

Name :

Abubaker Attique

Roll No :

P20-0560

Section :

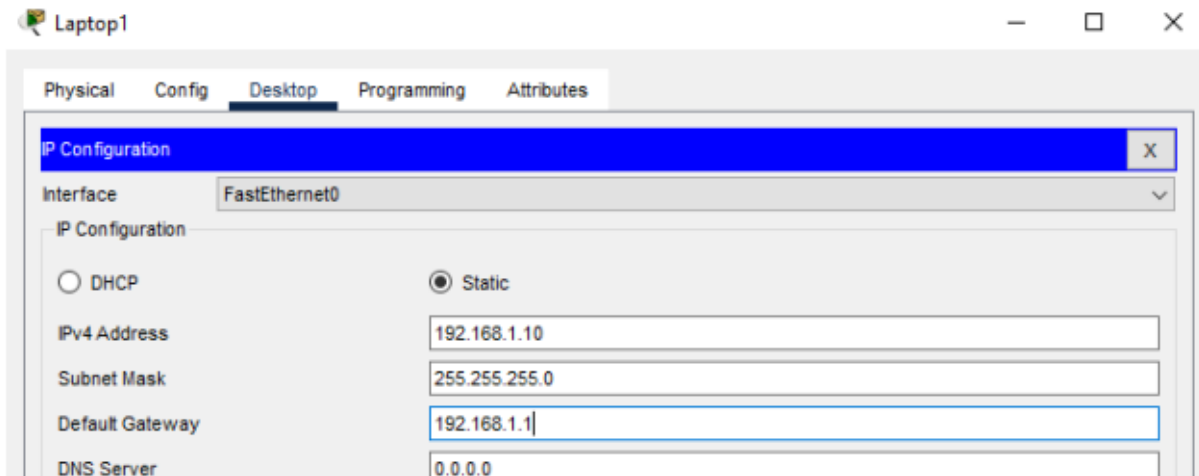
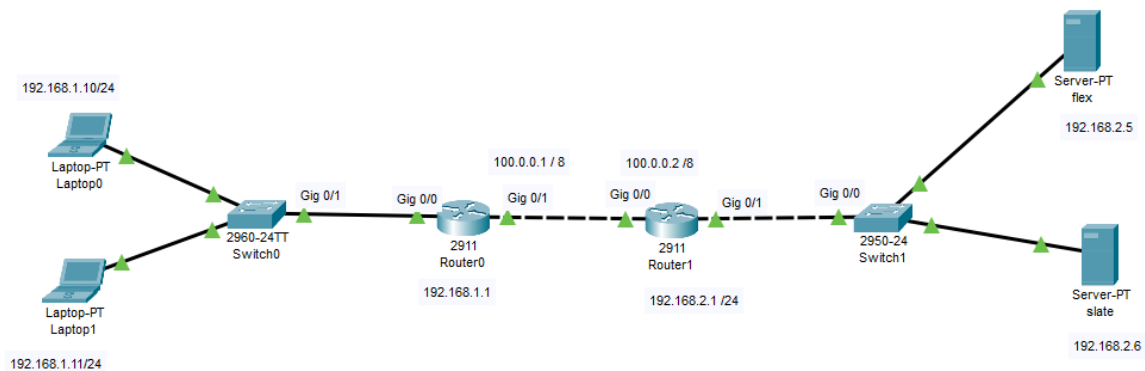
5-A

