



Jashore University of Science & Technology
Computer Science & Engineering

Course Code: CSE-3202

A Documentation on

Design a VLAN with 3 switch and one Router

Submitted To	Submitted By
Monishanker Halder Assistant Professor Dept.Computer Science & Engineering Jashore University of Science & Technology	Md. Monirul Islam 3rd year,2nd semester Roll: 180126 Session: 2018-19 Dept.Computer Science & Engineering Jashore University of Science & Technology

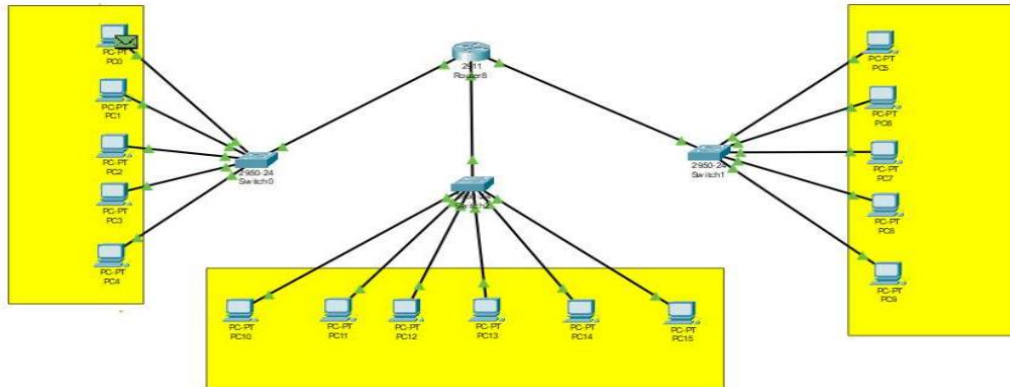
Submission Date: 17.09.2022

Experiment no: 2

Experiment name: Design a VLAN with 3 switch and one Route

Setup process:

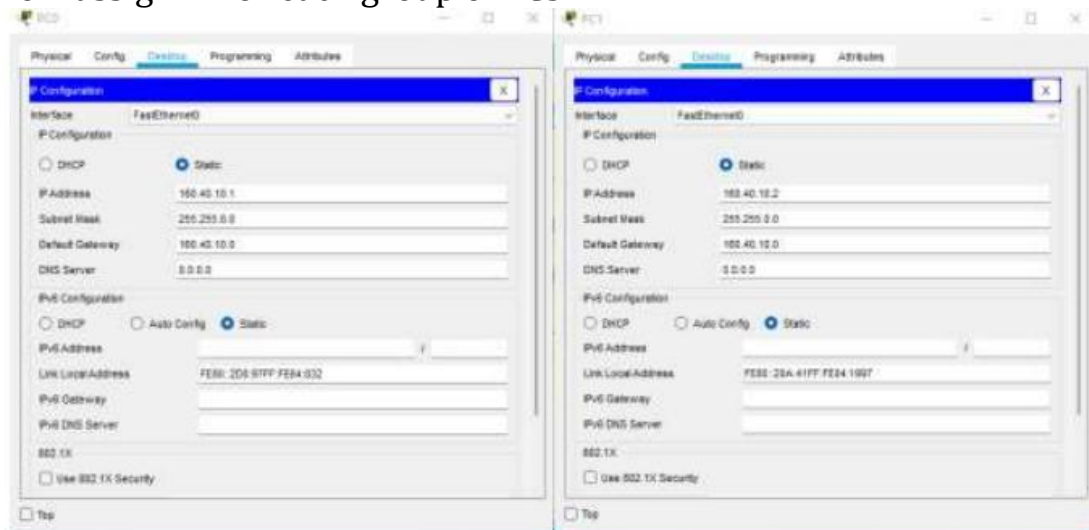
At first open packet tracer and make such diagram.

