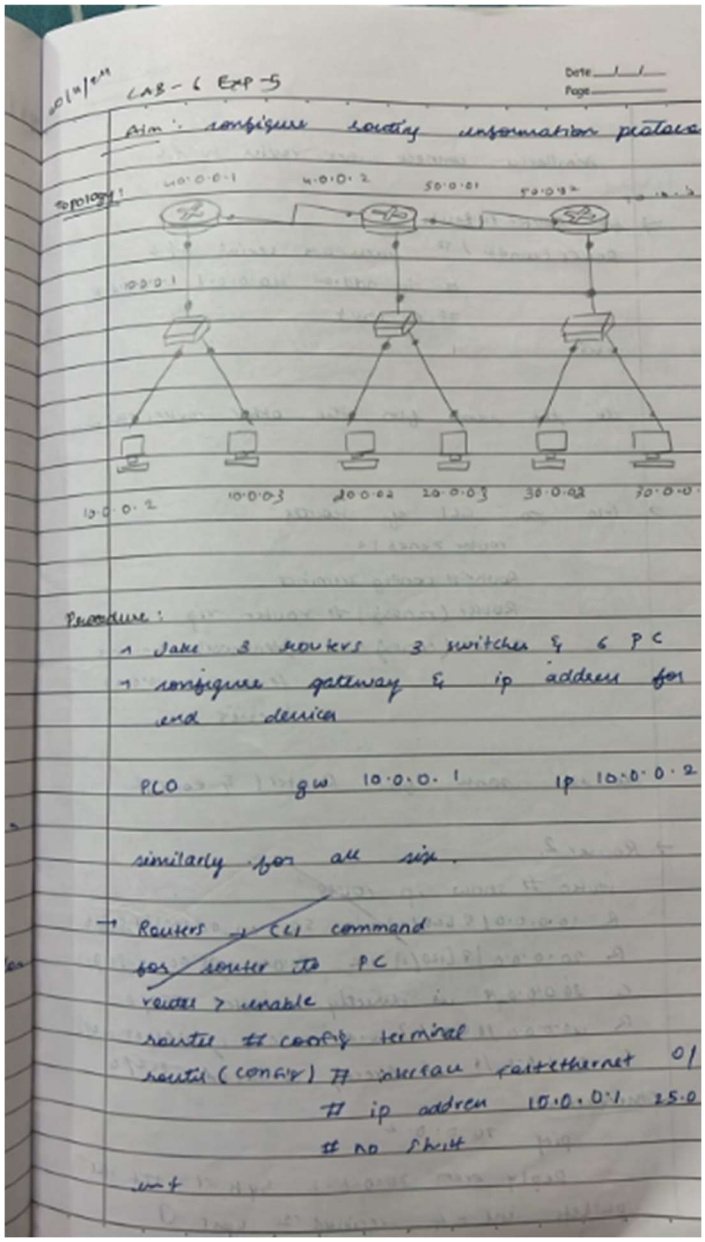
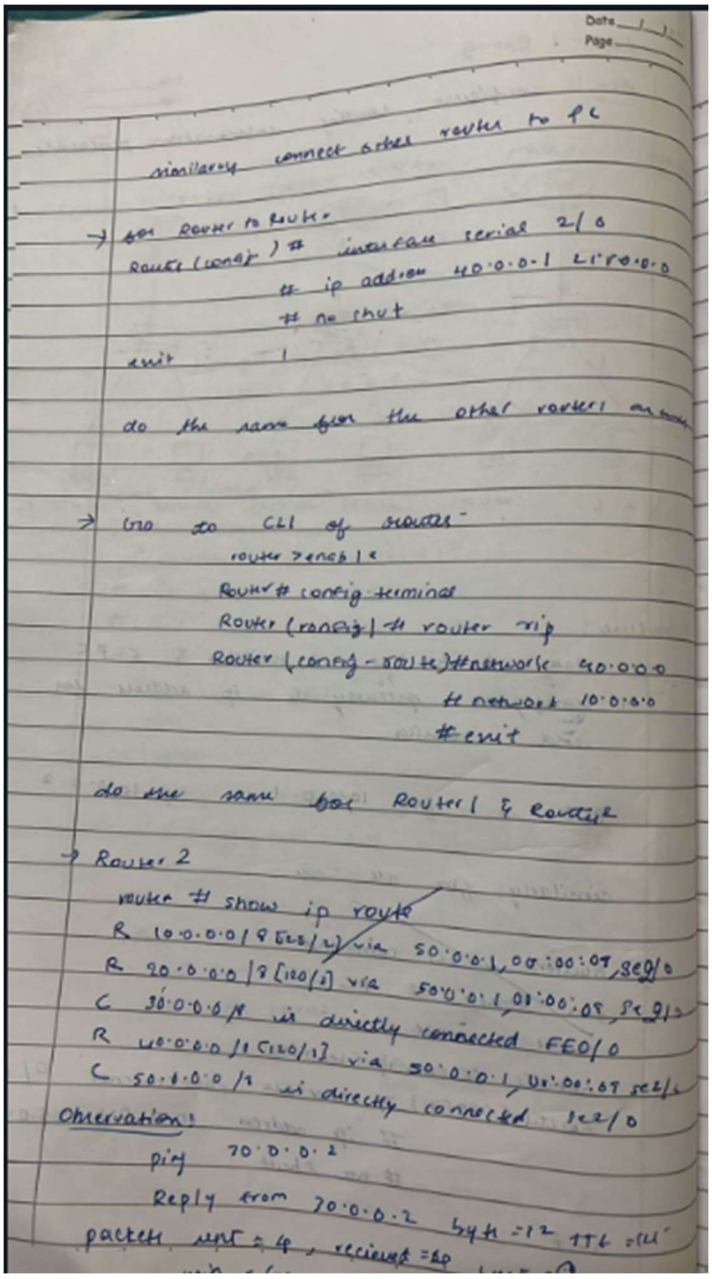
LAB – 6