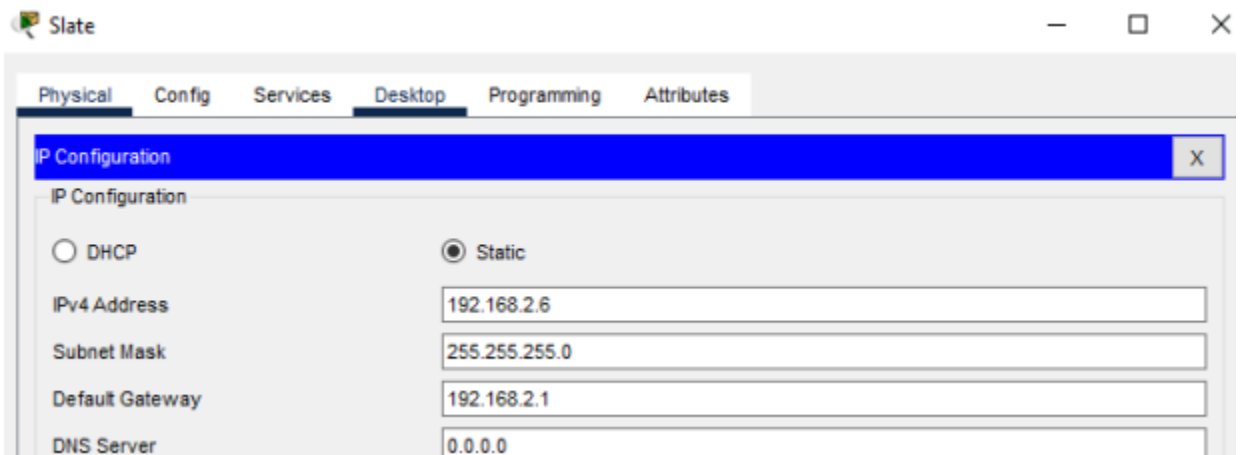
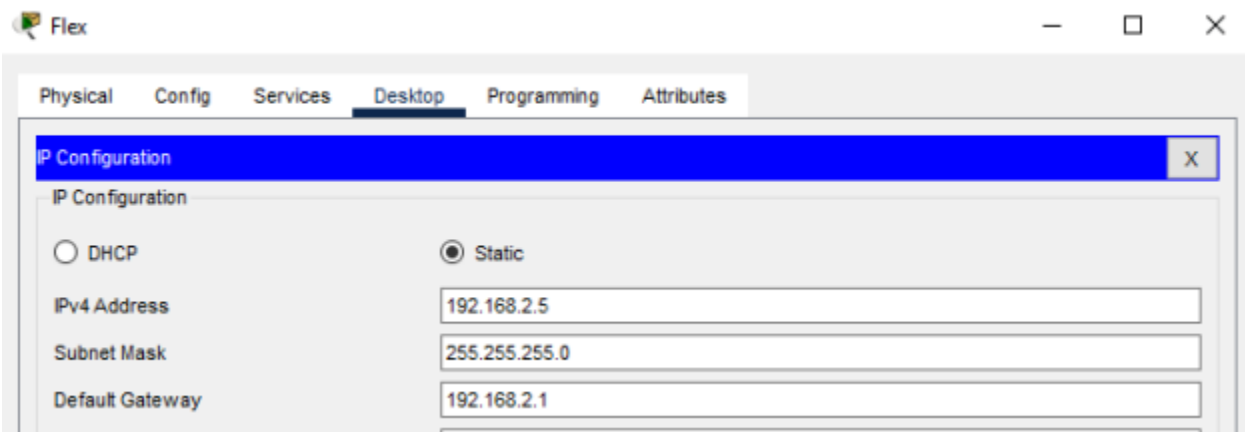
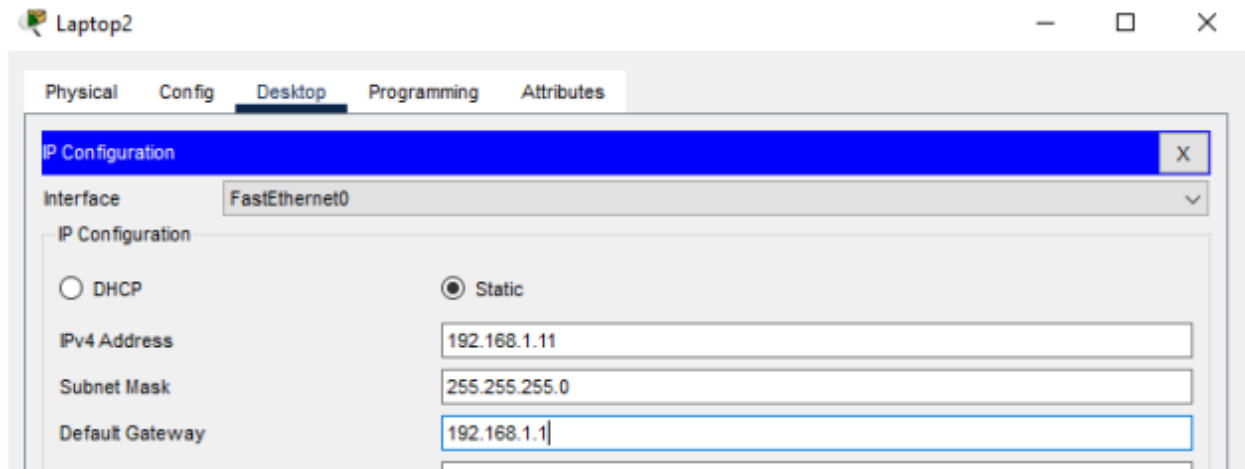
Lab 12

