Aim-12

12. To understand the operation of TELNET by accessing the router in server room from a PC in IT office.

Topology:

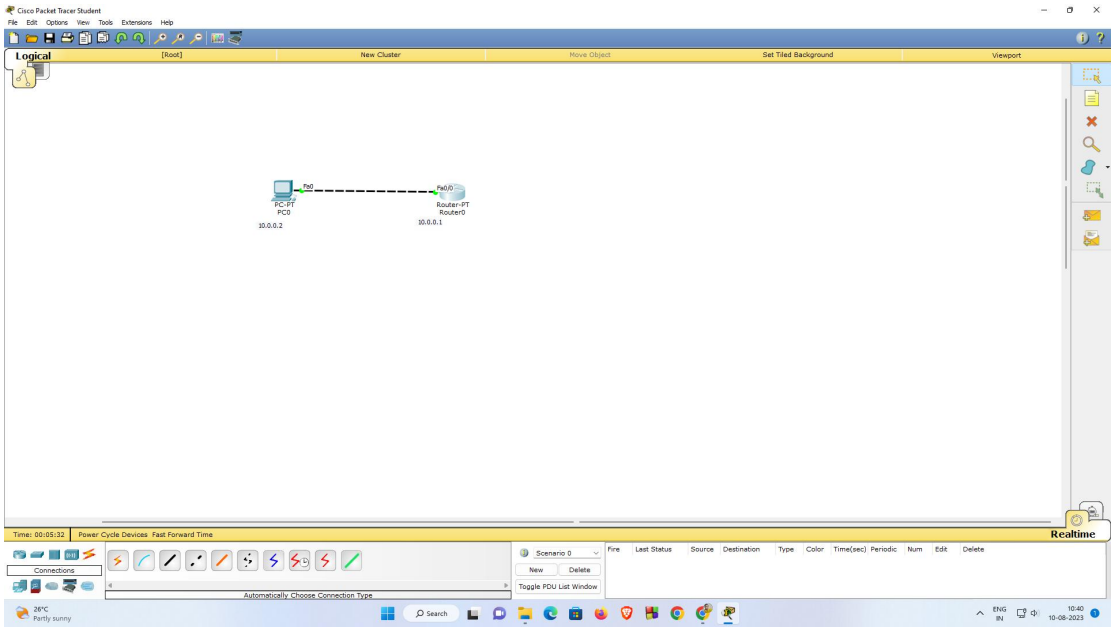


