

Practical - 8

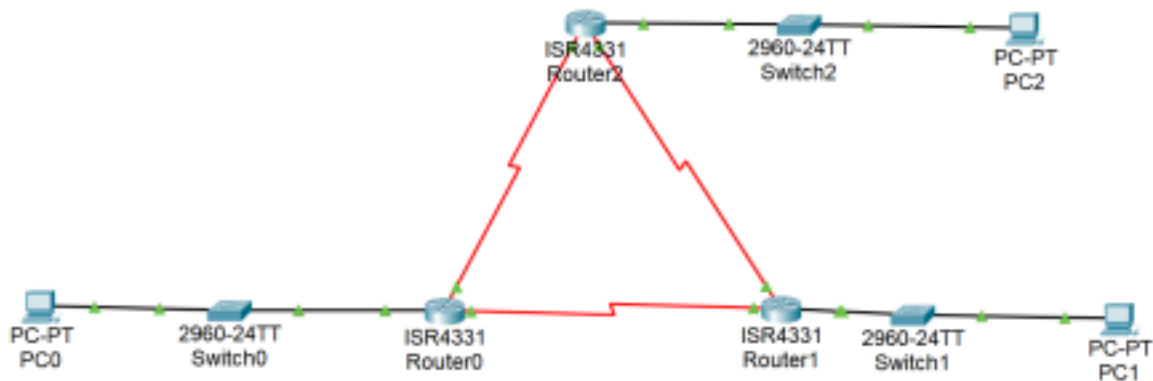
Aim: To design a network using Open Shortest Path First (OSPF) Protocol.

Scenario:

Consider that organization has three departments and as routing protocol Open Shortest Path First (OSPF) protocol is implemented. Configure network as shown in figure below and implement Open Shortest Path First (OSPF) routing protocol.