Task 1:

Implement the S-NAT for web servers of (flex and slate) in a single topology.

Solution :





Router Configuration :

Router0

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/0

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0007.ECC3.9501

IP Configuration

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

Router0

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0007.ECC3.9502

IP Configuration

IPv4 Address 100.0.0.1

Subnet Mask 255.0.0.0

Router1

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/0

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0030.A3C3.0701

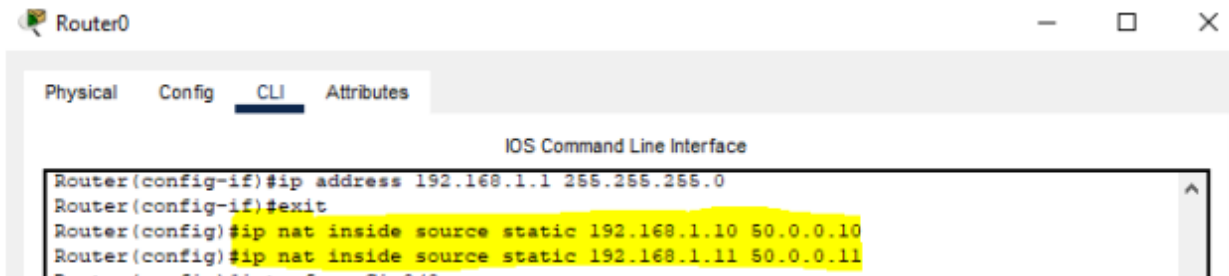
IP Configuration

IPv4 Address 192.168.2.1

Subnet Mask 255.255.255.0

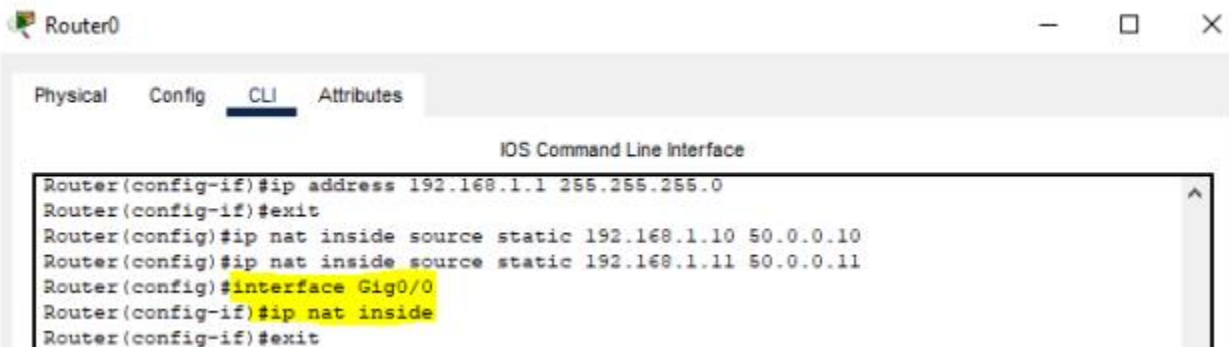
Configure Static NAT :

