 dest 11
             9999
                      10
                              9
915
         3 I
             9999
                      17
                             2
916 Routing table for node 2.
917
            next hop
918
919
         0 I
               0
         11
               3
920
               2
921 dest 21
922
         3 I
               3
923
924 MAIN: rcv event, t=10005.526, at 1 src: 2, dest: 1, contents:
                                                                         1
   9
        0
            2
925 Distance table has not been updated.
926
927 Distance table of node 1 is:
928
                     via
929
      D1 |
               0
                      2
                           3
930
      ----|----
931
         01
              20
                     11
                           10
932 dest 21
              21
                     10
                            9
933
         3 I
              23
                     12
                            7
934 Routing table for node 1.
935
            next hop
```

```
936
937
         01
               3
938
         11
               1
939 dest 21
               3
940
         31
               3
941
942 MAIN: rcv event, t=10005.597, at 1 src: 0, dest: 1, contents:
                                                                        0
   10
         1
943 Distance table has not been updated.
944
945 Distance table of node 1 is:
946
                    via
947
      D1 |
               0
                      2
                           3
948
     ----
949
        0 I
              20
                    11
                           10
950 dest 21
              21
                     10
                            9
              23
                            7
951
         31
                    12
952 Routing table for node 1.
953
            next hop
954
955
         01
               3
956
         11
               1
957 dest 21
               3
         3 I
               3
958
959
960 MAIN: rcv event, t=20000.000, at -1
961 Function linkhandler() has been called at t=20000.000000 for node 0
   since link cost from node 0 to 1 has been changed to 1.
962
963 Distance table has been updated.
964
965
966 Distance table of node 0 is:
967
                    via
968
      D0 I
               1
                      2
969
      ----
970
         11
               1
                     10
971 dest 21
             9999
                       1
                       3
972
         3 I
             9999
973 Routing table for node 0.
```

```
974
            next hop
 975
      ----|------
 976
         01
                0
 977
         11
                1
                2
 978 dest 21
                2
 979
         31
 980
 981 A packet has been sent from node 0 to node 1, contents = 0 9999 1 3
 982 A packet has been sent from node 0 to node 2, contents = 0 1 9999
    9999
 983 Function linkhandler() has been called at t=20000.000000 for node 1
    since link cost from node 1 to 0 has been changed to 1.
 984
 985 Distance table has been updated.
 986
 987
 988 Distance table of node 1 is:
 989
                     via
990
       D1 |
                0
                      2
                           3
 991
      ----
 992
         0 I
                1
                     11
                           10
 993 dest 21
             9999
                      10
                             9
 994
         31
             9999
                      12
 995 Routing table for node 1.
 996
            next hop
 997
      ----
 998
         01
                0
 999
         11
                1
                3
1000 dest 21
1001
         31
                3
1002
1003 A packet has been sent from node 1 to node 0, contents = 9999 0 9 7
1004 A packet has been sent from node 1 to node 2, contents = 1 0 9 7
1005 A packet has been sent from node 1 to node 3, contents = 1 0 9999
    9999MAIN: rcv event, t=20000.019, at 3 src: 1, dest: 3, contents:
        0 9999 9999
1006 Distance table has been updated.
1007
1008 Distance table of node 3 is:
1009
                     via
```

```
1010
       D3 |
               1
                     2
1011
      ----
                     3
1012
         0 I
               8
1013 dest 11
               7
                   9999
1014
         21 9999
                      2
1015 Routing table for node 3.
1016
            next hop
1017
1018
         0 I
               2
1019
         11
               1
               2
1020 dest 21
1021
         3 I
               3
1022
1023 MAIN: rcv event, t=20000.022, at 0 src: 1, dest: 0, contents: 9999
        9 7
1024 Distance table has been updated.
1025
1026 Distance table of node 0 is:
1027
                    via
1028
       DØ 1
               1
                     2
1029
     ----|-----
1030
         11
              1
                    10
1031 dest 21
              10
                     1
1032
         3 I
               8
                     3
1033 Routing table for node 0.
1034
            next hop
1035
      ----
1036
         0 I
               0
1037
         11
               1
1038 dest 21
               2
1039
         3 I
               2
1040
1041 MAIN: rcv event, t=20000.421, at 2 src: 0, dest: 2, contents:
                                                                    0
    1 9999 9999
1042 Distance table has been updated.
1043
1044 Distance table of node 2 is:
1045
                    via
1046
       D2 |
               0
                     1
                          3
      ----
1047
```

```
1048
         0 I
                1
                     20
                          9999
1049 dest 11
                2
                     10
                             9
1050
         31
              9999
                      17
                              2
1051 Routing table for node 2.
1052
             next hop
      ----|------
1053
1054
         01
                0
1055
         11
                0
1056 dest 21
                2
1057
         31
                3
1058
1059 A packet has been sent from node 2 to node 0, contents = 9999 9999 0
1060 A packet has been sent from node 2 to node 1, contents = 1 2 0 2
1061 A packet has been sent from node 2 to node 3, contents = 1 2 0 9999
1062 MAIN: rcv event, t=20000.699, at 1 src: 0, dest: 1, contents:
    9999
            1
1063 Distance table has been updated.
1064
1065 Distance table of node 1 is:
1066
                     via
1067
       D1 |
                0
                      2
                            3
1068
      ----
1069
         0 I
                1
                     11
                            10
1070 dest 21
                2
                     10
                             9
1071
         3 I
                4
                     12
                             7
1072 Routing table for node 1.
1073
             next hop
1074
      ----|-----
1075
         01
                0
1076
         11
                1
1077 dest 21
                0
1078
         31
                0
1079
1080 A packet has been sent from node 1 to node 0, contents = 9999 \cdot 09999
    9999
1081 A packet has been sent from node 1 to node 2, contents = 1 0 2 4
1082 A packet has been sent from node 1 to node 3, contents = 1 0 2 4
1083 MAIN: rcv event, t=20001.739, at 0 src: 2, dest: 0, contents: 9999
```