EXP-5


LAB – 6 EXP-5
Aim: configure routing information protocol
Topology:
40.0.0.1
40.0.0.2
50.0.0.1
50.0.0.2
10.0.0.1
10.0.0.2
10.0.0.3
20.0.0.2
20.0.0.3
30.0.0.2
Procedure:
1 Take 3 routers 3 switches & 6 PC
2 configure gateway & ip address for end devices
PC0 gw 10.0.0.1 ip 10.0.0.2
similarly for all six.
→ Routers → CLI command
for router to PC
router > enable
router # config terminal
router (config) # interface fastethernet 0/
ip address 10.0.0.1 25.0
no shut
int



similarly connect other router to PC

→ for Router to Router

Router (config) # interface serial 2/0
ip address 40.0.0.1 255.0.0.0
no shut
exit

do the same for the other routers as shown

→ Go to CLI of routers

router >enable
Router # config terminal
Router (config) # router rip
Router (config-router) # network 40.0.0.0
network 10.0.0.0
exit

do the same for Router1 & Router2

→ Router 2

router # show ip route
R 10.0.0.0/8 [120/2] via 50.0.0.1, 00:00:09, Se2/0
R 20.0.0.0/8 [120/2] via 50.0.0.1, 00:00:09, Se2/0
C 30.0.0.0/8 is directly connected FE0/0
R 40.0.0.0/8 [120/1] via 50.0.0.1, 00:00:09 se2/0
C 50.0.0.0/8 is directly connected se2/0

Observation:

ping 70.0.0.2

Reply from 70.0.0.2 byte=32 TTL=125

packet sent = 4, received = 4

EXP 7

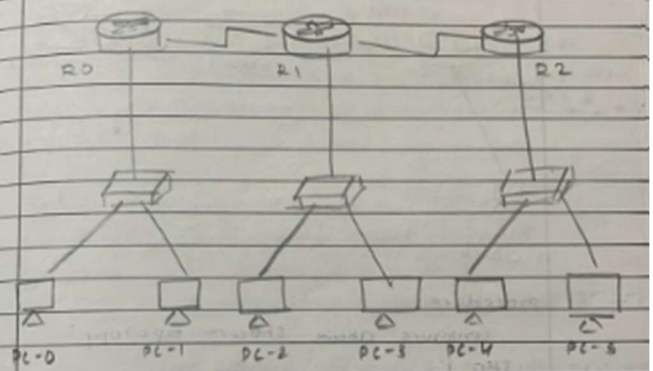
Date / /
Page

Exp-6

Aim:

Demonstrate the TPL or life of a packet

Topology:



