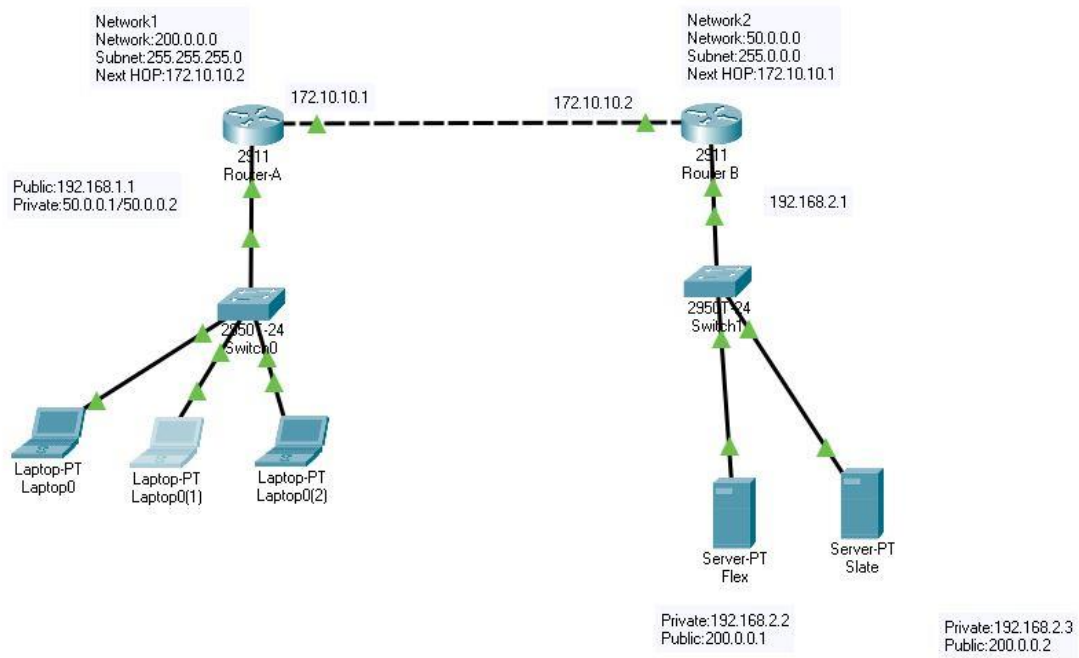

Name: Muhammad Abeer

Roll No: 19P-0061

Section:5-B

Network Diagram



R1 Config

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router-A
Router-A(config)#ex
Router-A#
%SYS-5-CONFIG_I: Configured from console by console

Router-A#enable
Router-A#conf ter
Enter configuration commands, one per line. End with CNTL/Z.
Router-A(config)#int
% Incomplete command.
Router-A(config)#interface GigabitEthernet0/0
Router-A(config-if)#ip address 172.10.10.1 255.255.0.0
Router-A(config-if)#ip address 172.10.10.1 255.255.255.0
Router-A(config-if)#no shutdown
Router-A(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

Router-A(config-if)#exit
Router-A(config)#interface GigabitEthernet0/1
Router-A(config-if)#ip address 192.168.1.1 255.255.255.0
Router-A(config-if)#ip address 192.168.1.1 255.255.255.0
Router-A(config-if)#no shutdown
Router-A(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
```

R2 Config

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router-B
Router-B(config)#
Router-B(config)#interface GigabitEthernet0/0
Router-B(config-if)#ip address 172.10.10.2 255.255.0.0
Router-B(config-if)#ip address 172.10.10.2 255.255.255.0
Router-B(config-if)#no shutdown
Router-B(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

Router-B(config-if)#exit
Router-B(config)#interface GigabitEthernet0/1
Router-B(config-if)#ip address 192.168.2.1 255.255.255.0
Router-B(config-if)#ip address 192.168.2.1 255.255.255.0
Router-B(config-if)#no shutdown
Router-B(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
```