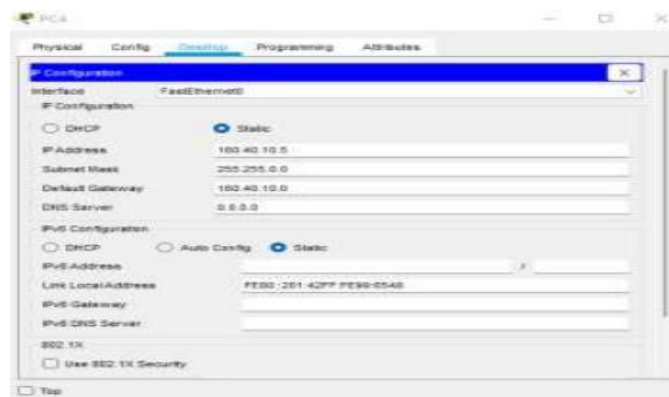
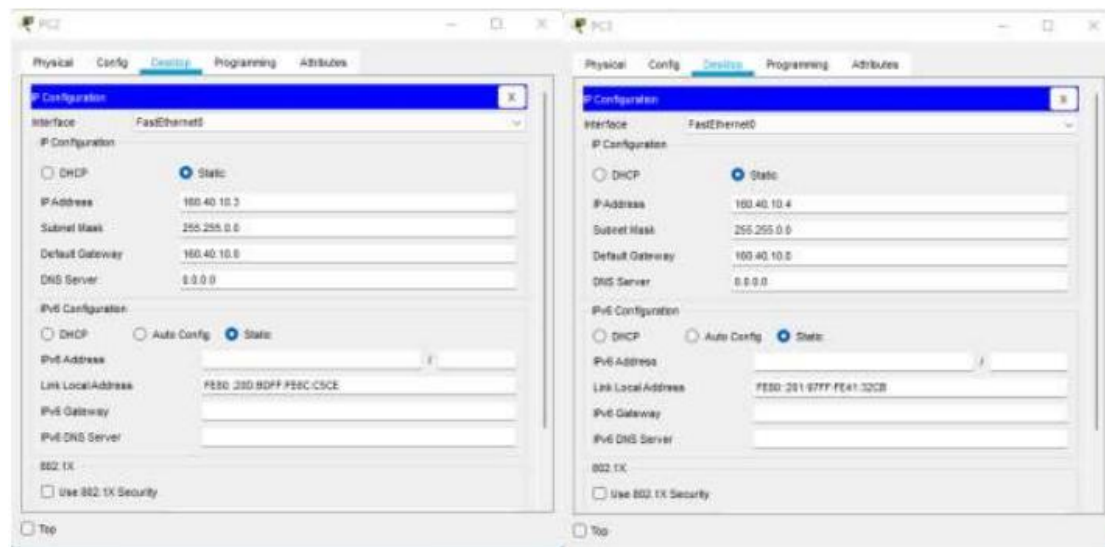