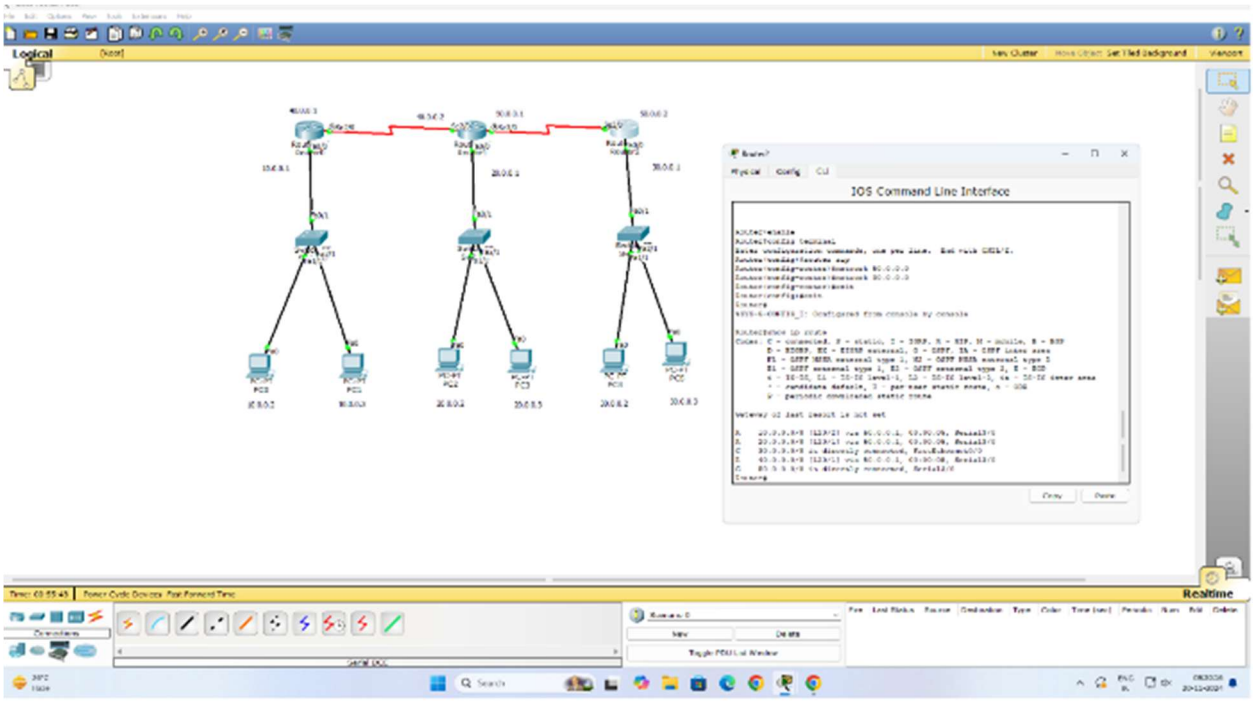
Procedure:

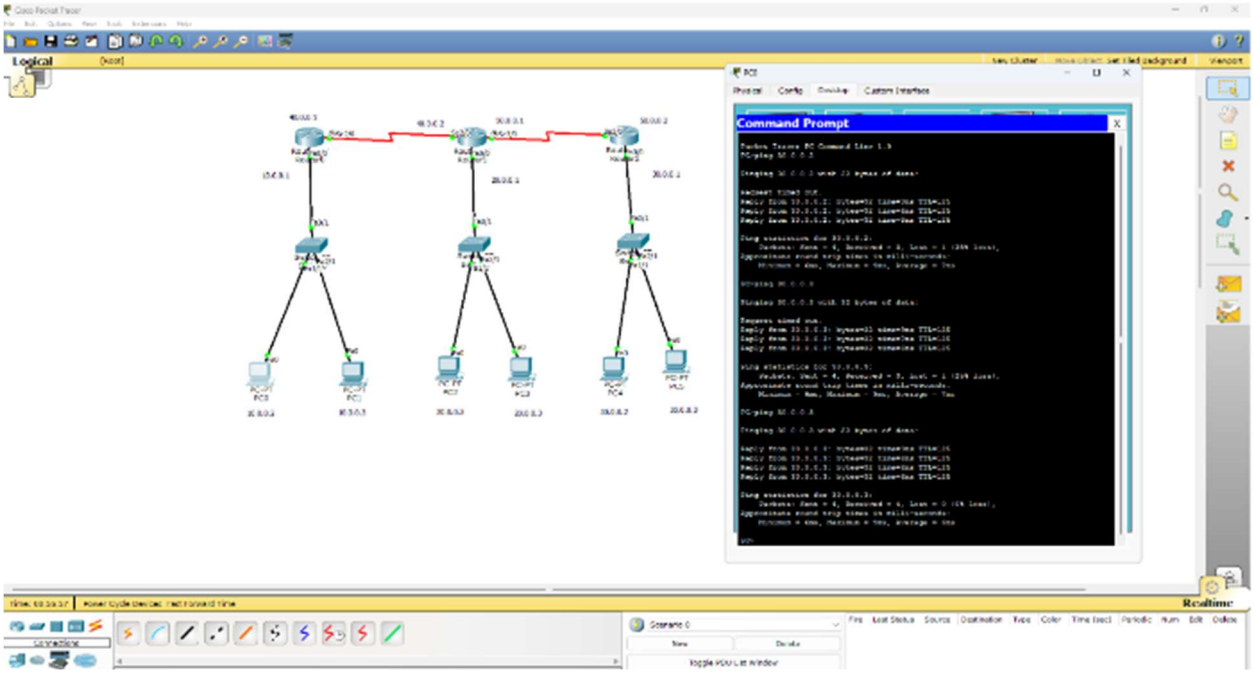
- configure as shown above
- In simulation layout, we select simple PDU
  - Select a source PC & destination PC

20/11/24

Observation:

- when the packet arrived at Router 0, TTL = 21
- when packet arrives at Router 1 TTL = 21-1
- when the packet arrives at R2, TTL = 21-2
- so from each router, TTL reduces by 1.


IOS Command Line Interface


Command Prompt