LABORATORY PROGRAM – 6
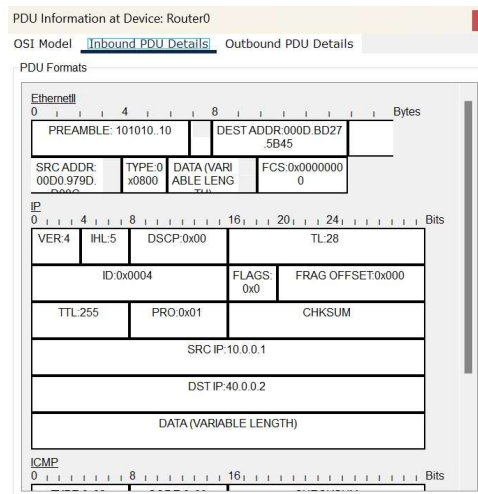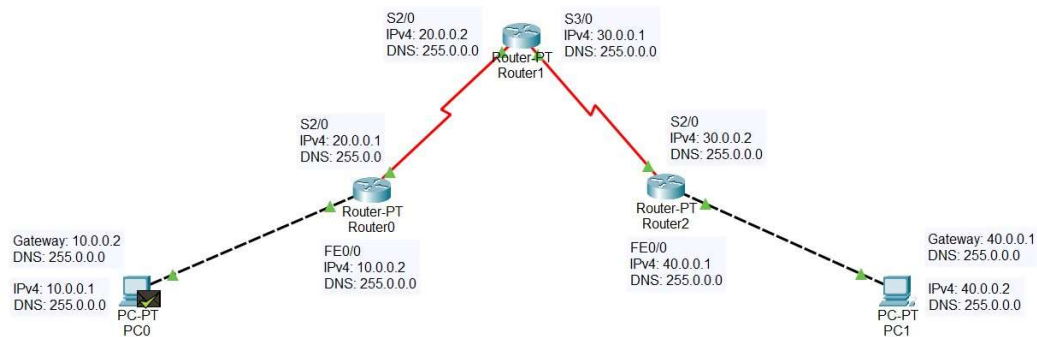
Demonstrate the TTL/ Life of a Packet.


```
C:\>ping 40.0.0.2

Pinging 40.0.0.2 with 32 bytes of data:

Reply from 40.0.0.2: bytes=32 time=72ms TTL=123
Reply from 40.0.0.2: bytes=32 time=53ms TTL=123
Reply from 40.0.0.2: bytes=32 time=55ms TTL=123
Reply from 40.0.0.2: bytes=32 time=69ms TTL=123

Ping statistics for 40.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 53ms, Maximum = 72ms, Average = 62ms
```

Demonstrate the TTL / Life of a packet

Observation: we are trying to connect different networks using RIP protocol. To connect different networks using RIP protocol go to Router → enable → config terminal → router rip → network (ip addres of devices connected to that router but the last digit should be 0, as we are using multiple end devices)

We have to configure the above to all the Routers. From this all the networks will get connected to each other and we can ping message from one end device to another b/w every networks. Once RIP is installed/activated in Routers every router shares its routing protocol with its imm neighbours, Hence in iterations every router will know about all n/w that their neighbours are Conn. to.

Demonstrate the TTL / Life of a packet

→ Aim: To show how TTL changes when a simple PPU is transmitted from one system to another over different networks

Topology:
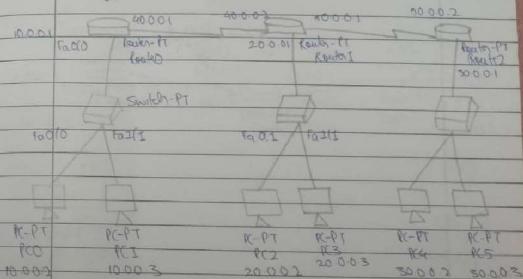
Procedure

① Cisco Packet Tracer
② Arrange the devices according to the above Topology
③ Configure the routers according to gateways
④ Configure the RIP in Routers for all networks
⑤ Go to simulation mode
⑥ Select PPU and drag it to source PC & destination PC
⑦ Click Play on the simulation and capture all the imp data