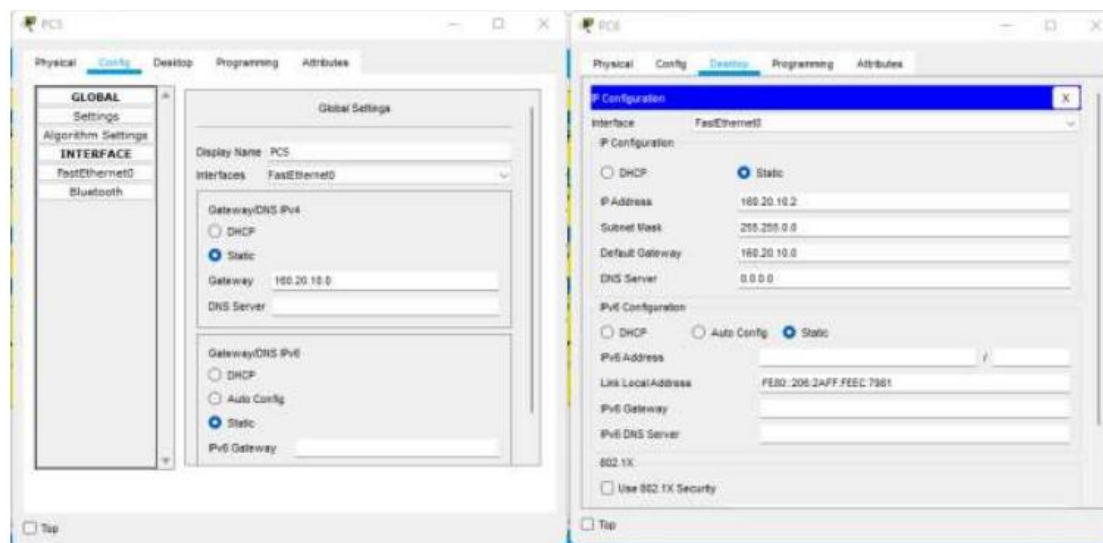
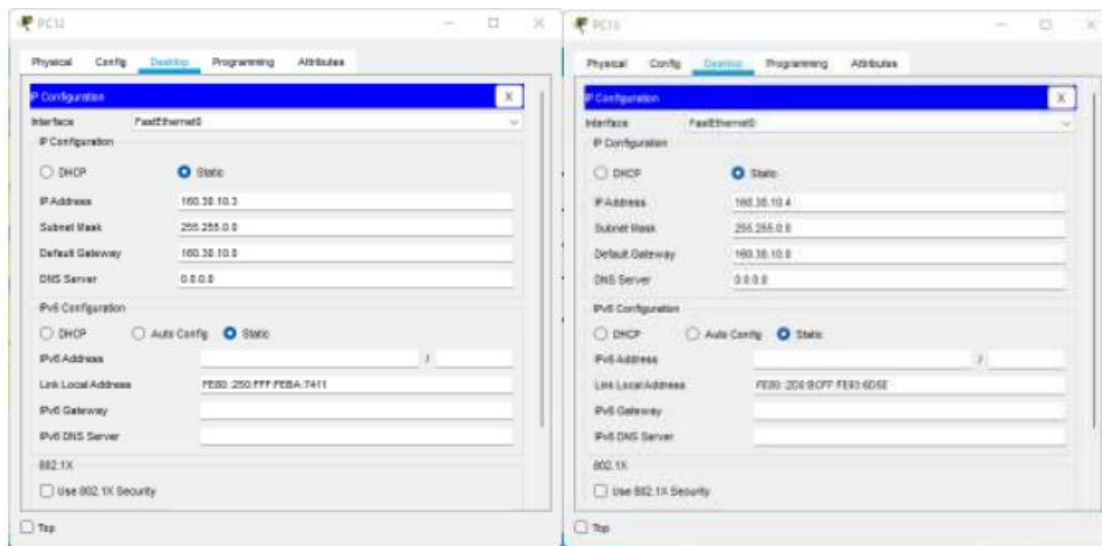
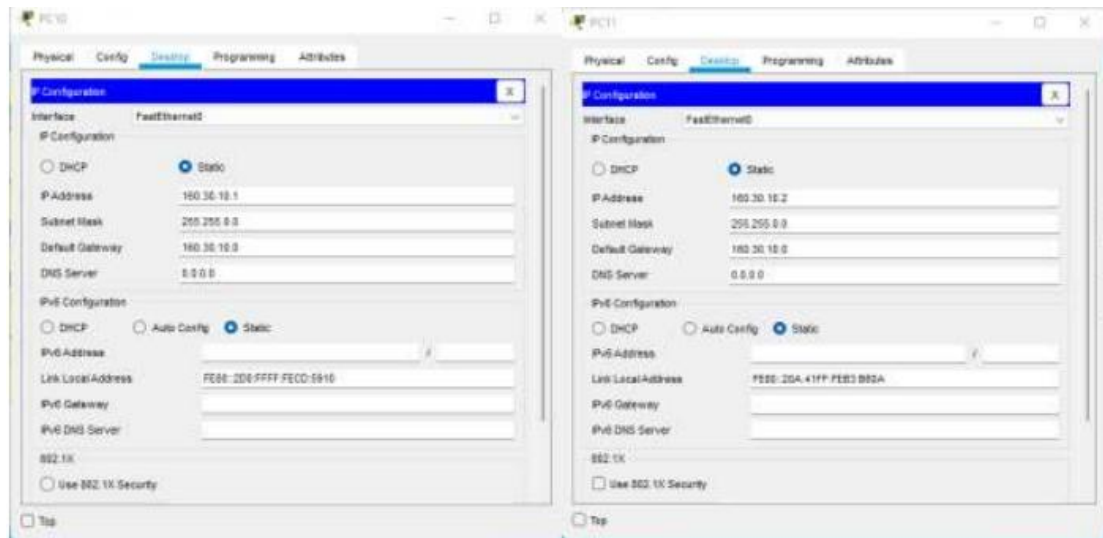
Here we use total 16 PCs (PC0 – PC15), 3 switches (2950-24), and one router (2911).

