PC2> ip dhcp

DDORA IP 192.168.2.3/24 GW 192.168.2.1

PC2> ping 192.168.3.2

\*192.168.4.2 icmp\_seq=1 ttl=254 time=179.237 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=2 ttl=254 time=173.510 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=3 ttl=254 time=163.433 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=4 ttl=254 time=167.357 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=5 ttl=254 time=147.794 ms (ICMP type:11, code:0, TTL expired in transit)

PC2> ping 192.168.3.2

\*192.168.4.2 icmp\_seq=1 ttl=254 time=155.541 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=2 ttl=254 time=159.108 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=3 ttl=254 time=151.782 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=4 ttl=254 time=156.682 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=5 ttl=254 time=140.055 ms (ICMP type:11, code:0, TTL expired in transit)

PC2> ping 192.168.3.2

\*192.168.4.2 icmp\_seq=1 ttl=254 time=158.992 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=2 ttl=254 time=144.378 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=3 ttl=254 time=150.398 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=4 ttl=254 time=155.838 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=5 ttl=254 time=163.419 ms (ICMP type:11, code:0, TTL expired in transit)

PC2> ping 192.168.1.3

84 bytes from 192.168.1.3 icmp\_seq=1 ttl=62 time=40.579 ms

84 bytes from 192.168.1.3 icmp\_seq=2 ttl=62 time=34.553 ms

84 bytes from 192.168.1.3 icmp\_seq=3 ttl=62 time=24.285 ms

84 bytes from 192.168.1.3 icmp\_seq=4 ttl=62 time=22.854 ms

84 bytes from 192.168.1.3 icmp\_seq=5 ttl=62 time=20.550 ms

PC2> ping 192.168.3.2

\*192.168.4.2 icmp\_seq=1 ttl=254 time=139.769 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=2 ttl=254 time=129.493 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=3 ttl=254 time=153.383 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=4 ttl=254 time=159.530 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=5 ttl=254 time=158.576 ms (ICMP type:11, code:0, TTL expired in transit)

PC2> ping 192.168.3.3

\*192.168.4.2 icmp\_seq=1 ttl=254 time=148.732 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=2 ttl=254 time=167.687 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=3 ttl=254 time=150.664 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=4 ttl=254 time=148.620 ms (ICMP type:11, code:0, TTL expired in transit)

\*192.168.4.2 icmp\_seq=5 ttl=254 time=150.947 ms (ICMP type:11, code:0, TTL expired in transit)

PC2> ping 192.168.3.3

84 bytes from 192.168.3.3 icmp\_seq=1 ttl=62 time=48.579 ms

84 bytes from 192.168.3.3 icmp\_seq=2 ttl=62 time=21.083 ms

84 bytes from 192.168.3.3 icmp\_seq=3 ttl=62 time=13.792 ms

84 bytes from 192.168.3.3 icmp\_seq=4 ttl=62 time=24.538 ms

84 bytes from 192.168.3.3 icmp\_seq=5 ttl=62 time=18.432 ms

PC2>

R1(config-if)#exit

R1(config)#ip dhcp pool p1

R1(dhcp-config)#network 192.168.2.0 255.255.255.0

R1(dhcp-config)#default-router 192.168.2.1

R1(dhcp-config)#exit

R1(config)#

\*Mar 1 00:15:22.399: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1, changed state to up

R1(config)#show ip route

^

% Invalid input detected at '^' marker.

