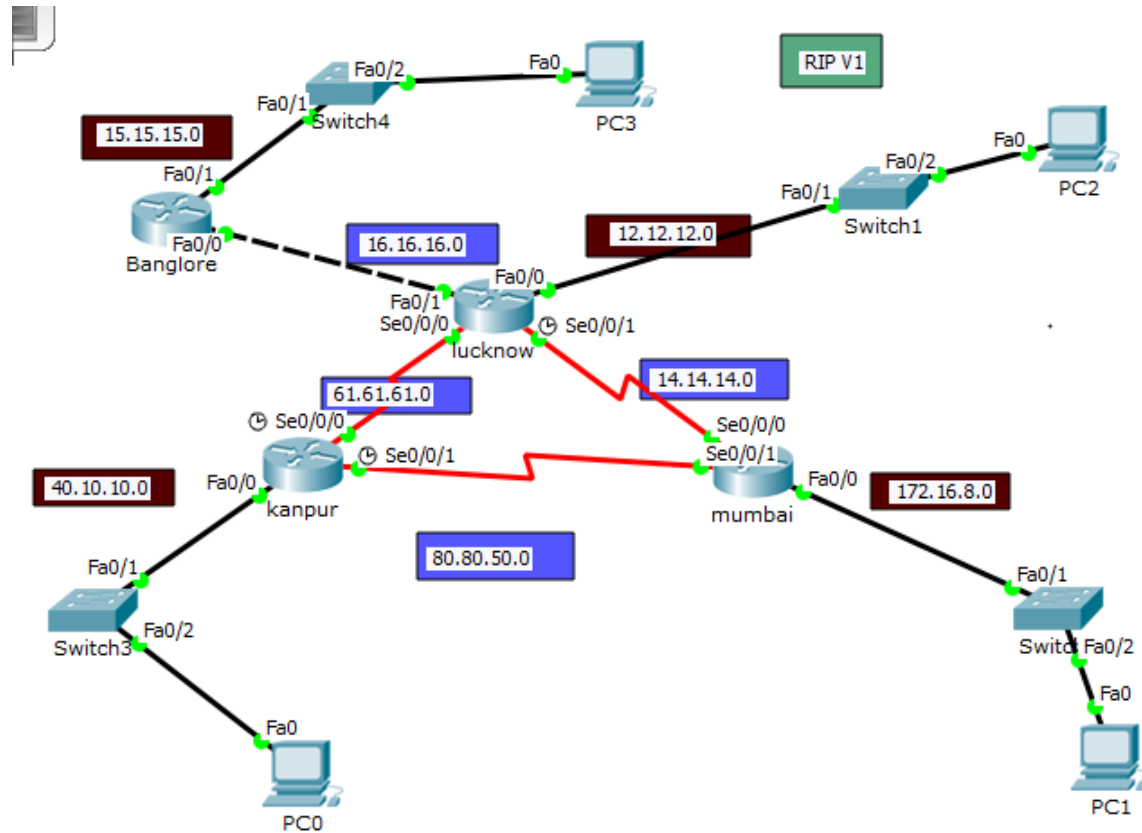




## Rip V 1 Lab



### Kanpur

```
Router>enable
```

```
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#hostname kanpur
```

```
kanpur(config)#
```

```
kanpur(config)#username Abhishek
```

```
kanpur(config)#
```

```
kanpur(config)#
```

```
kanpur(config)#interface Serial0/0/0
```

```
kanpur(config-if)#ip address 61.61.61.1 255.0.0.0
```

```
kanpur(config-if)#clock rate 125000
```

```
kanpur(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
```

```
kanpur(config-if)#
```

```
kanpur(config-if)#exit
```

```
kanpur(config)#interface Serial0/0/1
```

```
kanpur(config-if)#ip address 80.80.50.1 255.0.0.0
```

```
kanpur(config-if)#clock rate 125000
```

```
kanpur(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to down
```

```
kanpur(config-if)#
```

```
kanpur(config-if)#exit
```

```
kanpur(config)#interface FastEthernet0/0
```

```
kanpur(config-if)#ip address 40.10.10.1 255.0.0.0
```

```
kanpur(config-if)#no shutdown
```

```
kanpur(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
kanpur(config-if)#exit
```

```
kanpur(config)#router rip
```

```
kanpur(config-router)#network 61.0.0.0
```

```
kanpur(config-router)#network 80.0.0.0
```

```
kanpur(config-router)#network 40.0.0.0
```

```
kanpur(config-router)#timers basic 20 120 120 160
```

```
kanpur(config-router)#exit
```

```
kanpur#sh ip int br
```