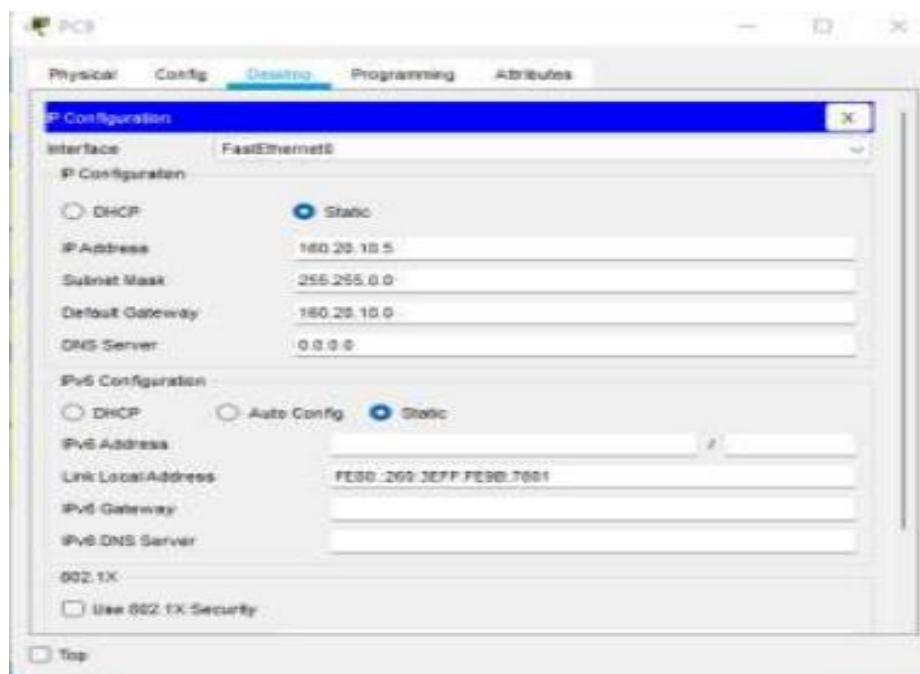
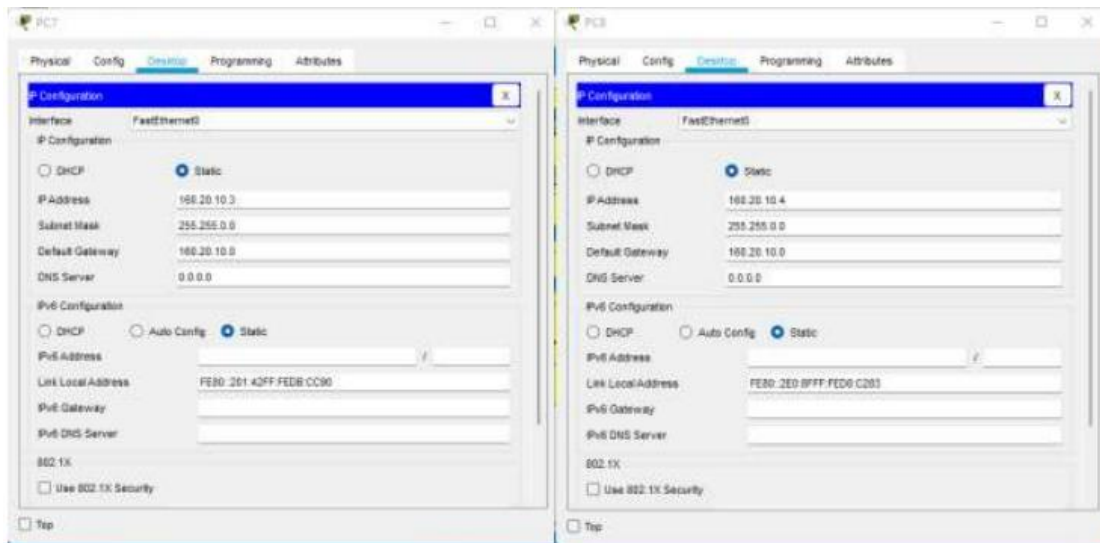
Now let's do sub netting of given IP address 160.40.10.1 we have 3 group and they have 5, 6 and 5 user.

Now assign IP for each group of PCs.









Now configure the router for this 3 groups.