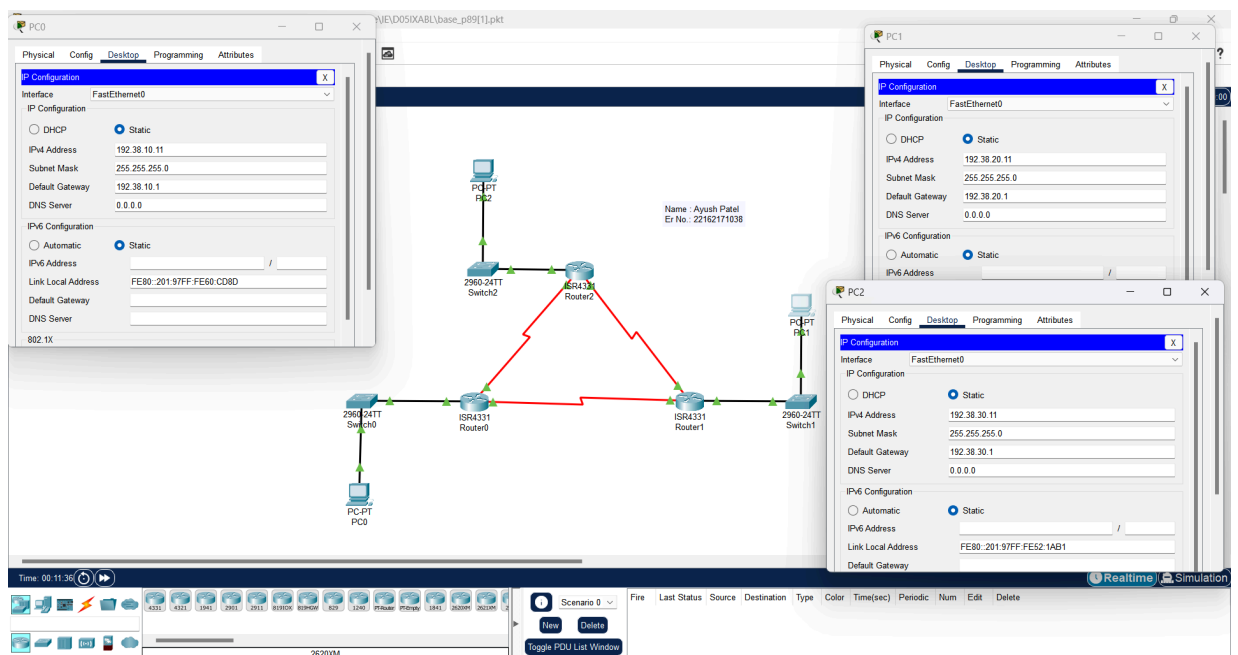
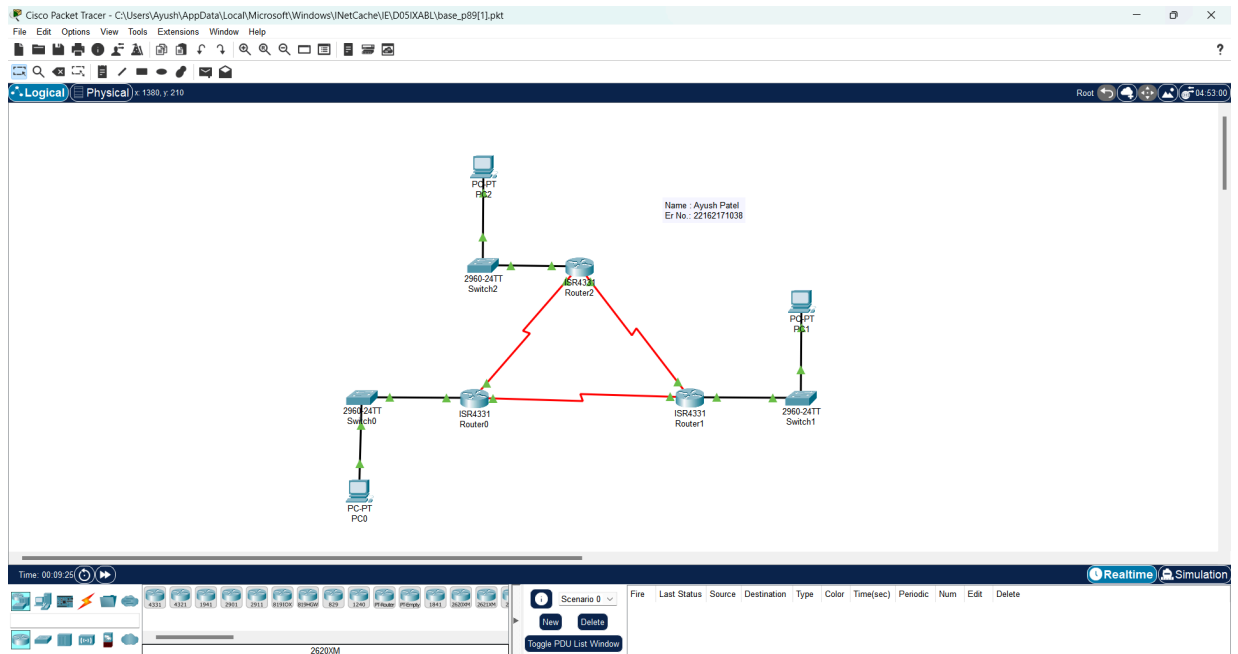
Procedure:

