Program 10

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

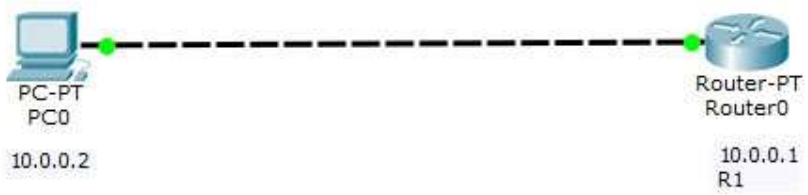


Figure 62: Topology

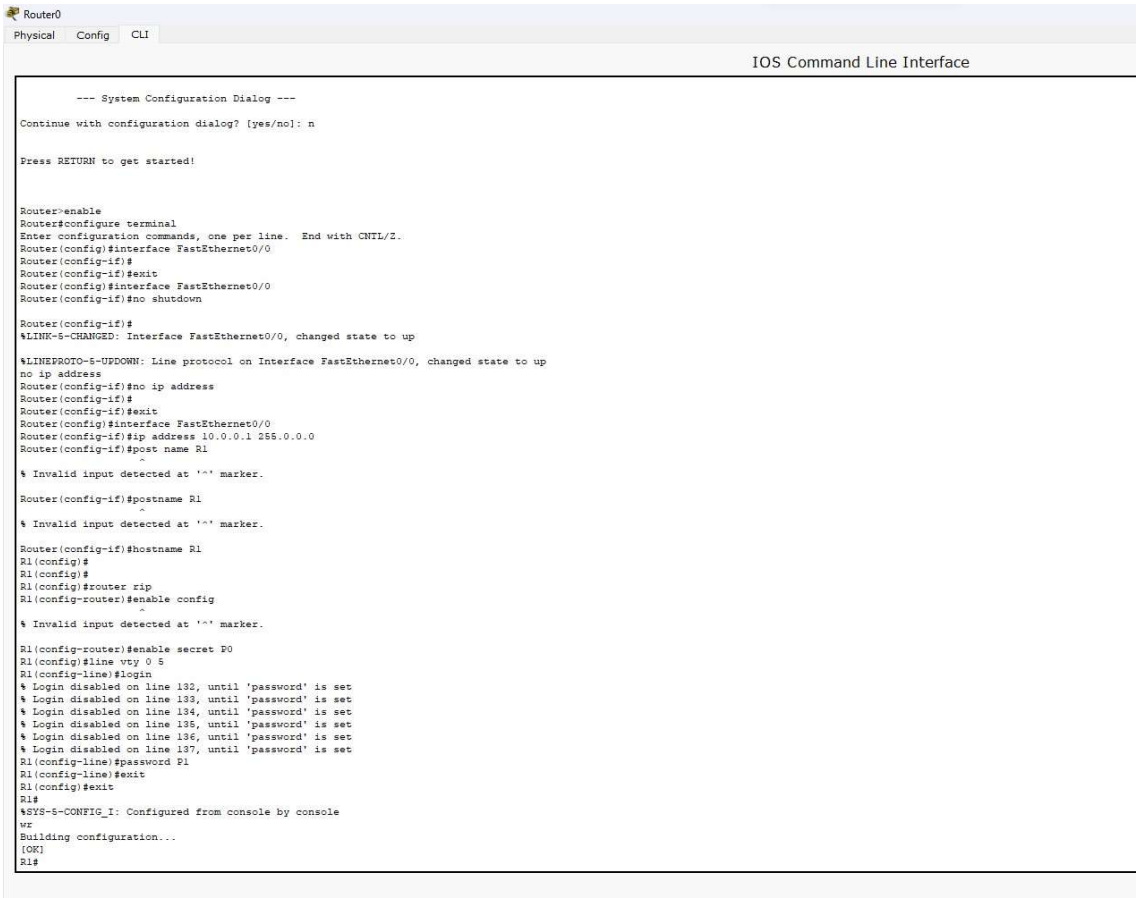


Figure 63: Router CLI

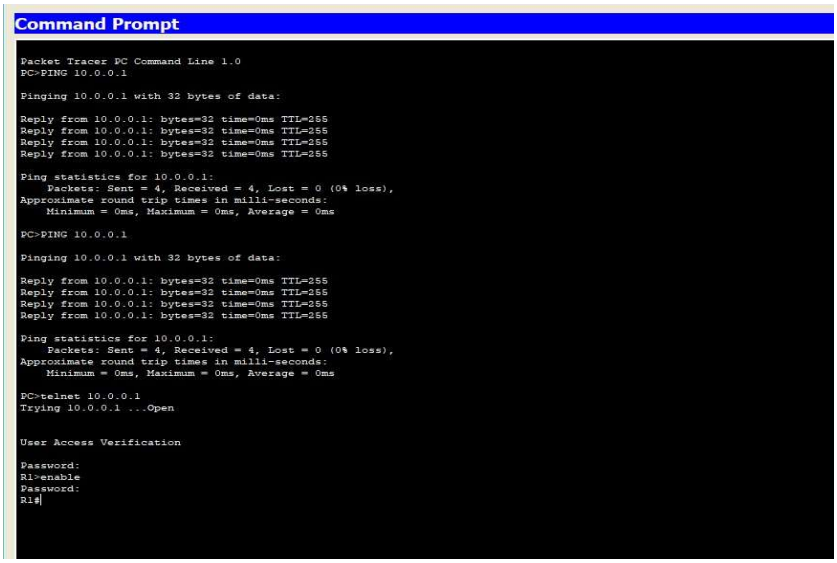


Figure 64: Output

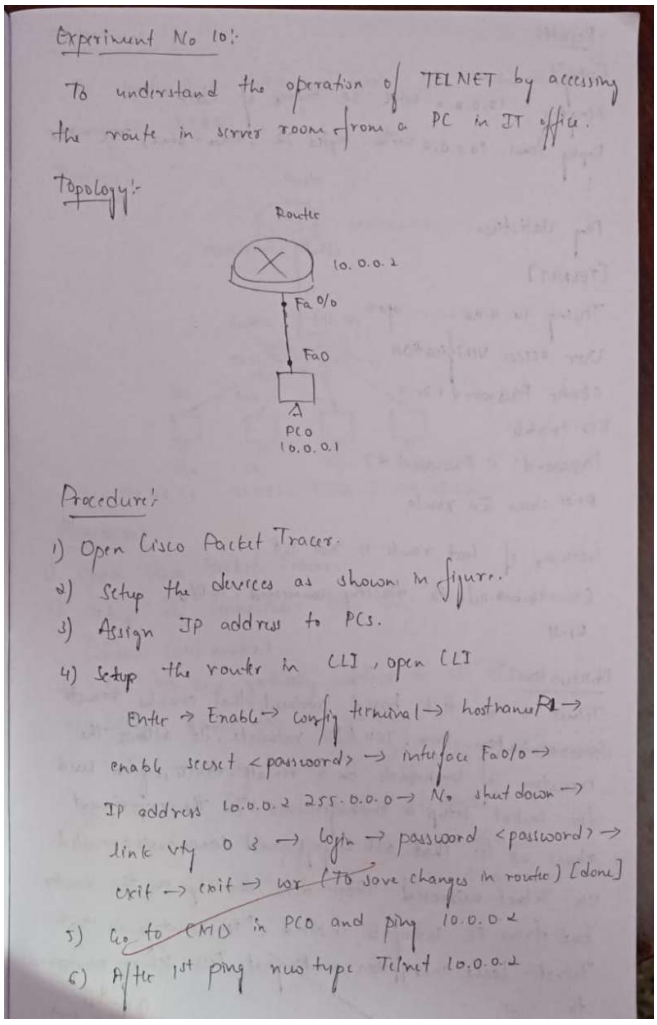
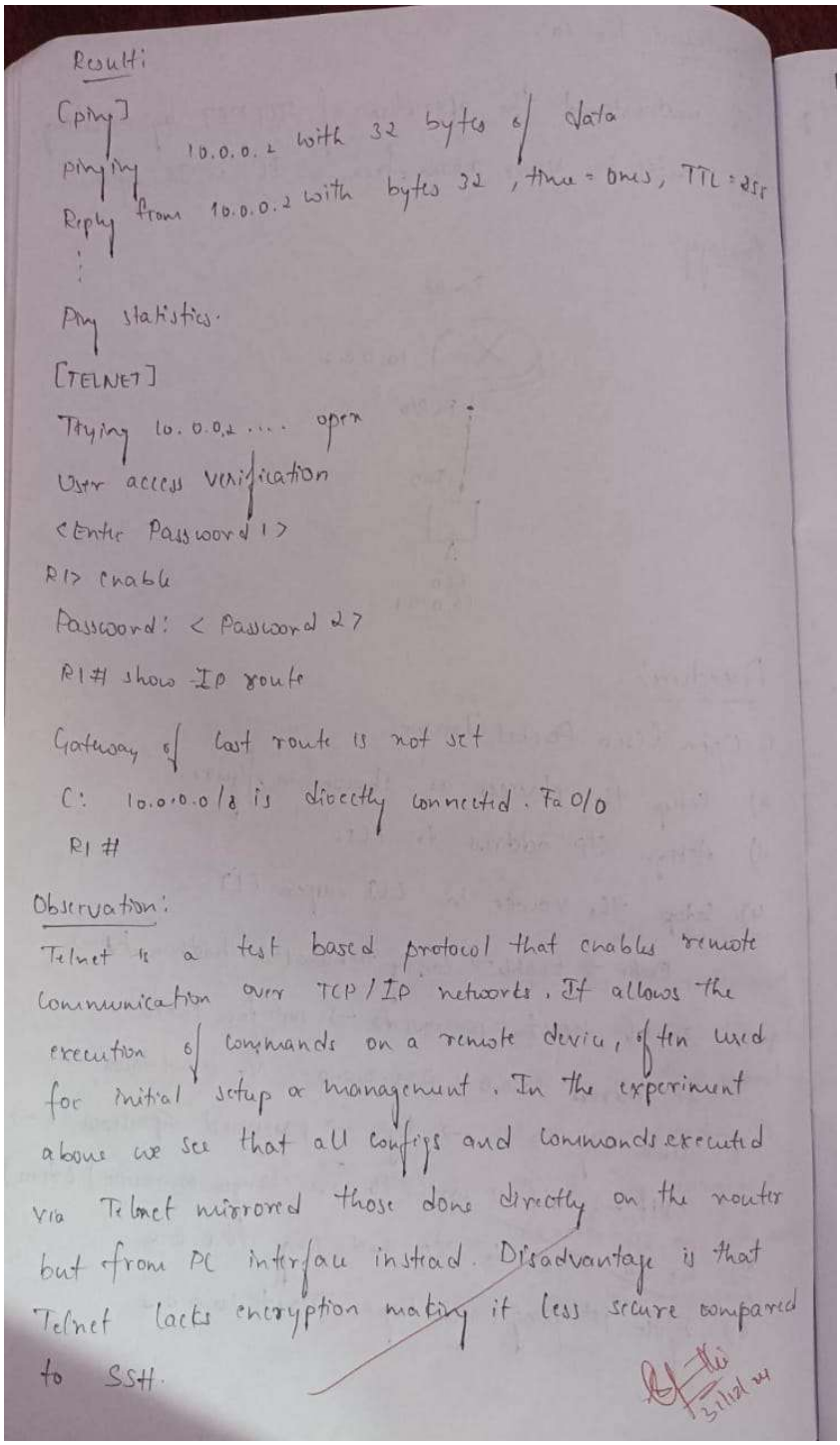


Figure 65: Observation Book 1


Result:

[ping]

pinging 10.0.0.2 with 32 bytes of data

Reply from 10.0.0.2 with bytes 32, time = 0ms, TTL = 255

:

Ping statistics.

[TELNET]

Trying 10.0.0.2 .... open

User access verification

<Enter Password>

R1> enable

Password: <Password 2>

R1# show IP route

Gateway of last route is not set

C: 10.0.0.0/8 is directly connected. Fa 0/0

R1#

Observation:

Telnet is a text based protocol that enables remote communication over TCP/IP networks. It allows the execution of commands on a remote device, often used for initial setup or management. In the experiment above we see that all configs and commands executed via Telnet mirrored those done directly on the router but from PC interface instead. Disadvantage is that Telnet lacks encryption making it less secure compared to SSH.

Figure 66: Observation Book 2