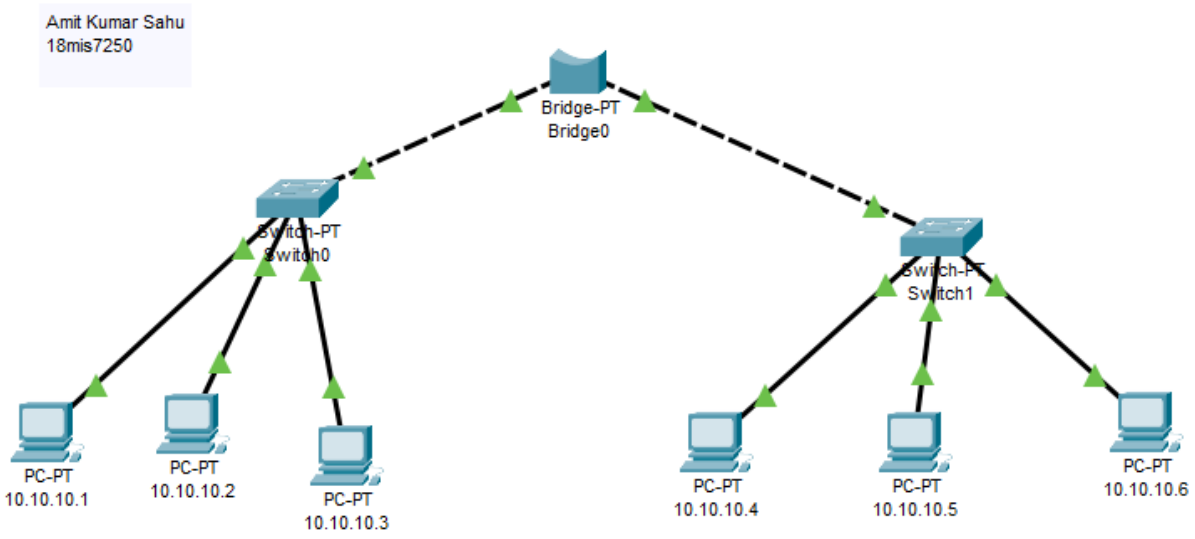
Lab -3

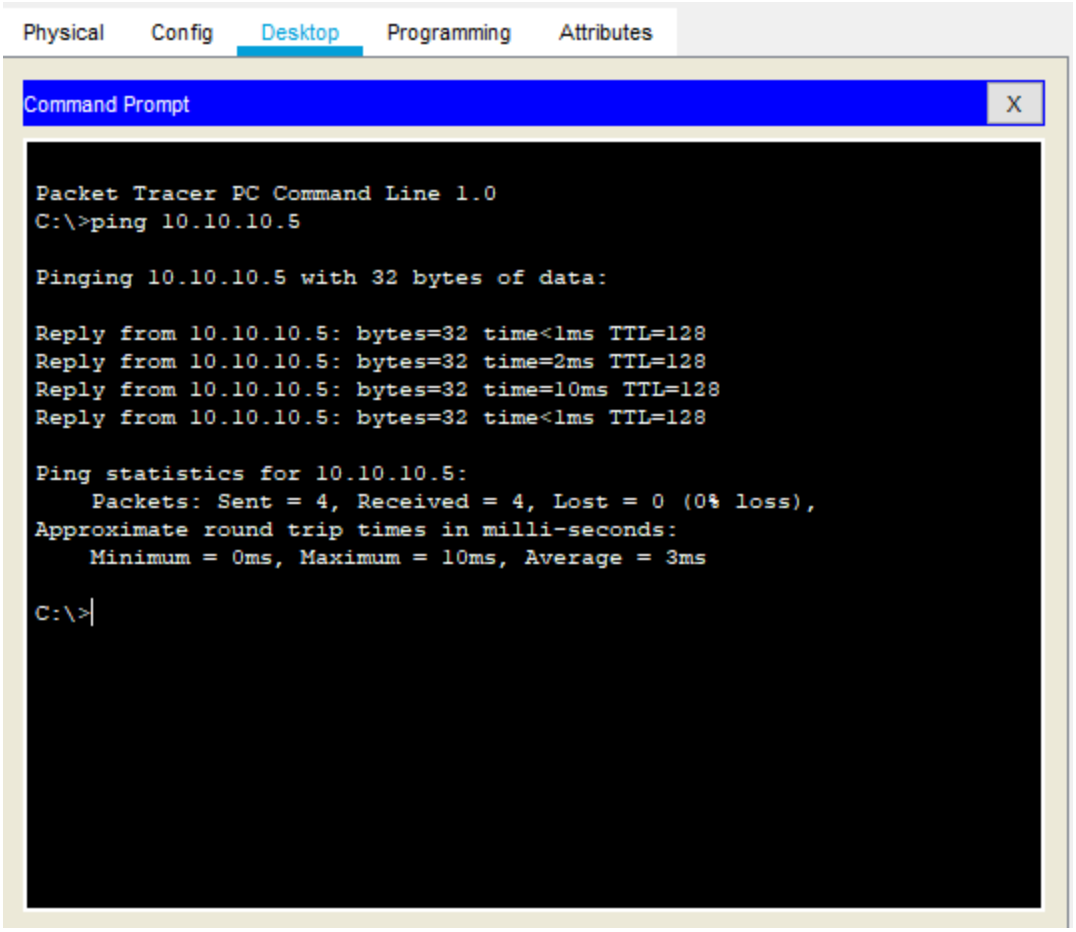
Name – Amit Kumar Sahu

Reg. No.- 18mis7250

Bridge

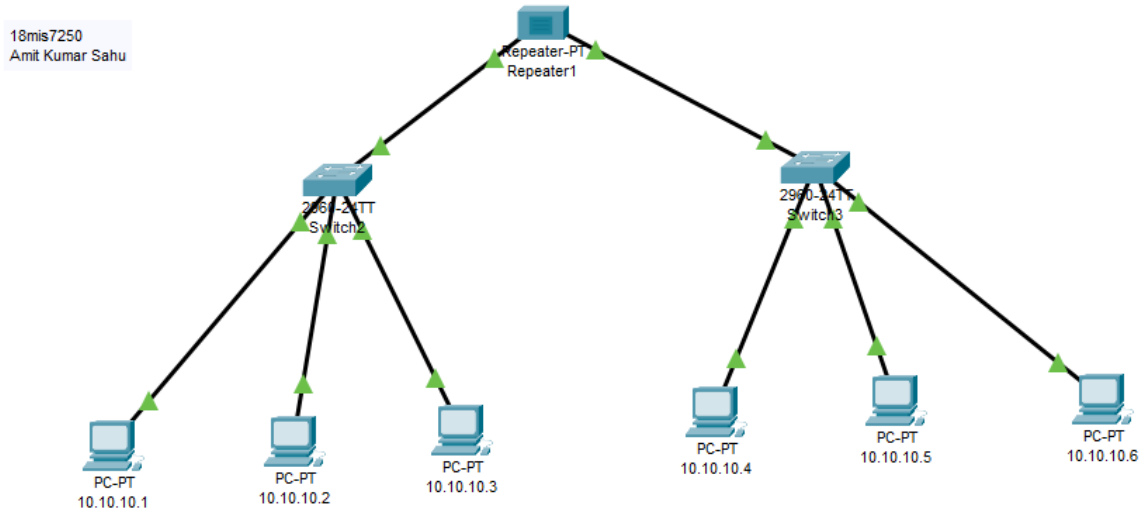
A bridge is a network device that connects multiple LANs (local area networks) together to form a larger LAN. The process of aggregating networks is called network bridging. A bridge connects the different components so that they appear as parts of a single network. Bridges operate at the data link layer of the OSI model and hence also referred as Layer 2 switches.

