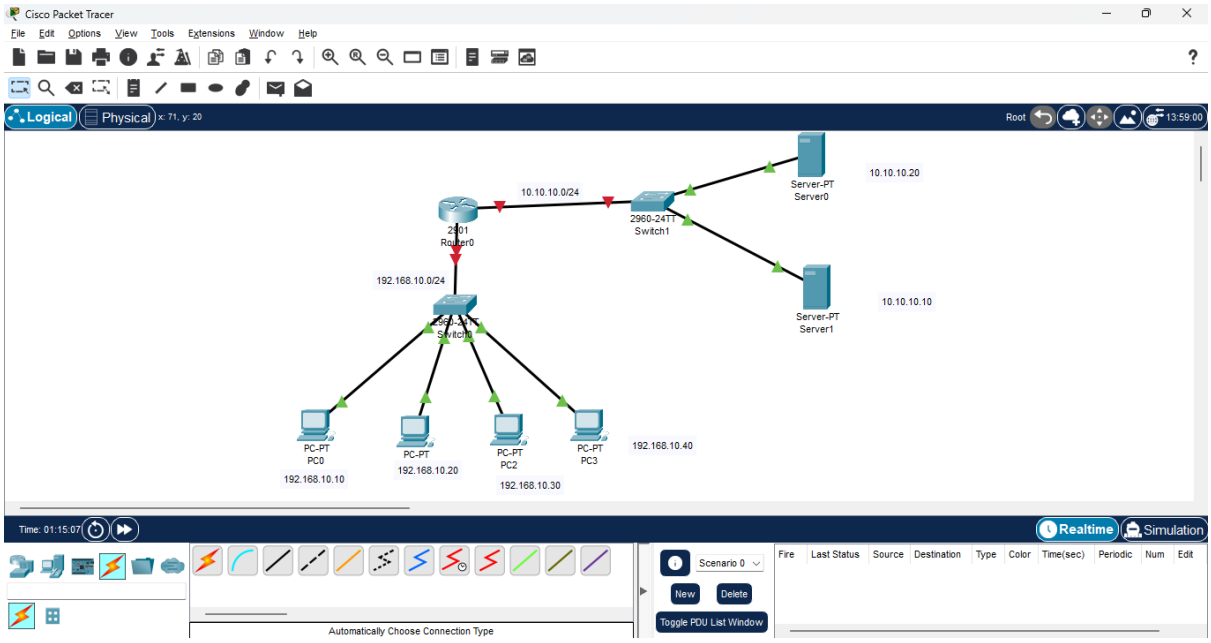
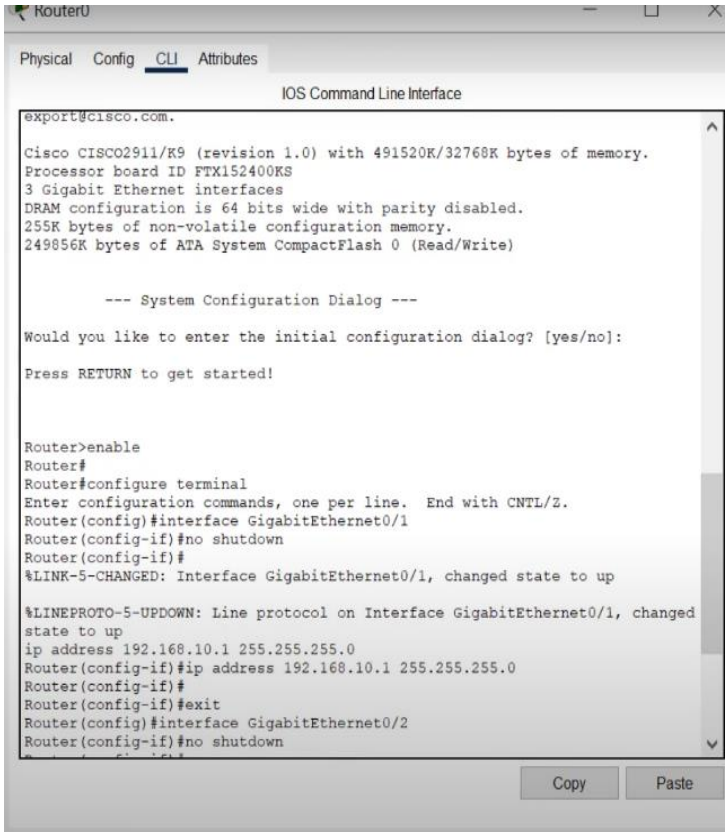
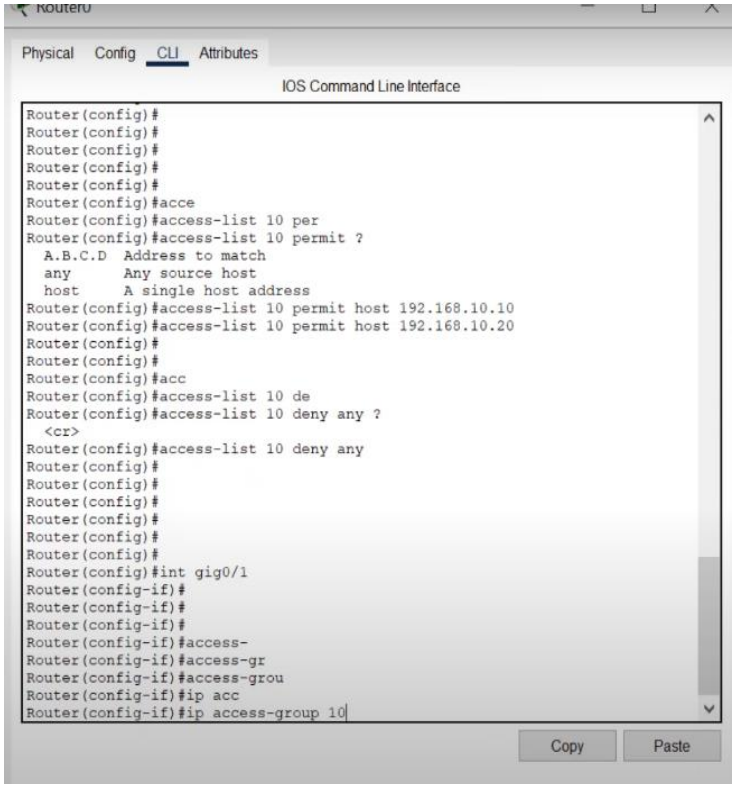
Q10) Implement ACLs to restrict traffic based on source and destination ports. Test rules by simulating legitimate and unauthorized traffic.