Router>enable

Router#config

Router(config)#interface (port)

Router(config-if)#ip address (ip address)

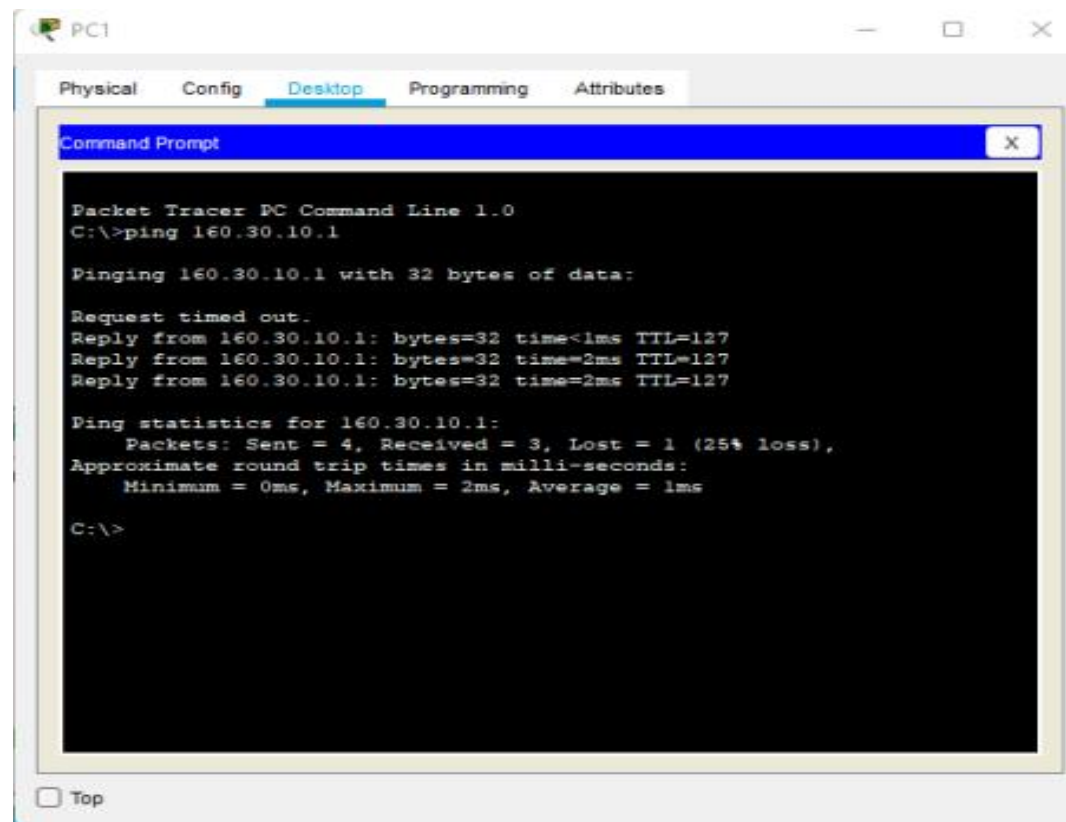
Router(config-if)#no shutdown

Router(config-if)#

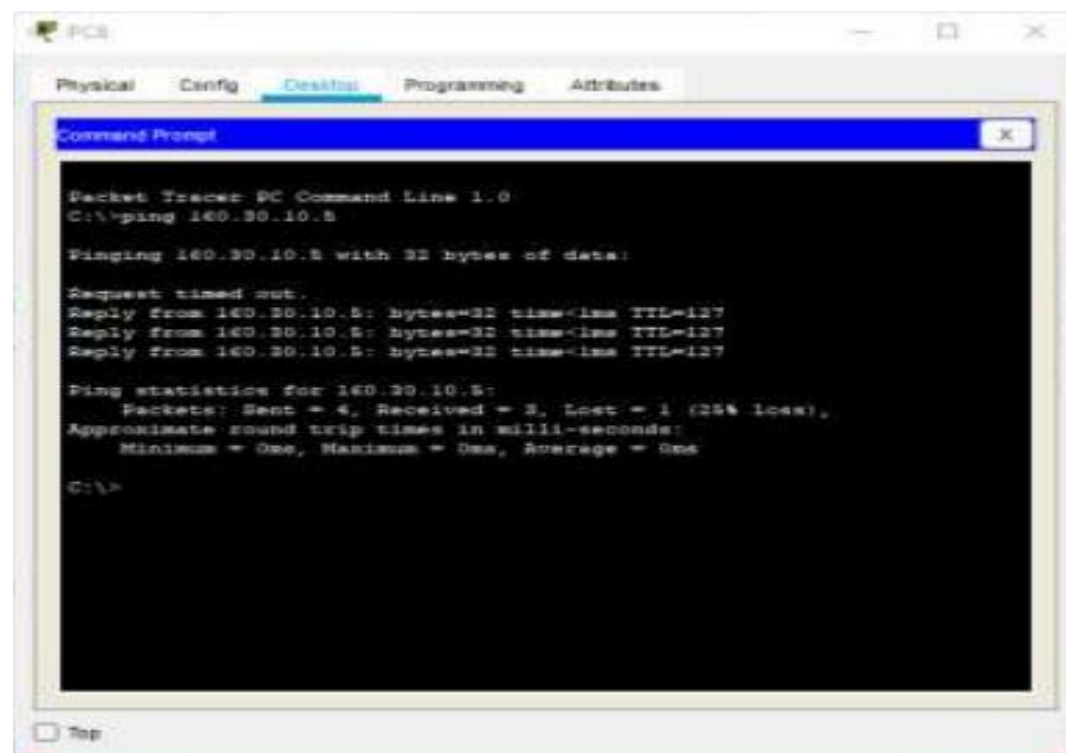
Thus the diagram should establish connection.