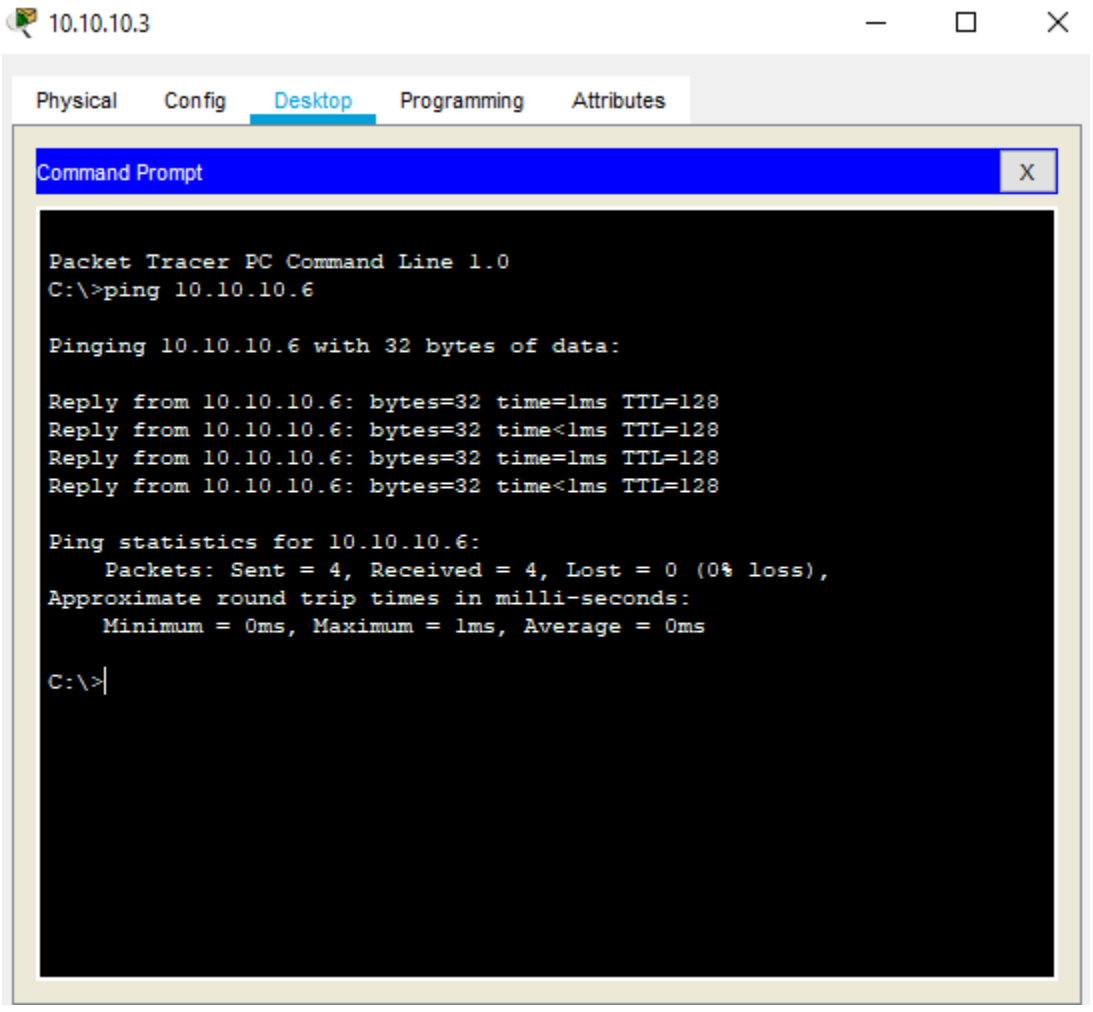




Repeater

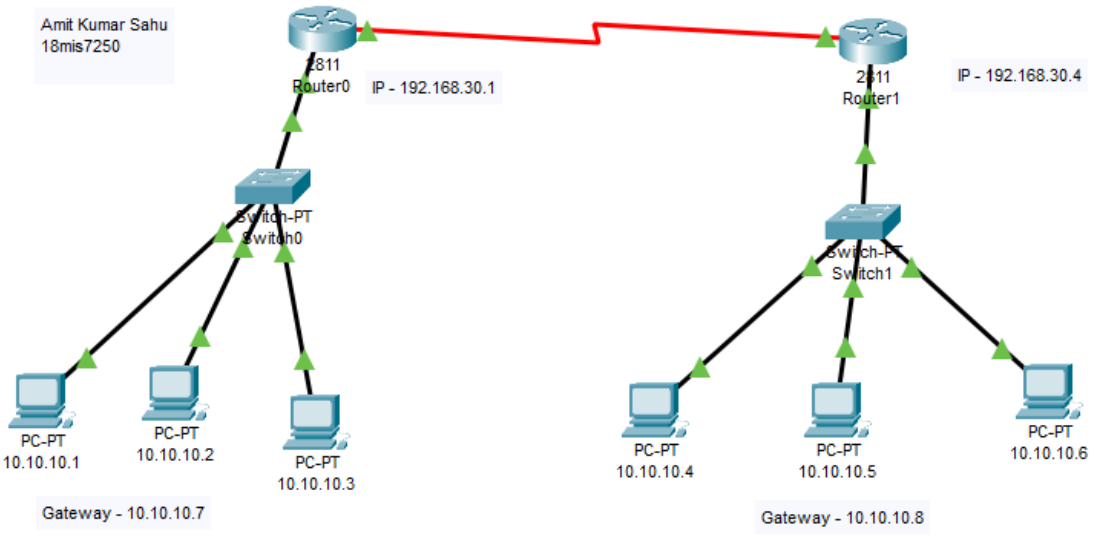
Repeaters are network devices operating at physical layer of the OSI model that amplify or regenerate an incoming signal before retransmitting it. They are incorporated in networks to expand its coverage area. They are also known as signal boosters.