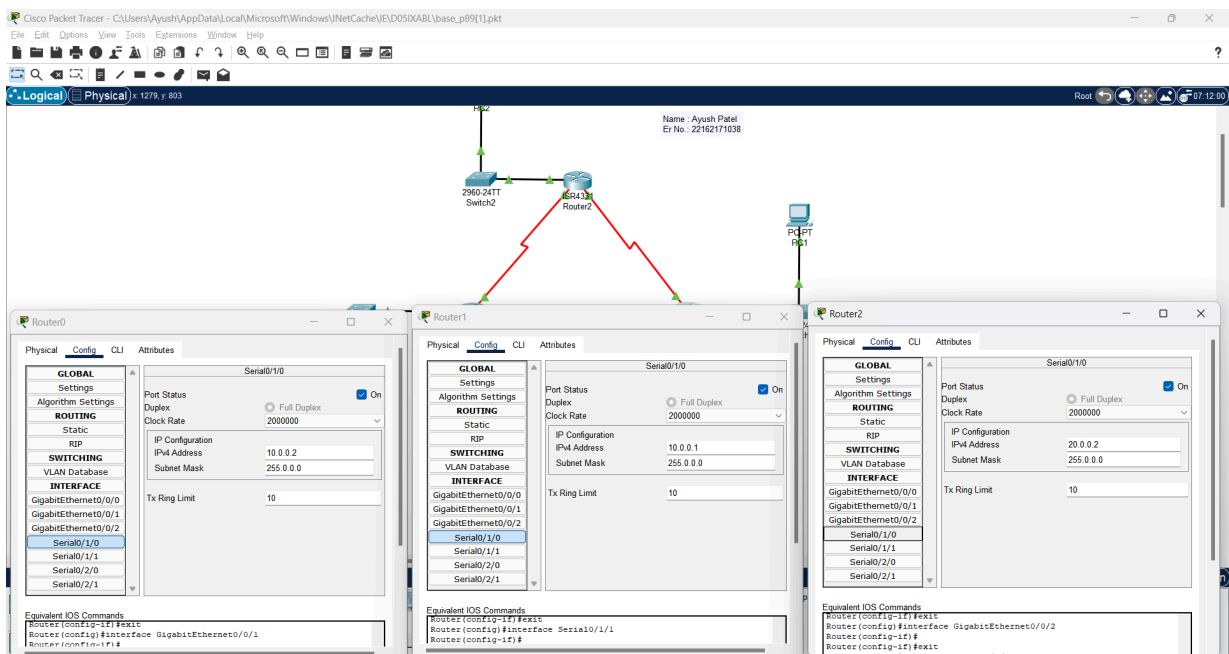
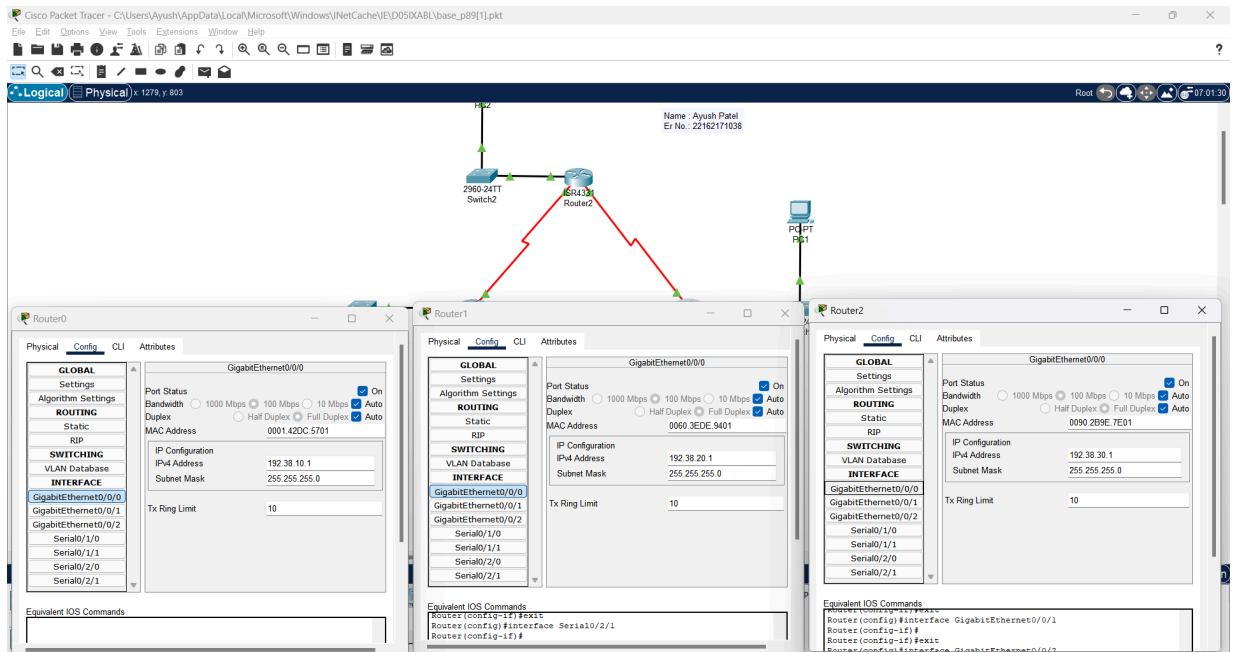
- 1) Create network as given below