Ctrl+F6 to exit CLI focus

Copy

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Server Ips

Flex

Physical Config Services **Desktop** Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 192.168.2.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.1

DNS Server: 192.168.2.1

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::205:5EFF:FE3C:7C1

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

Slate

Physical Config Services **Desktop** Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 192.168.2.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.1

DNS Server: 192.168.2.1

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::20B:BEFF:FEE9:5900

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

DHCP pool R1

```
Router-A(config-if)#
Router-A(config-if)#ex
Router-A(config)#ip dhcp pool A
Router-A(dhcp-config)#network 192.168.1.0 255.255.255.0
Router-A(dhcp-config)#192.168.1.1

% Invalid input detected at '^' marker.

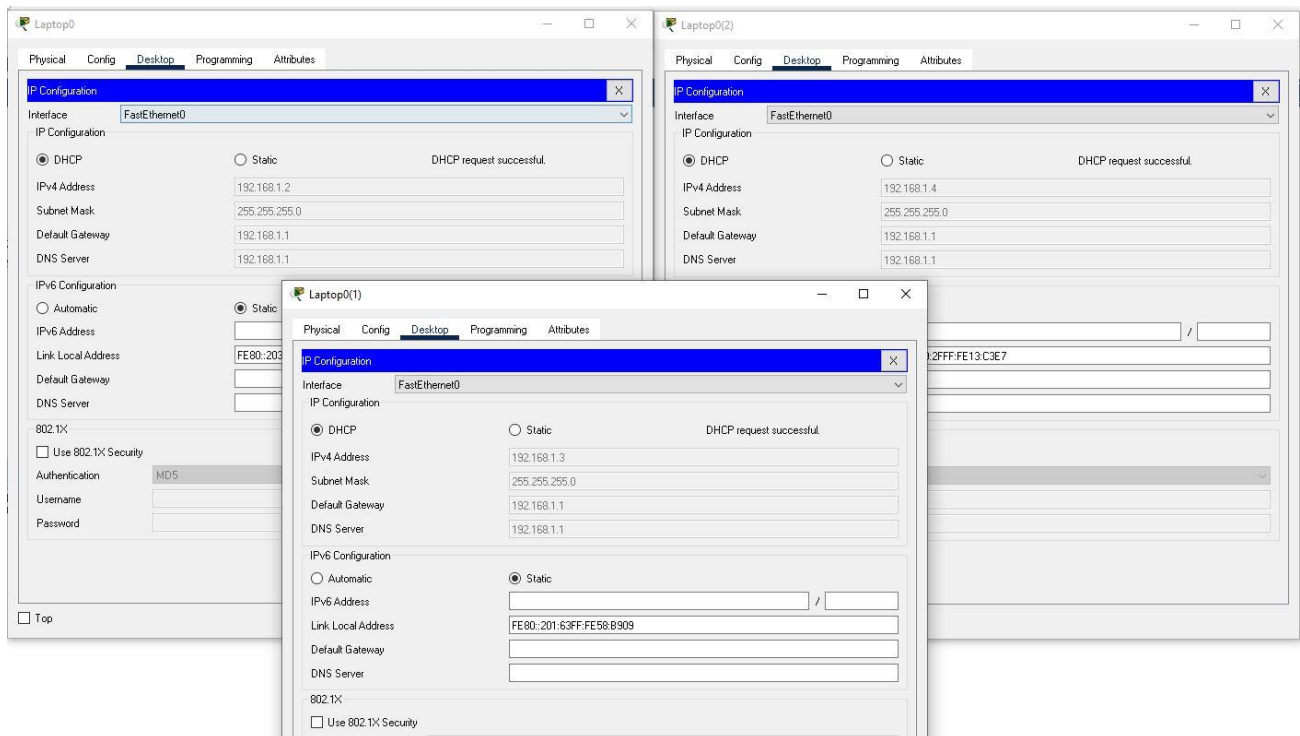
Router-A(dhcp-config)#dns-server 192.168.1.1
Router-A(dhcp-config)#default-router 192.168.1.1
Router-A(dhcp-config)#
```