For Router0 :



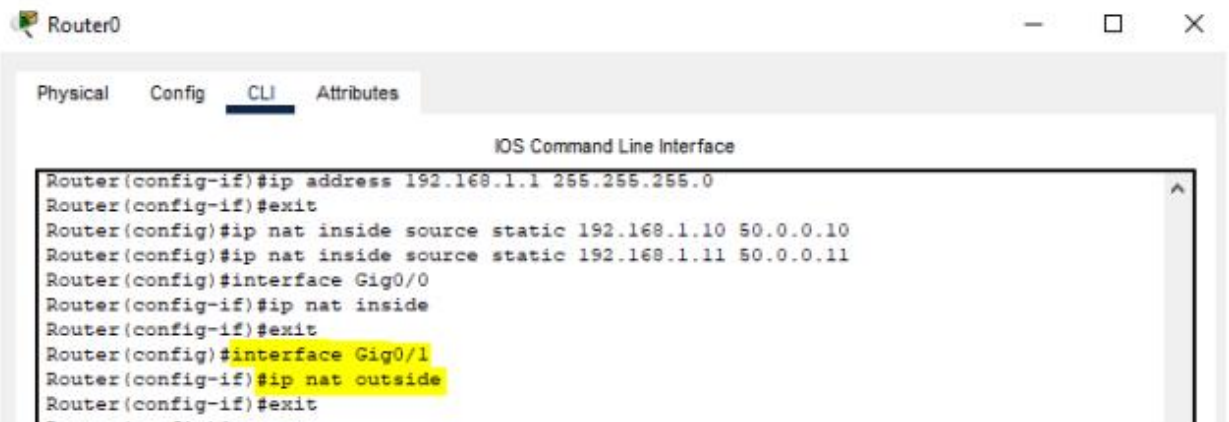
The screenshot shows the Router0 configuration window with the CLI tab selected. The command history in the terminal window is as follows:

```
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#exit
Router(config)#ip nat inside source static 192.168.1.10 50.0.0.10
Router(config)#ip nat inside source static 192.168.1.11 50.0.0.11
```



The screenshot shows the Router0 configuration window with the CLI tab selected. The command history in the terminal window is as follows:

```
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#exit
Router(config)#ip nat inside source static 192.168.1.10 50.0.0.10
Router(config)#ip nat inside source static 192.168.1.11 50.0.0.11
Router(config)#interface Gig0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
```

