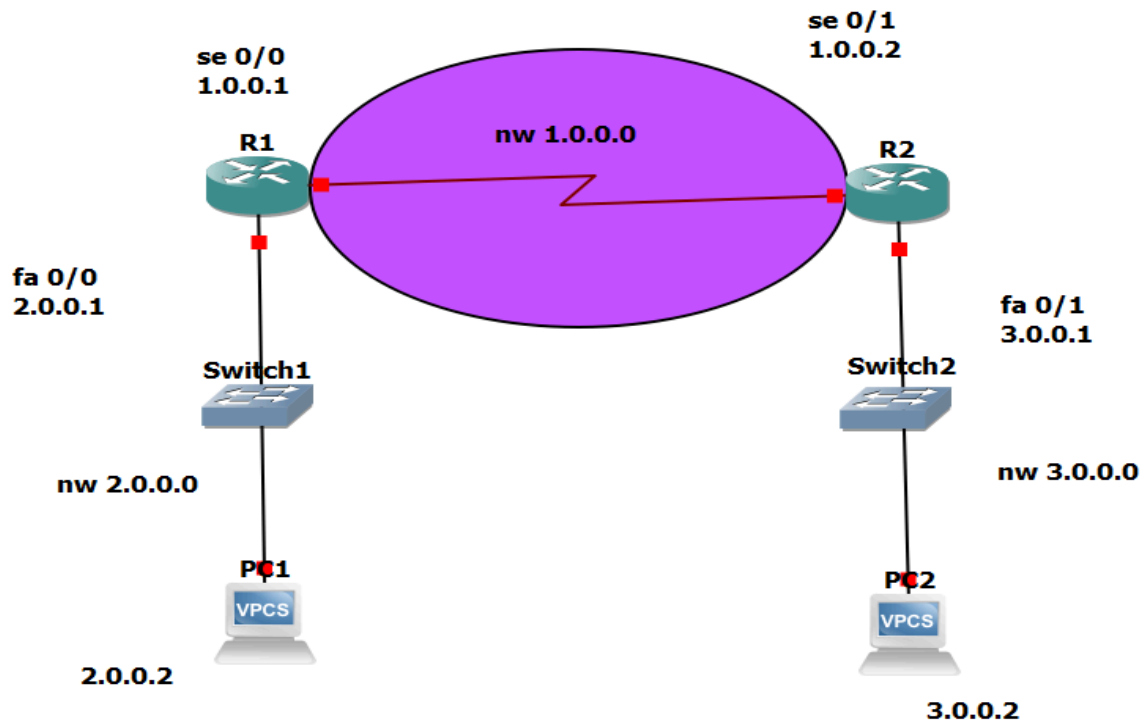


Implement the concept of RIPv1 and RIPv2 routing protocol

Implementation:-

Here is the Topology on which we did the experiment.



Configuration:

```
R1(config)# int se 0/0
R1(config-if)# ip add 1.0.0.1 255.0.0.0
R1(config-if)#no shut
R1(config-if)#exit
```

```
R1(config)# router rip
R1(config-router)# network 2.0.0.0
R1(config-router)#network 1.0.0.0
R1(config-router)#exit
```

```
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)# int se 0/1
R2(config-if)# ip add 1.0.0.2 255.0.0.0
R2(config-if)#no shut
R2(config-if)#exit
```

```
R2(config)#int fa 0/1
R2(config-if)# ip add 3.0.0.1 255.0.0.0
R2(config-if)# no shut
R2(config-if)#exit
```

```
R2(config-router)# exit
R2(config)# router rip
R2(config-router)#network 1.0.0.0
R2(config-router)#network 3.0.0.0
R2(config-router)#exit
R2(config)#
```

```
PC1> ip 2.0.0.2 gateway 2.0.0.1
Checking for duplicate address...
PC1 : 2.0.0.2 255.255.255.0 gateway 2.0.0.1
```

```
PC1> show ip
```

```
NAME       : PC1[1]
IP/MASK     : 2.0.0.2/24
GATEWAY     : 2.0.0.1
DNS         :
MAC         : 00:50:79:66:68:00
LPORT      : 10014
RHOST:PORT  : 127.0.0.1:10015
MTU         : 1500
```

```
PC1> ping 2.0.0.1
84 bytes from 2.0.0.1 icmp_seq=1 ttl=255 time=15.676 ms
84 bytes from 2.0.0.1 icmp_seq=2 ttl=255 time=15.375 ms
84 bytes from 2.0.0.1 icmp_seq=3 ttl=255 time=15.255 ms
84 bytes from 2.0.0.1 icmp_seq=4 ttl=255 time=15.492 ms
84 bytes from 2.0.0.1 icmp_seq=5 ttl=255 time=15.370 ms
```

```
PC2> ip 3.0.0.2 gateway 3.0.0.1
Checking for duplicate address...
PC1 : 3.0.0.2 255.255.255.0 gateway 3.0.0.1
```

```
PC2> ping 3.0.0.1
84 bytes from 3.0.0.1 icmp_seq=1 ttl=255 time=15.342 ms
84 bytes from 3.0.0.1 icmp_seq=2 ttl=255 time=15.435 ms
84 bytes from 3.0.0.1 icmp_seq=3 ttl=255 time=15.308 ms
84 bytes from 3.0.0.1 icmp_seq=4 ttl=255 time=16.062 ms
84 bytes from 3.0.0.1 icmp_seq=5 ttl=255 time=15.331 ms
```

OUTPUT:

```
PC1> ping 3.0.0.2
3.0.0.2 icmp_seq=1 timeout
3.0.0.2 icmp_seq=2 timeout
84 bytes from 3.0.0.2 icmp_seq=3 ttl=62 time=31.101 ms
84 bytes from 3.0.0.2 icmp_seq=4 ttl=62 time=32.461 ms
84 bytes from 3.0.0.2 icmp_seq=5 ttl=62 time=30.226 ms
```

```
PC2> ping 2.0.0.2
84 bytes from 2.0.0.2 icmp_seq=1 ttl=62 time=31.008 ms
84 bytes from 2.0.0.2 icmp_seq=2 ttl=62 time=30.170 ms
84 bytes from 2.0.0.2 icmp_seq=3 ttl=62 time=31.066 ms
84 bytes from 2.0.0.2 icmp_seq=4 ttl=62 time=29.979 ms
84 bytes from 2.0.0.2 icmp_seq=5 ttl=62 time=32.765 ms
```