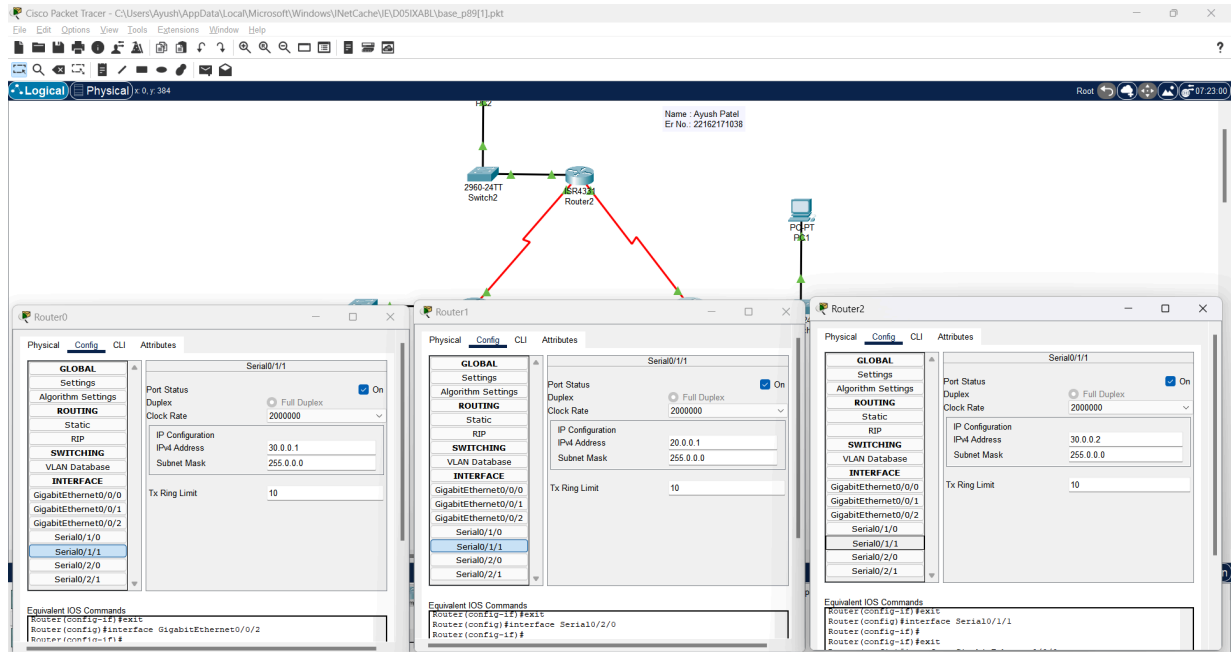


- 2) Configure IP address (All Devices, Routers)
- 3) Configure open short path first routing table (OSPF in routers)