R1(config)#exit

R1#

\*Mar 1 00:21:37.727: %SYS-5-CONFIG\_I: Configured from console by console

R1#conf t

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

R1(config)#exit

R1#show

\*Mar 1 00:21:52.627: %SYS-5-CONFIG\_I: Configured from console by console

R1#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 2 subnets

C 192.168.4.4 is directly connected, Serial0/1

C 192.168.4.0 is directly connected, Serial0/0

C 192.168.2.0/24 is directly connected, FastEthernet0/0

R1#conf t

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

R1(config)#ip route 192.168.1.0 255.255.255.0 s0/0

R1(config)#ip route 192.168.3.0 255.255.255.0 s0/0

R1(config)#exit

R1#show ip route

\*Mar 1 00:36:34.215: %SYS-5-CONFIG\_I: Configured from console by console

R1#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 2 subnets

C 192.168.4.4 is directly connected, Serial0/1

C 192.168.4.0 is directly connected, Serial0/0

S 192.168.1.0/24 is directly connected, Serial0/0

C 192.168.2.0/24 is directly connected, FastEthernet0/0

S 192.168.3.0/24 is directly connected, Serial0/0

R1#conf t

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

R1(config)#ip route 192.168.3.0 255.255.255.0 s0/1

R1(config)#exit

R1#show ip route

\*Mar 1 00:37:46.479: %SYS-5-CONFIG\_I: Configured from console by console

R1#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 2 subnets

C 192.168.4.4 is directly connected, Serial0/1

C 192.168.4.0 is directly connected, Serial0/0

S 192.168.1.0/24 is directly connected, Serial0/0

C 192.168.2.0/24 is directly connected, FastEthernet0/0

S 192.168.3.0/24 is directly connected, Serial0/0

is directly connected, Serial0/1

R1#conf t

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

R1(config)#no ip route 192.168.3.0 255.255.255.0 s0/0

R1(config)#exit

R1#show ip route

\*Mar 1 00:48:13.019: %SYS-5-CONFIG\_I: Configured from console by console

R1#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 2 subnets

C 192.168.4.4 is directly connected, Serial0/1

C 192.168.4.0 is directly connected, Serial0/0

S 192.168.1.0/24 is directly connected, Serial0/0

C 192.168.2.0/24 is directly connected, FastEthernet0/0

S 192.168.3.0/24 is directly connected, Serial0/1

R1#

R3#conf t

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

R3(config)#int s0/0

R3(config-if)#ip add 192.168.4.6 255.255.255.252

R3(config-if)#no shut

R3(config-if)#exit

\*Mar 1 00:15:16.203: %LINK-3-UPDOWN: Interface Serial0/0, changed state to up

\*Mar 1 00:15:17.203: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up

R3(config-if)#exit

R3(config)#int f0/0

R3(config-if)#ip add 192.168.3.0 255.255.255.0

Bad mask /24 for address 192.168.3.0

R3(config-if)#ip add 192.168.3.1 255.255.255.0

R3(config-if)#no shut

R3(config-if)#e

\*Mar 1 00:16:10.947: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up

\*Mar 1 00:16:11.947: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R3(config-if)#exit

R3(config)#ip dhcp pool p1

R3(dhcp-config)#network 192.168.3.0 255.255.255.0

R3(dhcp-config)#default-router 192.168.3.1

R3(dhcp-config)#exit

R3(config)#exit

R3#sh

\*Mar 1 00:21:01.827: %SYS-5-CONFIG\_I: Configured from console by console

R3#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 1 subnets

C 192.168.4.4 is directly connected, Serial0/0

C 192.168.3.0/24 is directly connected, FastEthernet0/0

R3#conf t

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

R3(config)#ip route 192.168.1.0 s0/0

^

% Invalid input detected at '^' marker.

R3(config)#ip route 192.168.1.0 255.255.255.0 s0/0

R3(config)#ip route 192.168.2.0 255.255.255.0 s0/0

R3(config)#exit

R3#

\*Mar 1 00:38:46.135: %SYS-5-CONFIG\_I: Configured from console by console

R3#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 1 subnets

C 192.168.4.4 is directly connected, Serial0/0

S 192.168.1.0/24 is directly connected, Serial0/0

S 192.168.2.0/24 is directly connected, Serial0/0

C 192.168.3.0/24 is directly connected, FastEthernet0/0

R3#

R2#conf t

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

R2(config)#int f0/0

R2(config-if)#ip address 192.168.1.1 255.255.255.0

R2(config-if)#no shut

R2(config-if)#exit

R2(config)#

\*Mar 1 00:03:14.471: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up

\*Mar 1 00:03:15.471: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R2(config)#ip dhcp pool p1

R2(dhcp-config)#network 192.168.1.0 255.255.255.0

R2(dhcp-config)#default-router 192.168.1.1

R2(dhcp-config)#exit

R2(config)#int s0/0

R2(config-if)#ip add 192.168.4.2 255.255.255.252

R2(config-if)#no shut

R2(config-if)#exit

\*Mar 1 00:05:19.387: %LINK-3-UPDOWN: Interface Serial0/0, changed state to up

\*Mar 1 00:05:20.387: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up

R2(config-if)#exit

R2(config)#

\*Mar 1 00:05:42.367: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to down

R2(config)#

\*Mar 1 00:08:02.367: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to up

R2(config)#exit

R2#sho

\*Mar 1 00:22:10.855: %SYS-5-CONFIG\_I: Configured from console by console

R2#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 1 subnets

C 192.168.4.0 is directly connected, Serial0/0

C 192.168.1.0/24 is directly connected, FastEthernet0/0

R2#conf t

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

R2(config)#ip route 192.168.2.0 255.255.255.0 s0/0

R2(config)#ip route 192.168.3.0 255.255.255.0 s0/0

R2(config)#exit

R2#show ip route

\*Mar 1 00:35:01.479: %SYS-5-CONFIG\_I: Configured from console by console

R2#show ip route

Codes: C - connected, S - static, 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

i - IS-IS, su - IS-IS summary, 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

192.168.4.0/30 is subnetted, 1 subnets

C 192.168.4.0 is directly connected, Serial0/0

C 192.168.1.0/24 is directly connected, FastEthernet0/0

S 192.168.2.0/24 is directly connected, Serial0/0

S 192.168.3.0/24 is directly connected, Serial0/0

R2#