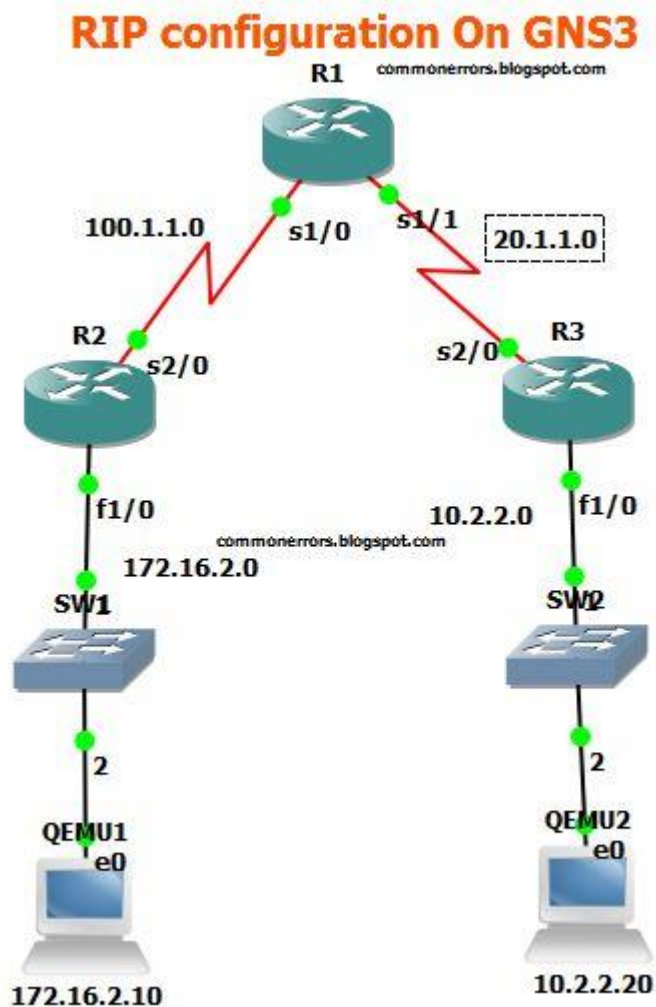# Assignment 7

Objective: Routing using RIP version 2 protocol.

Solution: Draw the network diagram as shown in figure below and make the configuration shown under it. Ping PC2 ip address from PC1 to validate the setup.

RIP routing protocol have simple configuration, you need a just network command to advertised the connected networks.

Configuration for R1:
R1#conf t
R1(config)#int s1/0
R1(config-if)#ip add 100.1.1.2 255.255.255.0
R1(config-if)#no shut

R1(config-if)#int s1/1
R1(config-if)#ip address 20.1.1.1 255.255.255.0
R1(config-if)#no shut
R1(config-if)#ex

RIP Configuration Commands for R1:
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#network 20.1.1.0
R1(config-router)#network 100.1.1.0

Configuration for R2:
R2#config t
R2(config)#int f1/0
R2(config-if)#ip address 172.16.2.1 255.255.0.0
R2(config-if)#no shut
R2(config-if)#int s1/0
R2(config-if)#ip address 100.1.1.1 255.255.255.0
R2(config-if)#no shut
R2(config)#router rip
R2(config-router)#version 2
R2(config-router)#network 172.16.0.0
R2(config-router)#network 100.1.1.0

Configuration for R3:
R3(config)#int s2/0
R3(config-if)#ip add 20.1.1.2 255.255.255.0
R3(config-if)#int f1/0
R3(config-if)#ip add 10.2.2.1 255.255.255.0
R3(config-if)#ex
R3(config)#router rip
R3(config-router)#ver 2
R3(config-router)#network 10.2.2.0
R3(config-router)#network 20.1.1.0
RIP Verification Commands:
Show ip route command should display all RIP networks and end to end ping
should be successful.

```
Gateway of last resort is not set

R     100.0.0.0/8 [120/1] via 20.1.1.1, 00:00:22, Serial2/0
      20.0.0.0/24 is subnetted, 1 subnets
C        20.1.1.0 is directly connected, Serial2/0
R     172.16.0.0/16 [120/1] via 20.1.1.1, 00:00:22, Serial2/0
R3#ping 172.16.2.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.2.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 36/74/128 ms
R3#
```