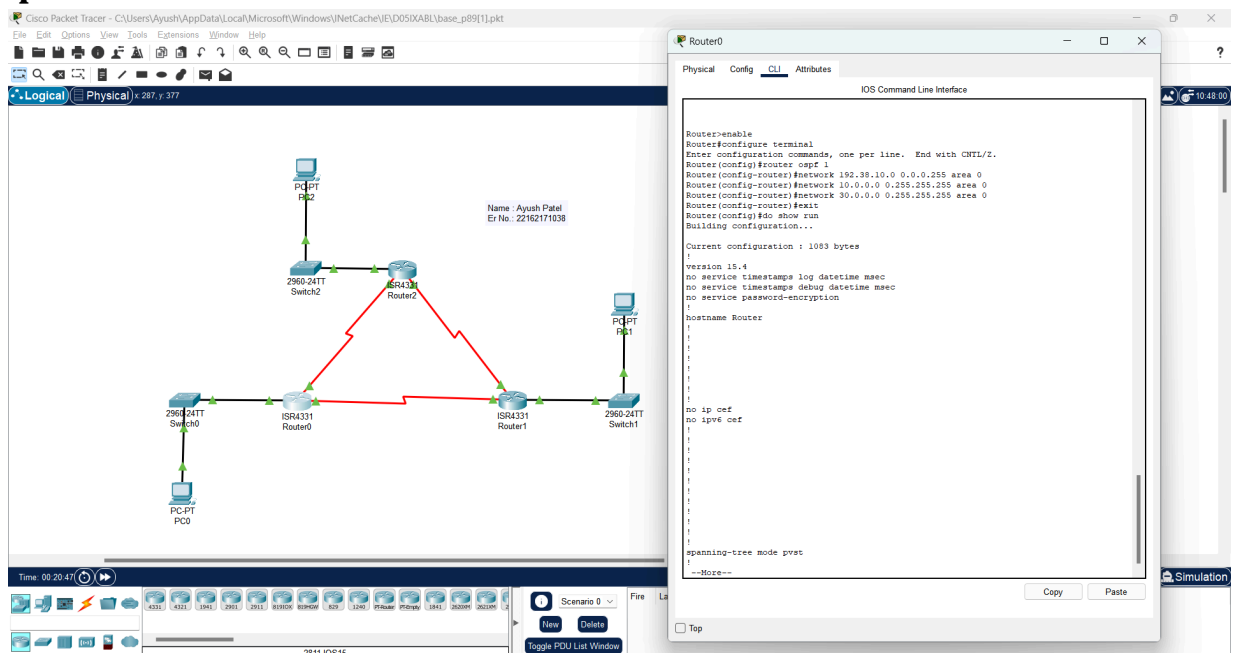
Configuration:

