First of all, I have brought four console laptops, one for ISP and rest three console laptop for three different Router (R1, R2, R3).

--- ---

LAN#1 -192.168.104.0/24

Required Hosts: 17

Subnet Mask: /27 (255.255.255.224)

Subnet #05: 192.168.104.160/27

Network Address: 192.168.104.160

Broadcast Address: 192.168.104.191

Usable IP Range: 192.168.104.161 to 192.168.104.190

Default Gateway: 192.168.104.161

1st usable IP: 192.168.104.162

2nd usable IP: 192.168.104.163

LAN#2 -192.168.204.0/24

Required Hosts: 8

Subnet Mask: /28 (255.255.255.240)

Subnet #05: 192.168.204.80/28

Network Address: 192.168.204.80

Broadcast Address: 192.168.204.95

Usable IP Range: 192.168.204.81 to 192.168.204.94

Default Gateway: 192.168.204.81

1st usable IP: 192.168.204.82

2nd usable IP: 192.168.204.83

Then I have done this:

Router(config)#hostname ISP

Router(config)#hostname R1

Router(config)#hostname R2

Router(config)#hostname R3

Then I have done this:

ISP (config)#interface Serial0/1/0

ISP (config-if) #ip address 192.168.250.1 255.255.255.252

ISP (config-if) #no shutdown

ISP (config-if) #exit

R1(config)#interface Serial0/1/0

R1(config-if) #ip address 192.168.250.2 255.255.255.252

R1(config-if) #no shutdown

R1(config-if) #exit

R1(config)#interface Serial0/0/0

R1(config-if) #ip address 192.168.251.1 255.255.255.252

R1(config-if) #no shutdown

R1(config-if) #exit

R1(config)#interface Serial0/0/1

R1(config-if) #ip address 192.168.252.1 255.255.255.252

R1(config-if) #no shutdown

R1(config-if) #exit

R2(config)#interface Serial0/0/0

R2(config-if) #ip address 192.168.251.2 255.255.255.252

R2(config-if) #no shutdown

R2(config-if) #exit

R2(config)#interface GigabitEthernet0/0

R2(config-if) #ip address 192.168.104.161 255.255.255.224

R2(config-if) #no shutdown

R2(config-if) #exit

R3(config)#interface Serial0/0/1

R3(config-if) #ip address 192.168.252.2 255.255.255.252

R3(config-if) #no shutdown

R3(config-if) #exit

R3(config)#interface GigabitEthernet0/0

R3(config-if) #ip address 192.168.204.81 255.255.255.240

R3(config-if) #no shutdown

R3(config-if) #exit

Then, I have done some manual tasks. In LAN-1,

Laptop 1 I have manually assigned:

IP address: 192.168.104.162

Subnet Mask: 255.255.255.224

Default Gateway: 192.168.104.161

Laptop 2 I have manually assigned:

IP address: 192.168.104.163

Subnet Mask: 255.255.255.224

Default Gateway: 192.168.104.161

After this. I have done some manual tasks. In LAN-2,

Laptop 3 I have manually assigned:

IP address: 192.168.204.82

Subnet Mask: 255.255.255.240

Default Gateway: 192.168.204.81

Laptop 4 I have manually assigned:

IP address: 192.168.204.83

Subnet Mask: 255.255.255.240

Default Gateway: 192.168.204.81

Then I have done this: Configure Static Routing in ISP Router using Next Hop IP Address

ISP (config)#ip route 192.168.104.160 255.255.255.224 192.168.250.2

ISP (config)#ip route 192.168.204.80 255.255.255.240 192.168.250.2

Then I have done it: Configure Default Static Routing in:
- R1 to ISP

R1(config)#ip route 0.0.0.0 0.0.0.0 192.168.250.1

- R2 to R1

R2(config)#ip route 0.0.0.0 0.0.0.0 192.168.251.1

- R3 to R1

R3(config)#ip route 0.0.0.0 0.0.0.0 192.168.252.1

Then I have done it: Configure RIP in R1, R2 and R3

R1(config)#router rip

R1(config-router) #network 192.168.250.2

R1(config-router) #network 192.168.251.1

R1(config-router) #network 192.168.252.1

R2(config)#router rip

R2(config-router) #network 192.168.251.2

R2(config-router) #network 192.168.104.161

R3(config)#router rip

R3(config-router) #network 192.168.252.2

R3(config-router) #network 192.168.204.81