Ctrl+F6 to exit CLI focus

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Laptop IPs



P-NAT Config R1

```
Router-A(config-if)#
Router-A(config-if)#ex
Router-A(config)#access-list 1 permit 192.168.1.0 0.0.0.255
Router-A(config)#ip nat pool ccna 50.0.0.1 50.0.0.2 netmask 255.0.0.0
Router-A(config)#ip nat inside source list 1 pool ccna overload
Router-A(config)#int f0/0
%Invalid interface type and number
Router-A(config)#int g0/0
Router-A(config-if)#ip nat outside
Router-A(config-if)#ex
Router-A(config)#int g0/1
Router-A(config-if)#ip nat inside
Router-A(config-if)#ex
Router-A(config)#
```

Ctrl+F6 to exit CLI focus

Copy

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S-NAT Config R2

```
Router-B(config-if)#exit
Router-B(config)#interface GigabitEthernet0/0
Router-B(config-if)#ex
Router-B(config)#ip nat inside source static 192.168.2.2 200.0.0.1
Router-B(config)#ip nat inside source static 192.168.2.3 200.0.0.2
Router-B(config)#int g0/0
Router-B(config-if)#ip nat outside
Router-B(config-if)#ex
Router-B(config)#int g0/1
Router-B(config-if)#ip nat inside
Router-B(config-if)#ex
Router-B(config)#
```

Ctrl+F6 to exit CLI focus

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Routing

R1

```
Router-A(config)#ip route 200.0.0.0 255.255.255.0 172.10.10.2
Router-A(config)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

R2

```
Router-B(config)#ip route 50.0.0.0 255.0.0.0 172.10.10.1
Router-B(config)#
```

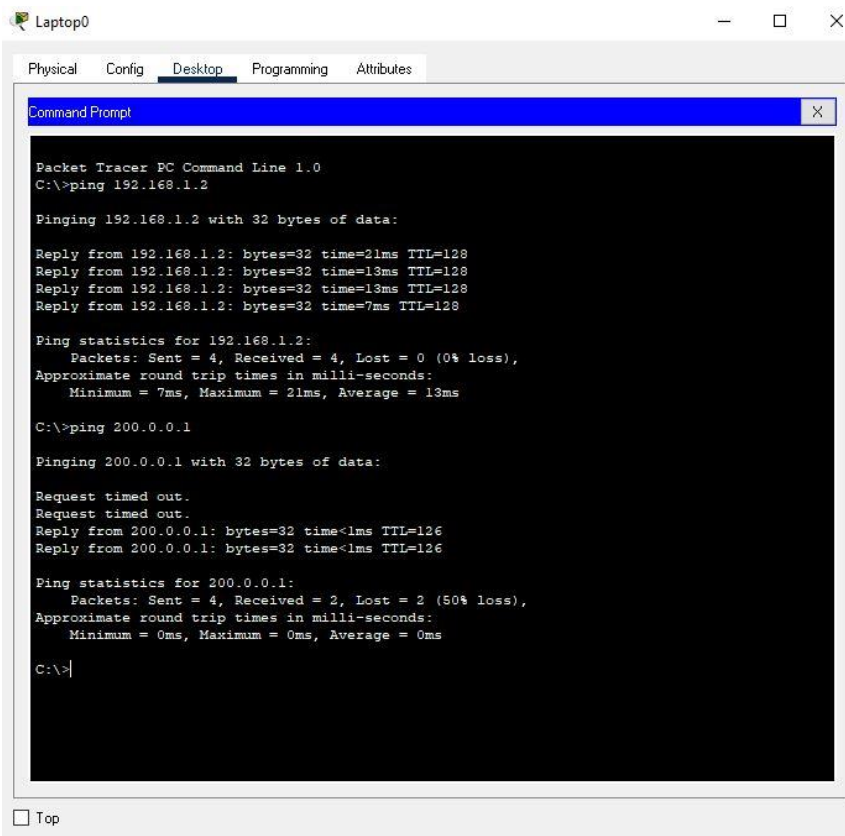
Ctrl+F6 to exit CLI focus

Copy

Paste

Pinging Flex and Slate

FLEX



The screenshot shows a Packet Tracer PC Command Line window for a device named 'Laptop0'. The window has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes', with 'Desktop' selected. The 'Command Prompt' window is open, displaying the output of two ping commands. The first command is 'C:\>ping 192.168.1.2', which shows successful results with 4 packets sent and received, 0% loss, and an average round trip time of 13ms. The second command is 'C:\>ping 200.0.0.1', which shows a 50% loss rate with 2 packets received out of 4 sent, and an average round trip time of 0ms. The window also includes a 'Top' button at the bottom left.

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=21ms TTL=128
Reply from 192.168.1.2: bytes=32 time=13ms TTL=128
Reply from 192.168.1.2: bytes=32 time=13ms TTL=128
Reply from 192.168.1.2: bytes=32 time=7ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 7ms, Maximum = 21ms, Average = 13ms

C:\>ping 200.0.0.1

Pinging 200.0.0.1 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 200.0.0.1: bytes=32 time<1ms TTL=126
Reply from 200.0.0.1: bytes=32 time<1ms TTL=126

Ping statistics for 200.0.0.1:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

SLATE

