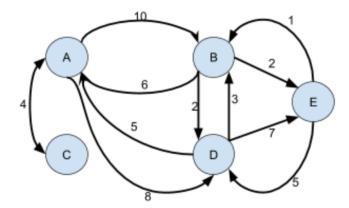
I implemented the topology below:



A is localhost:8000 B is localhost:8001 C is localhost:8002 D is localhost:8003 E is localhost:8004

Here are the converging screenshots:

Α

./jrip34 -p 8000 localhost:8001:10 localhost:8002:4 localhost:8003:8

```
kinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jrip34 -p 8000 localhost:8001:10 localhost:8002:4
 localhost:8003:8
[IP/PORT DESTINATION]
                      [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                       10
                                   127.0.0.1:8001
127.0.0.1:8003
                       8
                                   127.0.0.1:8003
127.0.0.1:8002
                                   127.0.0.1:8002
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                       10
                                   127.0.0.1:8001
127.0.0.1:8003
                                   127.0.0.1:8003
                       8
127.0.0.1:8002
                                   127.0.0.1:8002
127.0.0.1:8004
                       12
                                   127.0.0.1:8001
                       [DISTANCE]
[IP/PORT DESTINATION]
                                  [NEXT_HOP]
                                   127.0.0.1:8001
127.0.0.1:8001
                       10
127.0.0.1:8003
                       8
                                   127.0.0.1:8003
127.0.0.1:8002
                       4
                                   127.0.0.1:8002
127.0.0.1:8004
                                   127.0.0.1:8001
```

В

./jrip34 -p 8001 localhost:8000:6 localhost:8003:2 localhost:8004:2

```
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jrip34 -p 8001 localhost:8000:6 localhost:8003:2
localhost:8004:2
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
127.0.0.1:8000
                                   127.0.0.1:8000
                       6
127.0.0.1:8003
                       2
                                   127.0.0.1:8003
127.0.0.1:8002
                       10
                                   127.0.0.1:8000
127.0.0.1:8004
                                   127.0.0.1:8004
                       [DISTANCE] [NEXT_HOP]
[IP/PORT DESTINATION]
                                   127.0.0.1:8000
127.0.0.1:8000
                       6
127.0.0.1:8003
                                   127.0.0.1:8003
                                   127.0.0.1:8000
                       10
127.0.0.1:8002
127.0.0.1:8004
                                   127.0.0.1:8004
                                  [NEXT_HOP]
[IP/PORT DESTINATION]
                       [DISTANCE]
                                   127.0.0.1:8000
127.0.0.1:8000
127.0.0.1:8003
                                   127.0.0.1:8003
                                   127.0.0.1:8000
127.0.0.1:8002
                       10
127.0.0.1:8004
                                   127.0.0.1:8004
```

./jrip34 -p 8002 localhost:8000:4

```
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jrip34 -p 8002 localhost:8000:4
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
                                   127.0.0.1:8000
127.0.0.1:8001
                        14
127.0.0.1:8000
                        4
                                   127.0.0.1:8000
127.0.0.1:8003
                        12
                                   127.0.0.1:8000
127.0.0.1:8004
                        19
                                   127.0.0.1:8000
[IP/PORT DESTINATION]
                       [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                                   127.0.0.1:8000
                        14
127.0.0.1:8000
                        4
                                   127.0.0.1:8000
127.0.0.1:8003
                        12
                                   127.0.0.1:8000
127.0.0.1:8004
                        16
                                   127.0.0.1:8000
                       [DISTANCE] [NEXT_HOP]
[IP/PORT DESTINATION]
                                   127.\overline{0}.0.1:8000
127.0.0.1:8001
                        14
127.0.0.1:8000
                        4
                                   127.0.0.1:8000
127.0.0.1:8003
                        12
                                   127.0.0.1:8000
127.0.0.1:8004
                        16
                                   127.0.0.1:8000
```

D

./jrip34 -p 8003 localhost:8000:5 localhost:8001:3 localhost:8004:7

```
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jrip34 -p 8003 localhost:8000:5 localhost:8001:3
localhost:8004:7
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                                   127.0.0.1:8001
                        3
127.0.0.1:8000
                                   127.0.0.1:8000
127.0.0.1:8002
                        9
                                   127.0.0.1:8000
127.0.0.1:8004
                                   127.0.0.1:8001
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
                                   127.0.0.1:8001
127.0.0.1:8001
127.0.0.1:8000
                        5
                                   127.0.0.1:8000
127.0.0.1:8002
                        9
                                   127.0.0.1:8000
127.0.0.1:8004
                                   127.0.0.1:8001
[IP/PORT DESTINATION] [DISTANCE]
                                  [NEXT_HOP]
                                   127.0.0.1:8001
127.0.0.1:8001
                                   127.0.0.1:8000
127.0.0.1:8000
                        5
127.0.0.1:8002
                        9
                                   127.0.0.1:8000
127.0.0.1:8004
                                   127.0.0.1:8001
```

Ε

./jrip34 -p 8004 localhost:8001:1 localhost:8003:5

```
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jrip34 -p 8004 localhost:8001:1 localhost:8003:5
127.0.0.1:8001
127.0.0.1:8000
                                127.0.0.1:8001
                                127.0.0.1:8001
127.0.0.1:8003
                     3
127.0.0.1:8002
                      11
                                127.0.0.1:8001
[IP/PORT DESTINATION]
                    [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                                127.0.0.1:8001
127.0.0.1:8000
                                127.0.0.1:8001
127.0.0.1:8003
                                127.0.0.1:8001
127.0.0.1:8002
                                127.0.0.1:8001
                     11
[IP/PORT DESTINATION] [DISTANCE] [NEXT_HOP]
127.0.0.1:8001
                                127.0.0.1:8001
                     1
127.0.0.1:8000
                                127.0.0.1:8001
127.0.0.1:8003
                     3
                                127.0.0.1:8001
127.0.0.1:8002
                     11
                                127.0.0.1:8001
```

Traceroute is shown as below:

```
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jtraceroute -p 7999 localhost:8000 localhost:8002
127.0.0.1:8000
127.0.0.1:8002
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jtraceroute -p 7999 localhost:8000 localhost:8003
127.0.0.1:8000
127.0.0.1:8003
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jtraceroute -p 7999 localhost:8000 localhost:8004
127.0.0.1:8000
127.0.0.1:8001
127.0.0.1:8004
xinwei@Xinweis-MacBook-Pro:~/Documents/GitHub/jrip/step3$ ./jtraceroute -p 7999 localhost:8001 localhost:8002
127.0.0.1:8001
127.0.0.1:8001
127.0.0.1:8000
127.0.0.1:8000
127.0.0.1:8000
127.0.0.1:8000
```