Fig 1: Topology

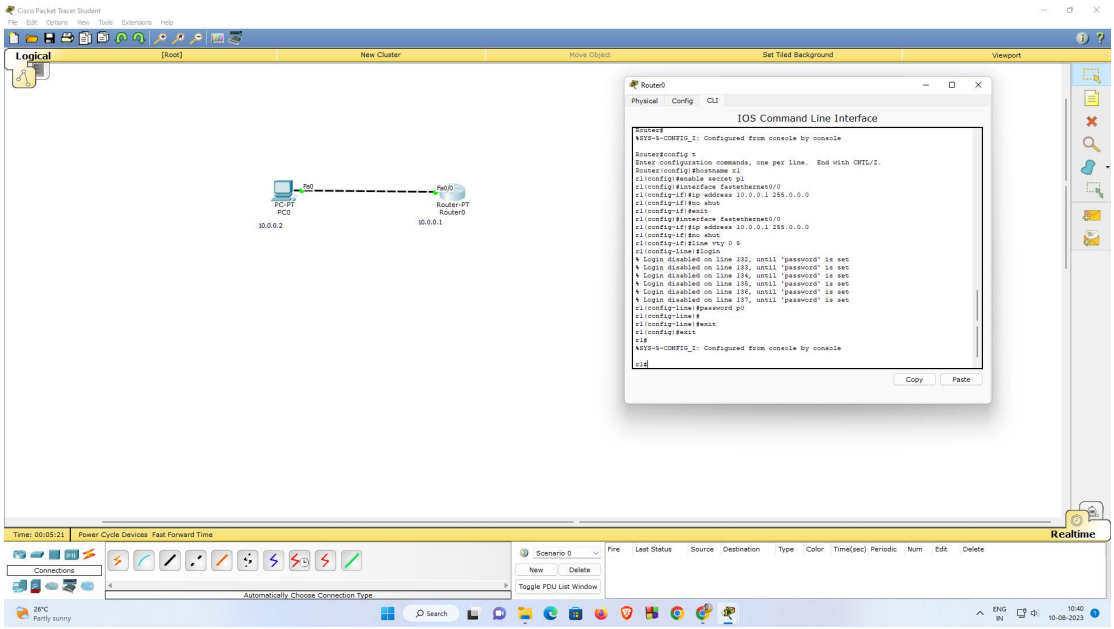


Fig 2: Router0 Configuration

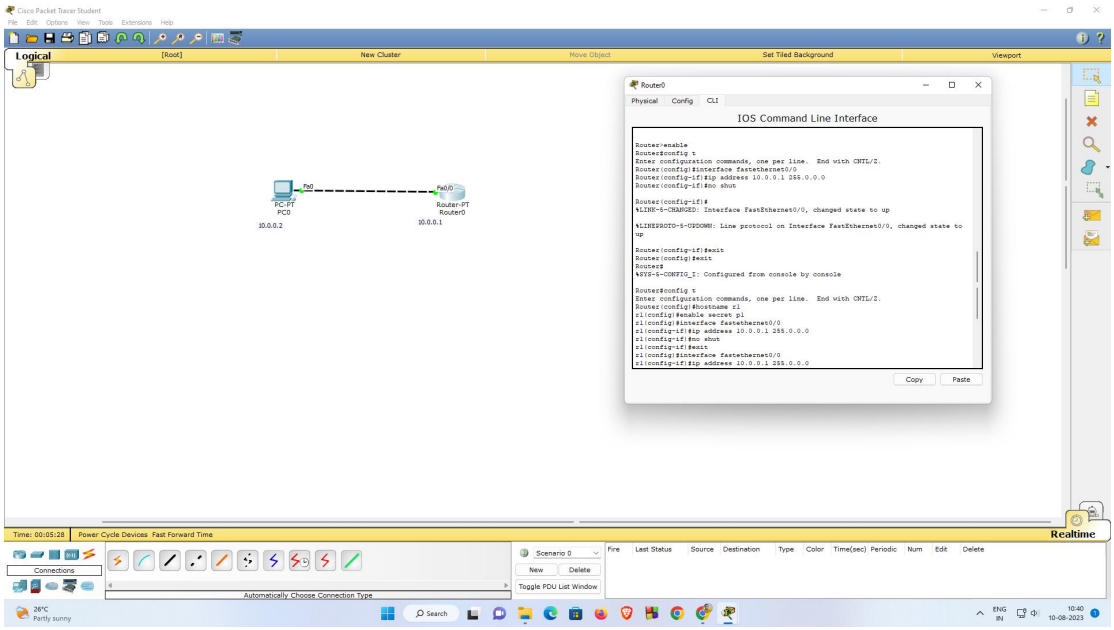
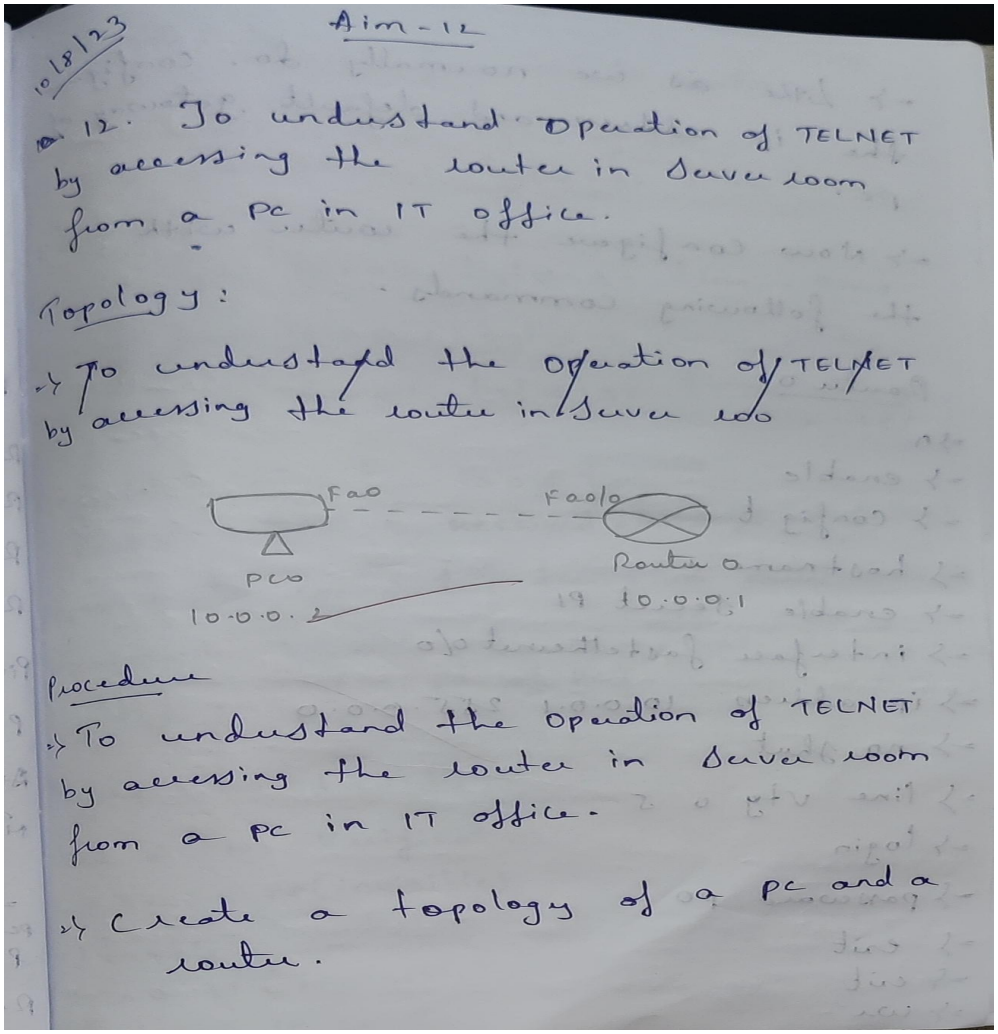