| Interface       | IP-Address | OK? | Method | Status                | Protocol |
|-----------------|------------|-----|--------|-----------------------|----------|
| FastEthernet0/0 | 40.10.10.1 | YES | manual | up                    | up       |
| FastEthernet0/1 | unassigned | YES | unset  | administratively down | down     |
| Serial0/0/0     | 61.61.61.1 | YES | manual | up                    | up       |
| Serial0/0/1     | 80.80.50.1 | YES | manual | up                    | up       |
| Vlan1           | unassigned | YES | unset  | administratively down | down     |

```
kanpur#
```

```
kanpur#sh ip route
```

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area

\* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route

Gateway of last resort is not set

```
R 12.0.0.0/8 [120/1] via 61.61.61.2, 00:00:12, Serial0/0/0
R 14.0.0.0/8 [120/1] via 61.61.61.2, 00:00:12, Serial0/0/0
    [120/1] via 80.80.50.2, 00:00:01, Serial0/0/1
R 15.0.0.0/8 [120/2] via 61.61.61.2, 00:00:12, Serial0/0/0
R 16.0.0.0/8 [120/1] via 61.61.61.2, 00:00:12, Serial0/0/0
C 40.0.0.0/8 is directly connected, FastEthernet0/0
C 61.0.0.0/8 is directly connected, Serial0/0/0
C 80.0.0.0/8 is directly connected, Serial0/0/1
R 172.16.0.0/16 [120/1] via 80.80.50.2, 00:00:01, Serial0/0/1
```

kanpur#

kanpur#**sh ip rip database**

```
12.0.0.0/8 auto-summary
```

```
12.0.0.0/8
```

```
    [1] via 61.61.61.2, 00:00:04, Serial0/0/0
```

```
14.0.0.0/8 auto-summary
```

```
14.0.0.0/8
```

```
    [1] via 61.61.61.2, 00:00:04, Serial0/0/0 [1] via 80.80.50.2, 00:00:13, Serial0/0/1
```

```
15.0.0.0/8 auto-summary
```

```
15.0.0.0/8
```

[2] via 61.61.61.2, 00:00:04, Serial0/0/0

16.0.0.0/8 auto-summary

16.0.0.0/8

[1] via 61.61.61.2, 00:00:04, Serial0/0/0

40.0.0.0/8 auto-summary

40.0.0.0/8 directly connected, FastEthernet0/0

61.0.0.0/8 auto-summary

61.0.0.0/8 directly connected, Serial0/0/0

80.0.0.0/8 auto-summary

80.0.0.0/8 directly connected, Serial0/0/1

172.16.0.0/16 auto-summary

172.16.0.0/16

[1] via 80.80.50.2, 00:00:13, Serial0/0/1

kanpur#

## Lucknow

```
Router>enable
```

```
Router#configure terminal
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Router(config)#hostname lucknow
```

```
lucknow(config)#
```

```
lucknow(config)#interface Serial0/0/0
```

```
lucknow(config-if)#ip address 61.61.61.2 255.0.0.0
```

```
lucknow(config-if)#clock rate 125000
```

This command applies only to DCE interfaces

```
lucknow(config-if)#no shutdown
```

```
lucknow(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
```

```
lucknow(config-if)#exit
```

```
lucknow(config)#interface Serial0/0/1
```

```
lucknow(config-if)#ip address 14.14.14.1 255.0.0.0
```

```
lucknow(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to down
```

```
lucknow(config-if)#clock rate 125000
```

```
lucknow(config-if)#
```

```
lucknow(config-if)#exit
```

```
lucknow(config)#interface FastEthernet0/1
```

```
lucknow(config-if)#ip address 16.16.16.1 255.0.0.0
```

```
lucknow(config-if)#no shutdown
```

```
lucknow(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
```

```
lucknow(config-if)#exit
```

```
lucknow(config)#interface FastEthernet0/0
```

```
lucknow(config-if)#ip address 12.12.12.1 255.0.0.0
```

```
lucknow(config-if)#no shutdown
```

```
lucknow(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
lucknow(config-if)#exit
```

```
lucknow(config)#router rip
```

```
lucknow(config-router)#network 12.0.0.0
```

```
lucknow(config-router)#network 16.0.0.0
```

```
lucknow(config-router)#network 61.0.0.0
```

```
lucknow(config-router)#network 14.0.0.0
```

```
lucknow(config-router)#timers basic 20 120 120 160
```

```
lucknow(config-router)#exit
```

```
lucknow#
```

```
Lucknow#sh ip interface brief
```