```
1084 Distance table has been updated.
1085
1086 Distance table of node 0 is:
1087
                     via
1088
       DØ 1
                1
                      2
1089
      ----
1090
         11
              1
                    9999
1091 dest 21
               10
                      1
                      3
1092
         3 I
                8
1093 Routing table for node 0.
1094
            next hop
1095
      ----
1096
         0 I
                0
1097
         11
                1
1098 dest 21
                2
1099
         31
                2
1100
1101 MAIN: rcv event, t=20002.052, at 2 src: 1, dest: 2, contents:
                                                                      1
        9
1102 Distance table has been updated.
1103
1104 Distance table of node 2 is:
1105
                     via
1106
       D2 |
                0
                      1
                           3
1107
      ----
1108
         0 I
                1
                     11
                          9999
1109 dest 11
                2
                     10
                            9
                      17
                             2
1110
         3 I
             9999
1111 Routing table for node 2.
1112
            next hop
1113
      ----
1114
         0 I
                0
1115
         11
                0
1116 dest 21
                2
1117
         3 I
                3
1118
1119 MAIN: rcv event, t=20002.211, at 3 src: 2, dest: 3, contents:
                                                                       1
    2
        0 9999
1120 Distance table has been updated.
1121
```

```
1122 Distance table of node 3 is:
1123
                     via
1124
       D3 I
               1
                      2
1125
      ----
1126
         Ø1
               8
                      3
1127 dest 11
               7
                      4
                       2
1128
         21
             9999
1129 Routing table for node 3.
1130
            next hop
1131
      ----|------
1132
         01
               2
1133
         11
               2
1134 dest 21
               2
               3
1135
         31
1136
1137 A packet has been sent from node 3 to node 1, contents = 3 4 2 0
1138 A packet has been sent from node 3 to node 2, contents = 9999 9999
    9999 0
1139 MAIN: rcv event, t=20002.309, at 1 src: 2, dest: 1, contents:
                                                                      1
1140 Distance table has not been updated.
1141
1142 Distance table of node 1 is:
1143
                     via
1144
       D1 |
               0
                      2
                           3
1145
      ----
1146
         01
               1
                     11
                           10
1147 dest 21
               2
                     10
                            9
1148
         3 I
               4
                     12
1149 Routing table for node 1.
1150
            next hop
1151
      ----
1152
         0 I
               0
1153
         11
               1
1154 dest 21
               0
         31
1155
               0
1156
1157 MAIN: rcv event, t=20002.679, at 0 src: 1, dest: 0, contents: 9999
    0 9999 9999
1158 Distance table has been updated.
```

```
1159
1160 Distance table of node 0 is:
1161
                     via
1162
       DØ 1
                1
                      2
1163
      ----
                    9999
1164
          11
                1
1165 dest 21
              9999
                       1
1166
         3 I
              9999
                       3
1167 Routing table for node 0.
1168
             next hop
1169
1170
         0 I
                0
1171
         11
                1
1172 dest 21
                2
1173
         31
                2
1174
1175 MAIN: rcv event, t=20003.013, at 1 src: 3, dest: 1, contents:
                                                                       3
    4
         2
1176 Distance table has not been updated.
1178 Distance table of node 1 is:
1179
                     via
1180
       D1 |
                0
                      2
                           3
1181
      ----
1182
         0 I
                1
                     11
                           10
1183 dest 21
                2
                     10
                            9
1184
                            7
         31
                4
                     12
1185 Routing table for node 1.
1186
             next hop
1187
      ----
1188
         0 I
                0
1189
         11
                1
1190 dest 21
                0
1191
         3 I
                0
1192
1193 MAIN: rcv event, t=20003.661, at 2 src: 1, dest: 2, contents:
1194 Distance table has been updated.
1195
1196 Distance table of node 2 is:
```

```
1197
                    via
1198
       D2 |
               0
                     1
                           3
1199
      ----
1200
         0 I
               1
                    11
                          9999
1201 dest 1
               2
                    10
                           9
                             2
1202
         3 I
             9999
                     14
1203 Routing table for node 2.
1204
            next hop
1205
      ----
1206
         0 I
               0
1207
         11
               0
1208 dest 21
               2
1209
         3 I
               3
1210
1211 MAIN: rcv event, t=20004.166, at 3 src: 1, dest: 3, contents:
        2
1212 Distance table has been updated.
1213
1214 Distance table of node 3 is:
1215
                    via
1216
                     2
       D3 I
               1
1217
      ----
1218
         0 I
               8
                     3
                     4
1219 dest 11
               7
               9
1220
         21
                      2
1221 Routing table for node 3.
1222
            next hop
1223
      ----
1224
               2
         0 I
1225
         11
               2
1226 dest 21
               2
1227
         3 I
               3
1228
1229 MAIN: rcv event, t=20004.197, at 2 src: 3, dest: 2, contents: 9999
    9999 9999
1230 Distance table has been updated.
1231
1232 Distance table of node 2 is:
1233
                    via
1234
       D2 |
                     1
                           3
               0
```

```
1235 ----
1236
        0| 1
                      9999
                  11
1237 dest 11
           2
                  10
                      9999
1238
        31 9999
                  14
1239 Routing table for node 2.
1240
           next hop
1241 ----
1242
      0 I
             0
1243
        11
             0
1244 dest 21
             2
1245
        3 I
             3
1246
1247
1248 Simulator terminated at t=20004.196844, no packets in medium
1249 Simulator terminated at time 20004.196844386122
1250
```