Fig 3: Router0 Configuration

Procedure and Observation:



-> Like as we normally do, configure the ip address and default gateway of pc.

-> Now configure the router with the following commands.

Router 0

->n
-> enable
-> config t
-> hostname r1
-> enable secret P1
-> interface fastethernet 0/0
-> ip address 10.0.0.1 255.0.0.0
-> no shut
-> line vty 0 5
-> login
-> password P0
-> exit
-> exit
-> wr

Output

=> Pinging from pc0 to router

PC> ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Pinging from 10.0.0.1: bytes=32 time=0ms TTL=255

Pinging from 10.0.0.1: bytes=32 time=0ms TTL=255

Pinging from 10.0.0.1: bytes=32 time=0ms TTL=255

Pinging from 10.0.0.1: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.1:

Packets: Sent=4, Received=4, Lost=0 (0% loss),

Approximate round trip times in milli-seconds

Minimum =0 ms, Maximum=0ms, Average=0ms

(Command prompt of PC)

PC> telnet 10.0.0.1

Trying 10.0.0.1 .... Open

User Access Verification

Password: P0 (invisible)

R1> enable

Password P1 (invisible)

R1# show IP route

Codes: C- Connected, S = Static, I = IGRP,
R- RIP, M- mobile,
B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF,
IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF
NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external
type 2, E = EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS
level-2, ia - IS-IS inter area
* - Candidate default, U - per-user
static route, o - ODR
P - Periodic downloaded static route
Gateway of last resort is not set.

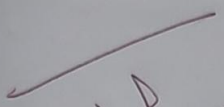
C 10.0.0.0/8 is directly connected,
FastEthernet 0/0.

Observation

=> Telnet stands for Teletype Network,
but it can also be used as a verb; 'to

-> Telnet is to establish a connection using the Telnet protocol.

-> Telnet is a simple, text-based network protocol that is used for accessing remote computers over TCP/IP networks like the Internet.



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Output:

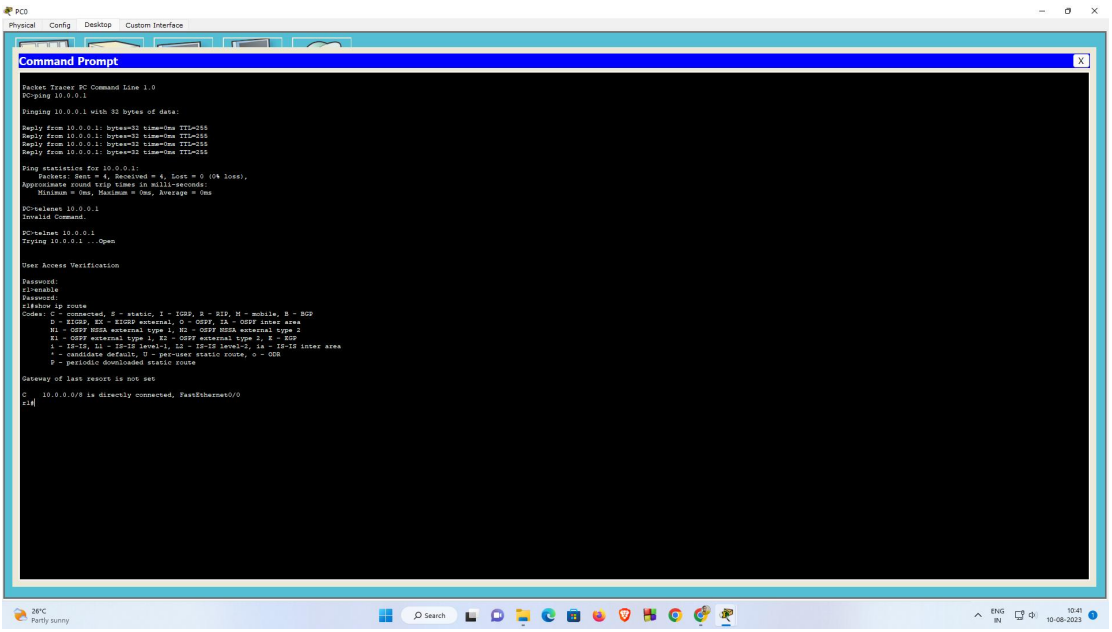

Fig 4: ping response and trying to access the device remotely