| Interface       | IP-Address | OK? | Method | Status                | Protocol |
|-----------------|------------|-----|--------|-----------------------|----------|
| FastEthernet0/0 | 12.12.12.1 | YES | manual | up                    | up       |
| FastEthernet0/1 | 16.16.16.1 | YES | manual | up                    | up       |
| Serial0/0/0     | 61.61.61.2 | YES | manual | up                    | up       |
| Serial0/0/1     | 14.14.14.1 | YES | manual | up                    | up       |
| Vlan1           | unassigned | YES | unset  | administratively down | down     |

```
lucknow#
```

```
lucknow#sh ip route
```

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area

\* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route



Gateway of last resort is not set

```
C 12.0.0.0/8 is directly connected, FastEthernet0/0
C 14.0.0.0/8 is directly connected, Serial0/0/1
R 15.0.0.0/8 [120/1] via 16.16.16.2, 00:00:14, FastEthernet0/1
C 16.0.0.0/8 is directly connected, FastEthernet0/1
R 40.0.0.0/8 [120/1] via 61.61.61.1, 00:00:19, Serial0/0/0
C 61.0.0.0/8 is directly connected, Serial0/0/0
R 80.0.0.0/8 [120/1] via 61.61.61.1, 00:00:19, Serial0/0/0
    [120/1] via 14.14.14.2, 00:00:12, Serial0/0/1
R 172.16.0.0/16 [120/1] via 14.14.14.2, 00:00:12, Serial0/0/1
```

lucknow#

Lucknow#**sh ip protocols**

Routing Protocol is "rip"

Sending updates every 20 seconds, next due in 16 seconds

Invalid after 120 seconds, hold down 120, flushed after 160

Outgoing update filter list for all interfaces is not set

Incoming update filter list for all interfaces is not set

Redistributing: rip

Default version control: send version 1, receive any version

Interface Send Recv Triggered RIP Key-chain

FastEthernet0/0 1 2 1

Serial0/0/0 1 2 1

Serial0/0/1 1 2 1

FastEthernet0/1 1 2 1

10

Automatic network summarization is in effect

Maximum path: 4

Routing for Networks:

12.0.0.0

14.0.0.0

16.0.0.0

61.0.0.0

Passive Interface(s):

Routing Information Sources:

Gateway Distance Last Update

16.16.16.2 120 00:00:15

61.61.61.1 120 00:00:06

14.14.14.2 120 00:00:13

Distance: (default is 120)

## Mumbai

```
Router>enable
```

```
Router#configure terminal
```

```
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)#hostname mumbai
```

```
mumbai(config)#
```

```
mumbai(config)#interface FastEthernet0/0
```

```
mumbai(config-if)#ip address 172.16.8.1 255.255.0.0
```

```
mumbai(config-if)#no shutdown
```

```
mumbai(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
mumbai(config-if)#exit
```

```
mumbai(config)#interface Serial0/0/0
```

```
mumbai(config-if)#ip address 14.14.14.2 255.0.0.0
```

```
mumbai(config-if)#no shutdown
```

```
mumbai(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
```

```
clock rate 125000
```

This command applies only to DCE interfaces

```
mumbai(config-if)#
```

```
mumbai(config-if)#exit
```

```
mumbai(config)#interface Serial0/0/1
```

```
mumbai(config-if)#
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
```

```
ip address 80.80.50.2 255.0.0.0
```

```
mumbai(config-if)#no shutdown
```

```
mumbai(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up
```

```
mumbai(config-if)#exit
```

```
mumbai(config)#
```

```
mumbai(config)#router rip
```

```
mumbai(config-router)#network 80.0.0.0
```

```
mumbai(config-router)#network 172.16.0.0
```

```
Mumbai(config-router)#network 14.0.0.0
```

```
Mumbai(config-router)#timers basic 20 120 120 160
```

```
mumbai(config-router)#exit
```

```
mumbai(config)#
```

```
mumbai#sh ip route
```

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area  
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP  
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area  
\* - candidate default, U - per-user static route, o - ODR  
P - periodic downloaded static route