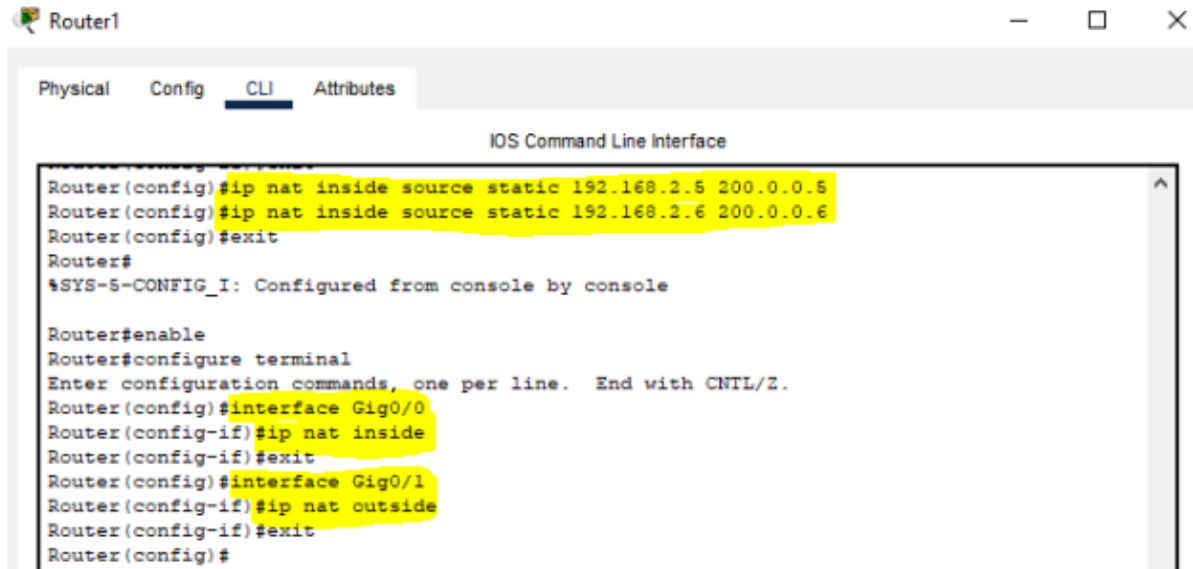


The screenshot shows the Router0 configuration window with the CLI tab selected. The command history in the terminal window is as follows:

```
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#exit
Router(config)#ip nat inside source static 192.168.1.10 50.0.0.10
Router(config)#ip nat inside source static 192.168.1.11 50.0.0.11
Router(config)#interface Gig0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#interface Gig0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
```

For Router1 :