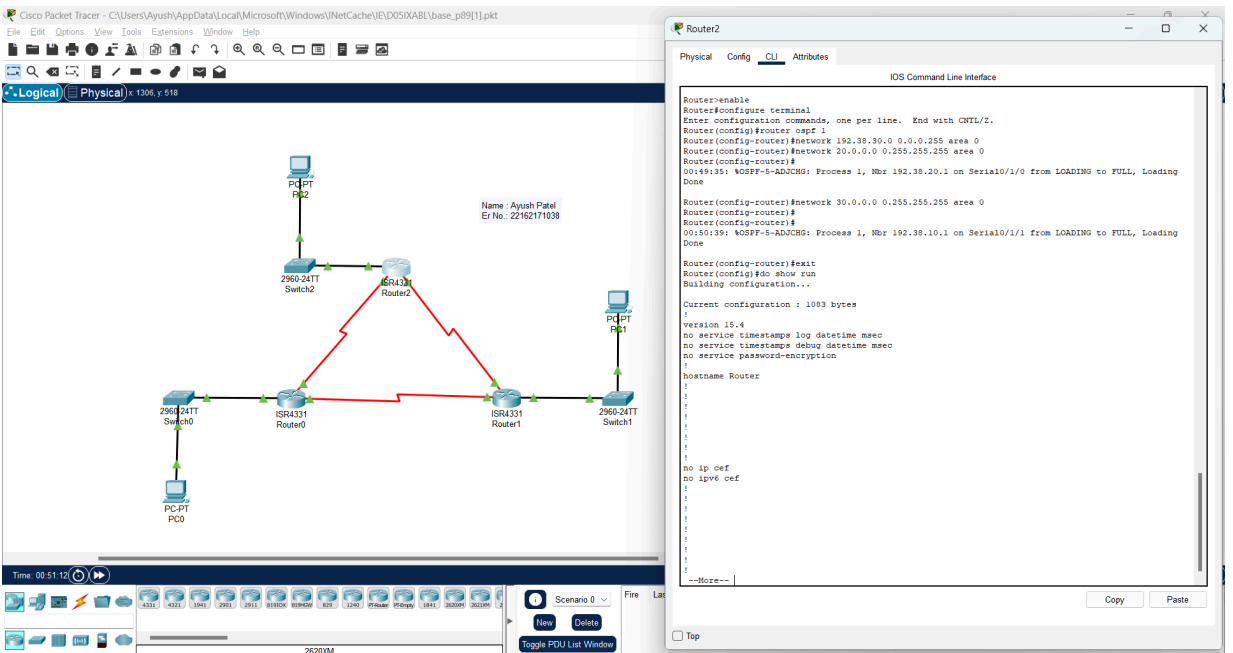
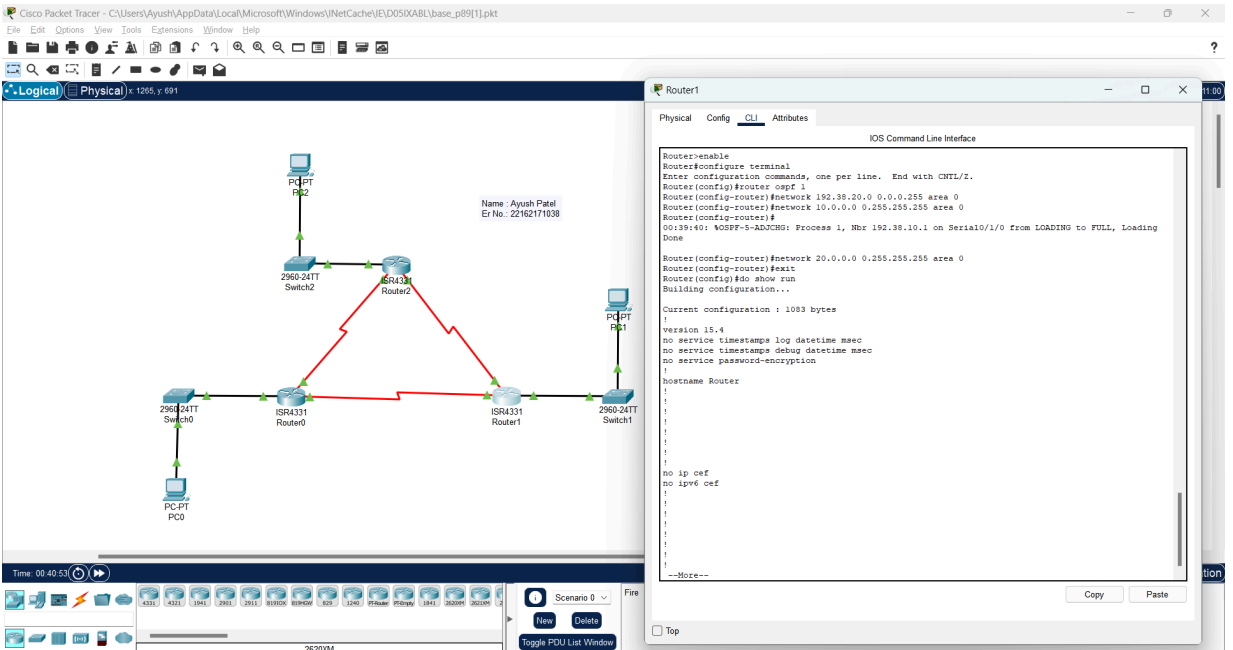