Gateway of last resort is not set

```
R 12.0.0.0/8 [120/1] via 14.14.14.1, 00:00:02, Serial0/0/0
C 14.0.0.0/8 is directly connected, Serial0/0/0
R 15.0.0.0/8 [120/2] via 14.14.14.1, 00:00:02, Serial0/0/0
R 16.0.0.0/8 [120/1] via 14.14.14.1, 00:00:02, Serial0/0/0
R 40.0.0.0/8 [120/1] via 80.80.50.1, 00:00:18, Serial0/0/1
R 61.0.0.0/8 [120/1] via 80.80.50.1, 00:00:18, Serial0/0/1
   [120/1] via 14.14.14.1, 00:00:02, Serial0/0/0
C 80.0.0.0/8 is directly connected, Serial0/0/1
C 172.16.0.0/16 is directly connected, FastEthernet0/0
mumbai#
```

# Bangalore

```
Router>en
```

```
Router#
```

```
Router#conf t
```

```
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)#
```

```
Router(config)#hostname Bangalore
```

```
Bangalore(config)#
```

```
Bangalore(config)#interface FastEthernet0/0
```

```
Bangalore(config-if)#ip address 16.16.16.2 255.0.0.0
```

```
Bangalore(config-if)#no shutdown
```

```
Bangalore(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
Bangalore(config-if)#exit
```

```
Bangalore(config)#interface FastEthernet0/1
```

```
Bangalore(config-if)#ip address 15.15.15.1 255.0.0.0
```

```
Bangalore(config-if)#no shutdown
```

```
Bangalore(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Bangalore(config-if)#exit

Bangalore(config)#interface FastEthernet0/1

Bangalore(config-if)#

Bangalore(config-if)#exit

Bangalore(config)#router rip

Bangalore (config-router)#network 15.0.0.0

Bangalore(config-router)#network 16.0.0.0

Bangalore(config-router)#timers basic 20 120 120 160

Bangalore(config-router)#exit

Bangalore(config)#

Bangalore(config)#

Bangalore#

Bangalore#**sh ip route**

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP

i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area

\* - candidate default, U - per-user static route, o - ODR

P - periodic downloaded static route

Gateway of last resort is not set

```
R 12.0.0.0/8 [120/1] via 16.16.16.1, 00:00:21, FastEthernet0/0
R 14.0.0.0/8 [120/1] via 16.16.16.1, 00:00:21, FastEthernet0/0
C 15.0.0.0/8 is directly connected, FastEthernet0/1
C 16.0.0.0/8 is directly connected, FastEthernet0/0
R 40.0.0.0/8 [120/2] via 16.16.16.1, 00:00:21, FastEthernet0/0
R 61.0.0.0/8 [120/1] via 16.16.16.1, 00:00:21, FastEthernet0/0
R 80.0.0.0/8 [120/2] via 16.16.16.1, 00:00:21, FastEthernet0/0
R 172.16.0.0/16 [120/2] via 16.16.16.1, 00:00:21, FastEthernet0/0
```

Bangalore#

Bangalore#**sh ip rip database**

```
12.0.0.0/8 auto-summary
```

```
12.0.0.0/8
```

```
[1] via 16.16.16.1, 00:00:02, FastEthernet0/0
```

```
14.0.0.0/8 auto-summary
```

```
14.0.0.0/8
```

```
[1] via 16.16.16.1, 00:00:02, FastEthernet0/0
```

```
15.0.0.0/8 auto-summary
```

```
15.0.0.0/8 directly connected, FastEthernet0/1
```

```
16.0.0.0/8 auto-summary
```

```
16.0.0.0/8 directly connected, FastEthernet0/0
```

```
40.0.0.0/8 auto-summary
```

```
40.0.0.0/8
```

```
[2] via 16.16.16.1, 00:00:02, FastEthernet0/0
```

```
61.0.0.0/8 auto-summary
```

```
61.0.0.0/8
```



[1] via 16.16.16.1, 00:00:02, FastEthernet0/0  
80.0.0.0/8 auto-summary

80.0.0.0/8

[2] via 16.16.16.1, 00:00:02, FastEthernet0/0  
172.16.0.0/16 auto-summary

172.16.0.0/16

[2] via 16.16.16.1, 00:00:02, FastEthernet0/0  
Banglore#

Check -

RIP V 1 [packet tracer file](#)  
<http://abhishekmaurya.weebly.com/>