Repeat the process

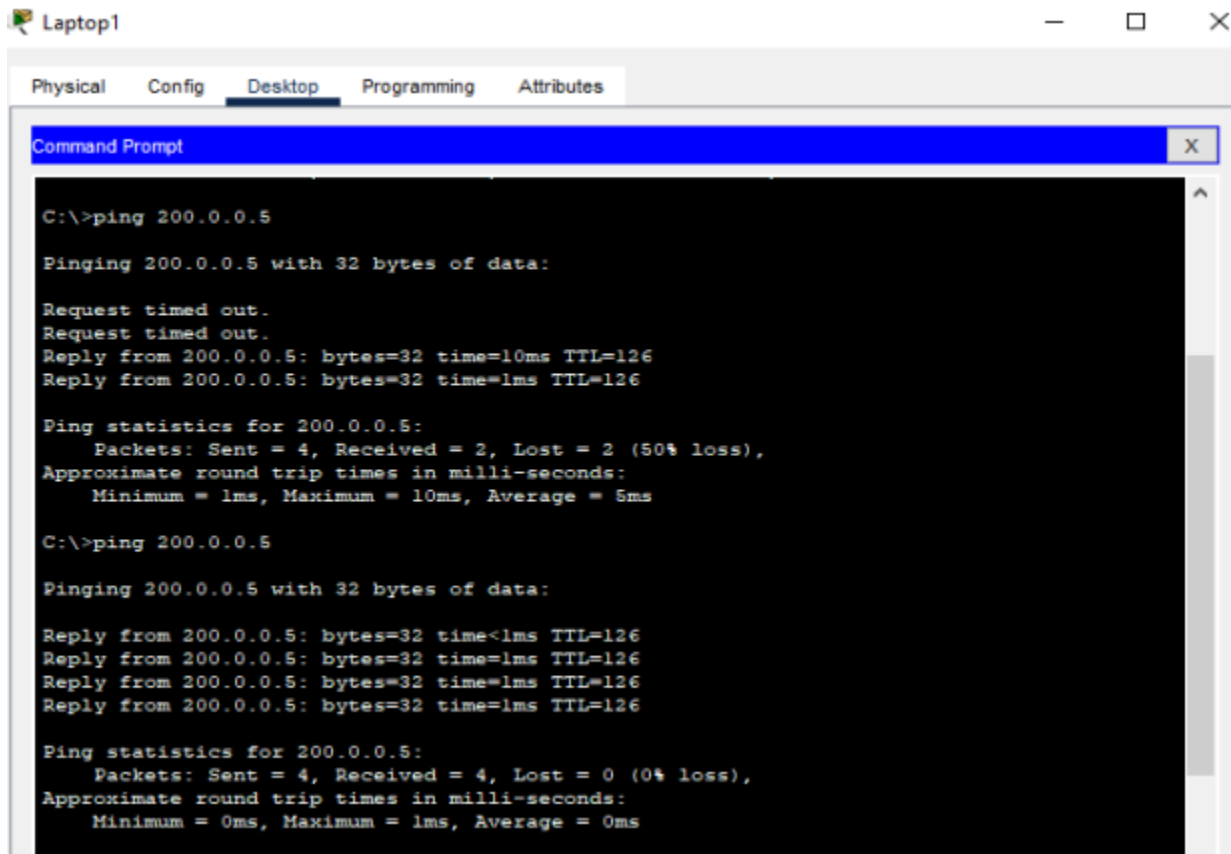


The image shows a window titled "Router1" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The following commands are entered and highlighted in yellow:

```
Router(config)#ip nat inside source static 192.168.2.5 200.0.0.5
Router(config)#ip nat inside source static 192.168.2.6 200.0.0.6
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTRL/Z.
Router(config)#interface Gig0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#interface Gig0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#
```

Testing Static NAT Configuration :



The image shows a window titled "Laptop1" with tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a "Command Prompt" window. The following commands and output are shown:

```
C:\>ping 200.0.0.5

Pinging 200.0.0.5 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 200.0.0.5: bytes=32 time=10ms TTL=126
Reply from 200.0.0.5: bytes=32 time=1ms TTL=126

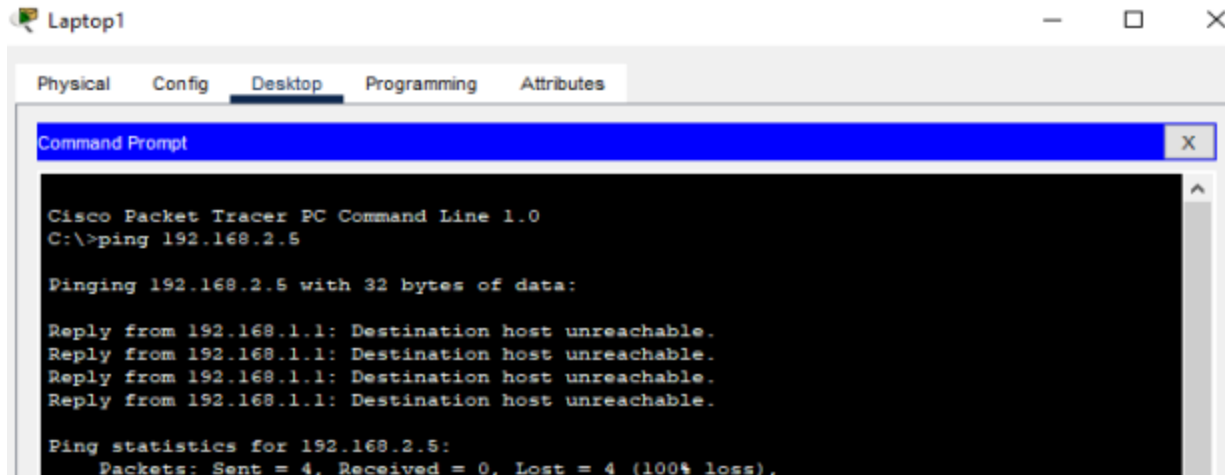
Ping statistics for 200.0.0.5:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 10ms, Average = 5ms

C:\>ping 200.0.0.5

Pinging 200.0.0.5 with 32 bytes of data:

Reply from 200.0.0.5: bytes=32 time<1ms TTL=126
Reply from 200.0.0.5: bytes=32 time=1ms TTL=126
Reply from 200.0.0.5: bytes=32 time=1ms TTL=126
Reply from 200.0.0.5: bytes=32 time=1ms TTL=126

Ping statistics for 200.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```



Creating File & putting it on Flex Server:

