

Assign IP Router1 to Switch1

```
R1(config)# interface gig0/0  
R1(config-if)# ip address 192.168.10.1 255.255.255.0  
R1(config-if)# no shutdown  
R1(config-if)# exit
```

Assign IP Router1 to Router2

```
R1(config)# interface gig0/1  
R1(config-if)# ip address 192.168.1.1 255.255.255.252  
R1(config-if)# no shutdown  
R1(config-if)# exit
```

RIP Version 2

```
R1(config)# router rip  
R1(config-router)# version 2  
R1(config-router)# network 192.168.10.0  
R1(config-router)# network 192.168.1.0  
R1(config-router)# no auto-summary  
R1(config-router)# exit
```

DHCP

```
R1(config)# ip dhcp pool LAN_POOL1  
R1(dhcp-config)# network 192.168.10.0 255.255.255.0  
R1(dhcp-config)# default-router 192.168.10.1  
R1(dhcp-config)# dns-server 1.1.1.1  
R1(dhcp-config)# exit  
R1(config)# ip dhcp excluded-address 192.168.10.1 192.168.10.9
```

Assign IP Router2 to Switch2

```
R2(config)# interface gig0/0  
R2(config-if)# ip address 192.168.20.1 255.255.255.0  
R2(config-if)# no shutdown  
R2(config-if)# exit
```

Assign IP Router2 to Router1

```
R2(config)# interface gig0/1  
R2(config-if)# ip address 192.168.1.2 255.255.255.252  
R2(config-if)# no shutdown  
R2(config-if)# exit
```

Assign IP Router2 to Router2

```
R2(config)# interface gig0/2
```

```
R2(config-if)# ip address 192.168.2.1 255.255.255.252
```

```
R2(config-if)# no shutdown
```

```
R2(config-if)# exit
```

RIP Version 2

```
R2(config)# router rip
```

```
R2(config-router)# version 2
```

```
R2(config-router)# network 192.168.20.0
```

```
R2(config-router)# network 192.168.1.0
```

```
R2(config-router)# network 192.168.2.0
```

```
R2(config-router)# no auto-summary
```

```
R2(config-router)# exit
```

DHCP

```
R2(config)# ip dhcp pool LAN_POOL2
```

```
R2(dhcp-config)# network 192.168.20.0 255.255.255.0
```

```
R2(dhcp-config)# default-router 192.168.20.1
```

```
R2(dhcp-config)# exit
```

```
R2(config)# ip dhcp excluded-address 192.168.20.1 192.168.20.9
```

Assign IP Router3 to Switch3

```
R3(config)# interface gig0/0
```

```
R3(config-if)# ip address 192.168.30.1 255.255.255.0
```

```
R3(config-if)# no shutdown
```

```
R3(config-if)# exit
```

Assign IP Router3 to Router2

```
R3(config)# interface gig0/1
```

```
R3(config-if)# ip address 192.168.2.2 255.255.255.252
```

```
R3(config-if)# no shutdown
```

```
R3(config-if)# exit
```

RIP Version 2

```
R3(config)# router rip
```

```
R3(config-router)# version 2
```

```
R3(config-router)# network 192.168.30.0
```

```
R3(config-router)# network 192.168.2.0
```

```
R3(config-router)# no auto-summary
```

```
R3(config-router)# exit
```

DHCP

```
R3(config)# ip dhcp pool LAN_POOL3
```

```
R3(dhcp-config)# network 192.168.30.0 255.255.255.0
```

```
R3(dhcp-config)# default-router 192.168.30.1
```

```
R3(dhcp-config)# exit
```

```
R3(config)# ip dhcp excluded-address 192.168.30.1 192.168.30.9
```