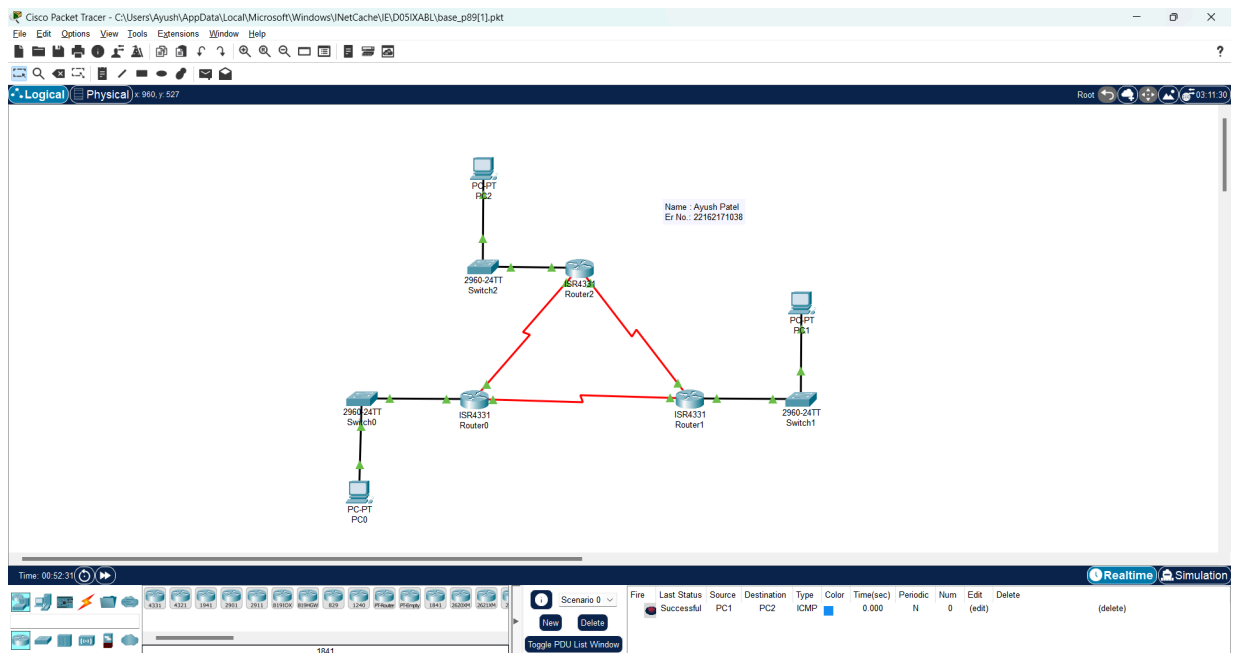
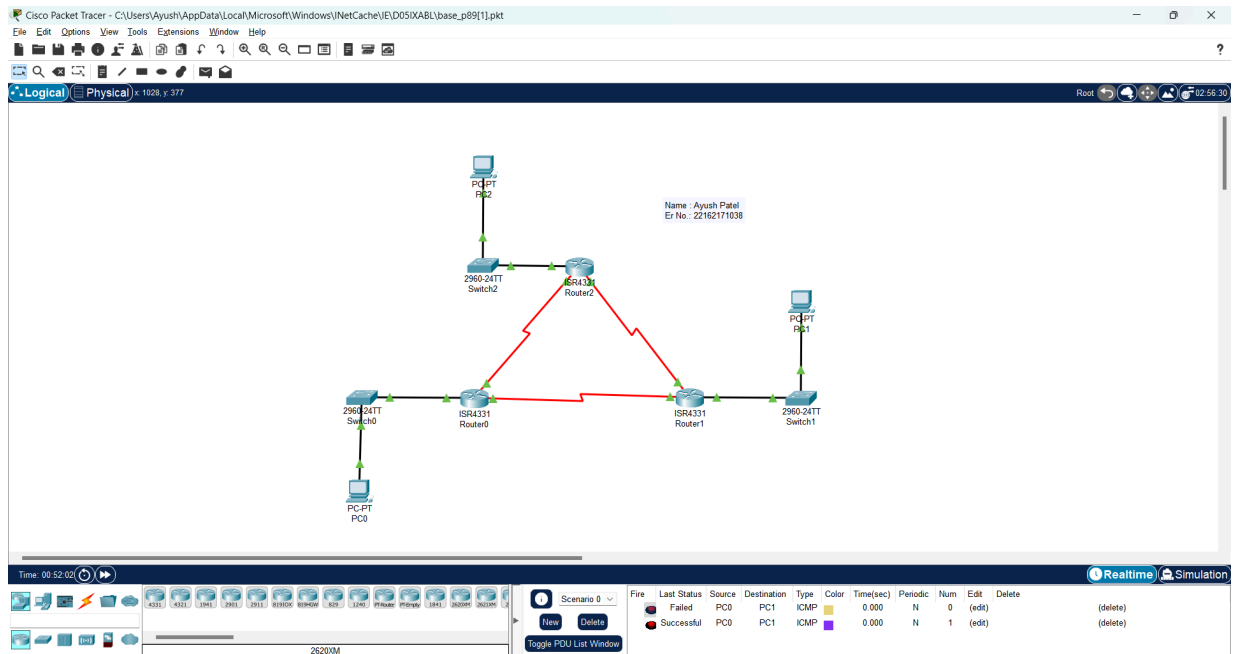