Access Control Lists (ACLs) are used in Cisco devices to **filter traffic** based on conditions like source/destination IPs, protocols, and ports. This ensures network security by allowing only authorized traffic.

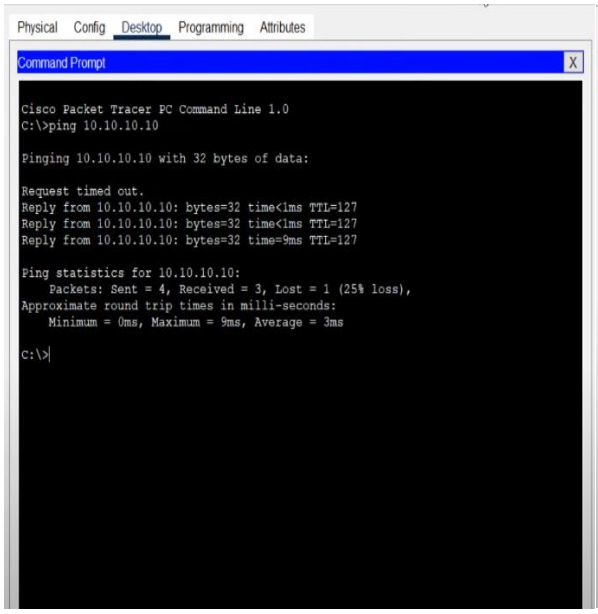


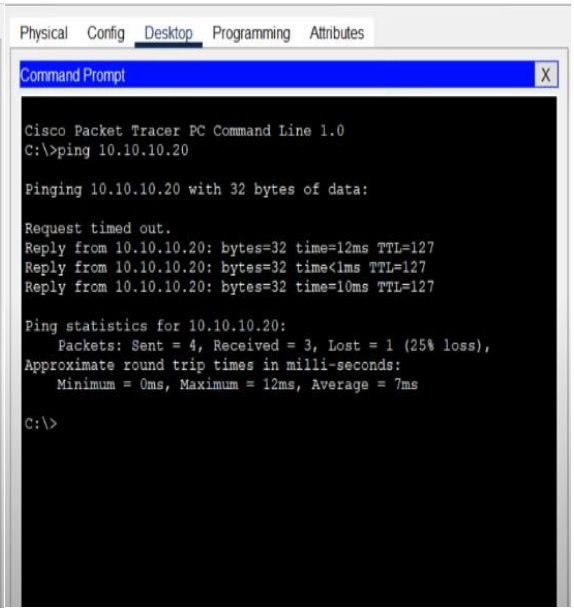
Steps:




Router0
Physical Config CLI Attributes
IOS Command Line Interface
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#acce
Router(config)#access-list 10 per
Router(config)#access-list 10 permit ?
A.B.C.D Address to match
any Any source host
host A single host address
Router(config)#access-list 10 permit host 192.168.10.10
Router(config)#access-list 10 permit host 192.168.10.20
Router(config)#
Router(config)#
Router(config)#acc
Router(config)#access-list 10 de
Router(config)#access-list 10 deny any ?
<cr>
Router(config)#access-list 10 deny any
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#int gig0/1
Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#access-
Router(config-if)#access-gr
Router(config-if)#access-grou
Router(config-if)#ip acc
Router(config-if)#ip access-group 10
Copy
Paste

Result:


Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.10
Pinging 10.10.10.10 with 32 bytes of data:
Request timed out.
Reply from 10.10.10.10: bytes=32 time<1ms TTL=127
Reply from 10.10.10.10: bytes=32 time<1ms TTL=127
Reply from 10.10.10.10: bytes=32 time=9ms TTL=127
Ping statistics for 10.10.10.10:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 9ms, Average = 3ms
C:\>


Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.20
Pinging 10.10.10.20 with 32 bytes of data:
Request timed out.
Reply from 10.10.10.20: bytes=32 time=12ms TTL=127
Reply from 10.10.10.20: bytes=32 time<1ms TTL=127
Reply from 10.10.10.20: bytes=32 time=10ms TTL=127
Ping statistics for 10.10.10.20:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 12ms, Average = 7ms
C:\>