Lets ping between each group

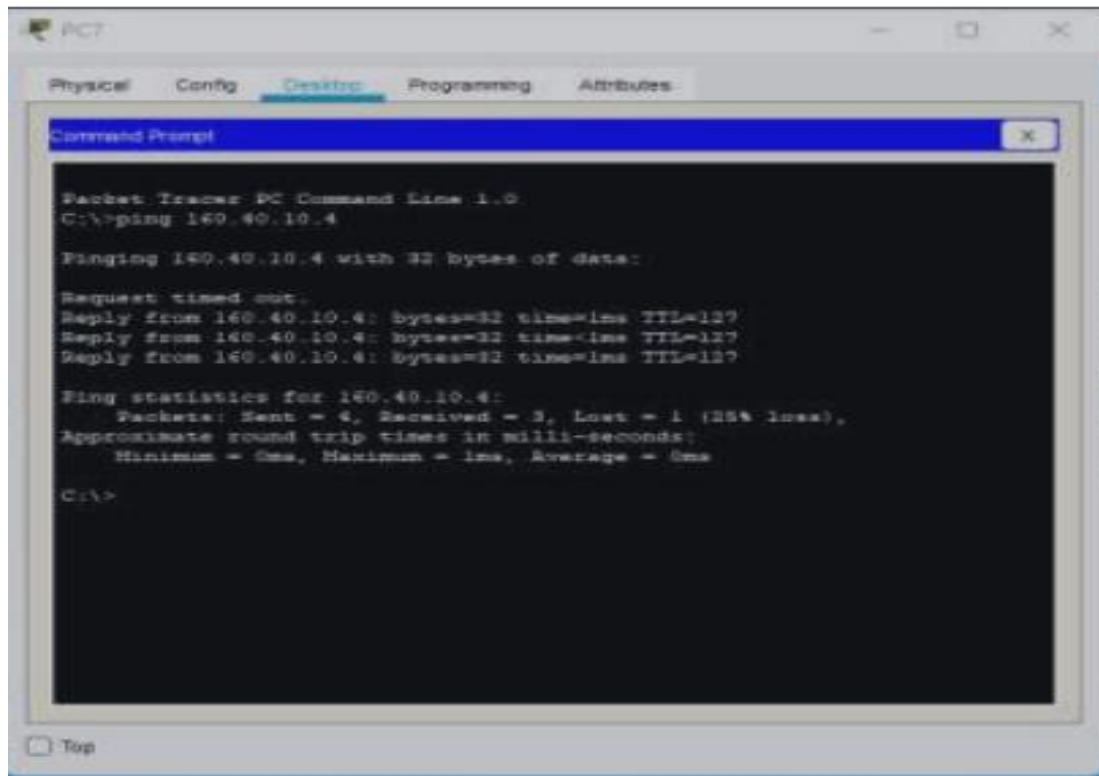
Ping PC1 with PC10



Ping PC6 with PC14



Ping PC7 with PC3



The screenshot shows a Packet Tracer PC Command Line window for PC7. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt. The Command Prompt shows the execution of the command 'ping 160.40.10.4'. The output indicates that the ping was successful, with 4 packets sent, 3 received, and 1 lost (25% loss). The approximate round trip times in milliseconds are: Minimum = 0ms, Maximum = 1ms, and Average = 0ms.

```
Packet Tracer PC Command Line 1.0
C:\>ping 160.40.10.4

Pinging 160.40.10.4 with 32 bytes of data:

Request timed out.
Reply from 160.40.10.4: bytes=32 time=1ms TTL=127
Reply from 160.40.10.4: bytes=32 time<1ms TTL=127
Reply from 160.40.10.4: bytes=32 time=1ms TTL=127

Ping statistics for 160.40.10.4:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```