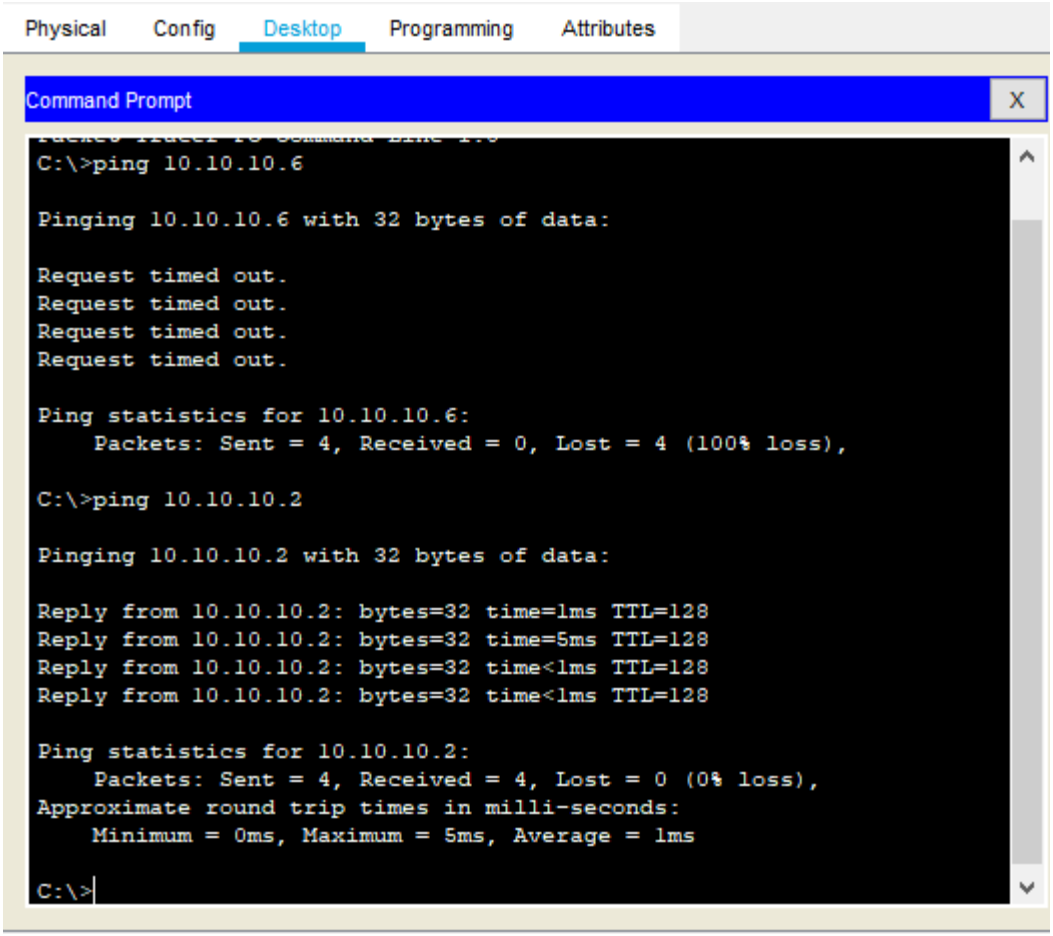

18mis7250
Amit Kumar Sahu
Repeater-PT
Repeater1
2960-24TT
Switch2
2960-24TT
Switch3
PC-PT
10.10.10.1
PC-PT
10.10.10.2
PC-PT
10.10.10.3
PC-PT
10.10.10.4
PC-PT
10.10.10.5
PC-PT
10.10.10.6


10.10.10.3
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.6
Pinging 10.10.10.6 with 32 bytes of data:
Reply from 10.10.10.6: bytes=32 time=1ms TTL=128
Reply from 10.10.10.6: bytes=32 time<1ms TTL=128
Reply from 10.10.10.6: bytes=32 time=1ms TTL=128
Reply from 10.10.10.6: bytes=32 time<1ms TTL=128
Ping statistics for 10.10.10.6:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>

Router

A router is connected to two or more data lines from different IP networks. When a data packet comes in on one of the lines, the router reads the network address information in the packet header to determine the ultimate destination. Then, using information in its routing table or routing policy, it directs the packet to the next network on its journey.




Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
C:\>ping 10.10.10.6
Pinging 10.10.10.6 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 10.10.10.6:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 10.10.10.2
Pinging 10.10.10.2 with 32 bytes of data:
Reply from 10.10.10.2: bytes=32 time=1ms TTL=128
Reply from 10.10.10.2: bytes=32 time=5ms TTL=128
Reply from 10.10.10.2: bytes=32 time<1ms TTL=128
Reply from 10.10.10.2: bytes=32 time<1ms TTL=128
Ping statistics for 10.10.10.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 5ms, Average = 1ms
C:\>