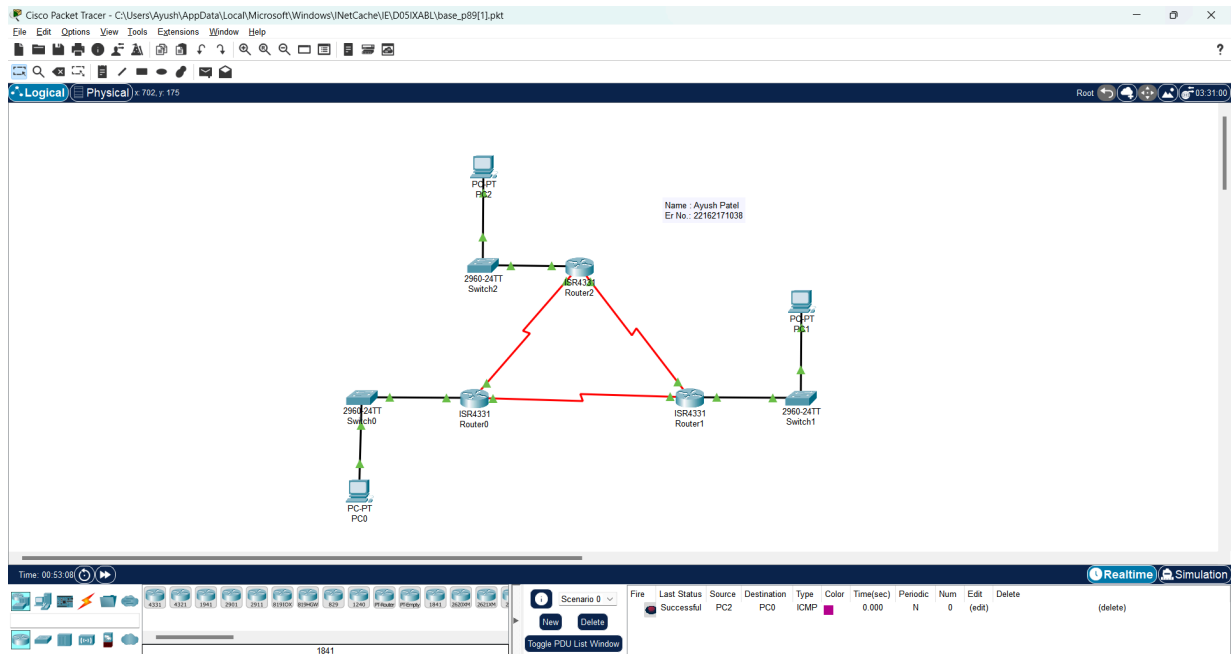


Output:









Conclusion:

We have successfully designed and implemented a network using OSPF and achieved dynamic and efficient routing within the network by setting the correct IP on each device and configure the routing table. This activity helped with our knowledge about routing protocols and how easily OSPF can handle complex multi-department networks.

Note:

Make sure last two digits of your enrollment numbers appears in network IP address that must be visible in snapshot of the cisco packet tracer. i.e. 192.XX.10.1 (XX indicates last two digits of your enrollment no.)