```
C:\>ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 200.0.0.2

Pinging 200.0.0.2 with 32 bytes of data:

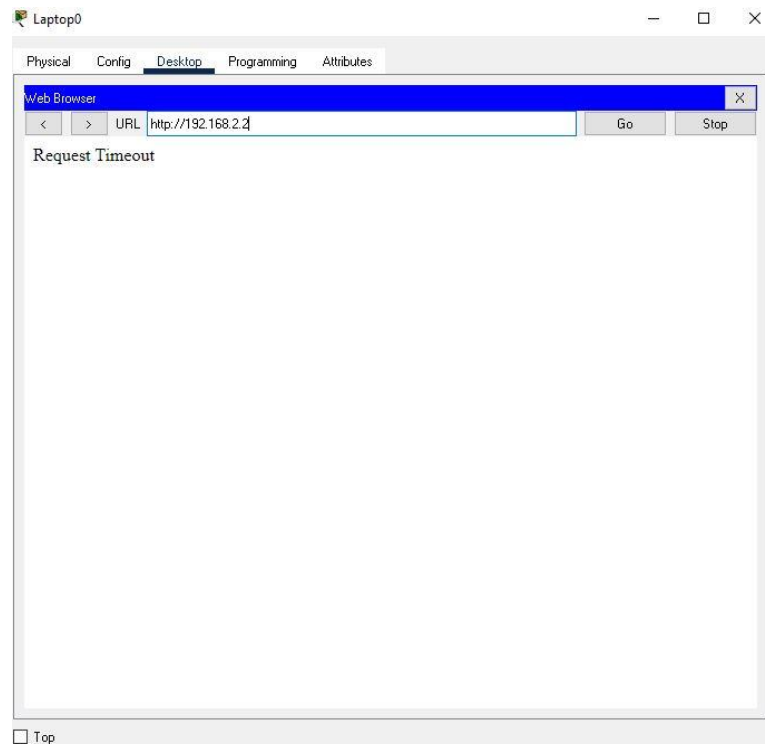
Request timed out.
Reply from 200.0.0.2: bytes=32 time=1ms TTL=126
Reply from 200.0.0.2: bytes=32 time<1ms TTL=126
Reply from 200.0.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 200.0.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

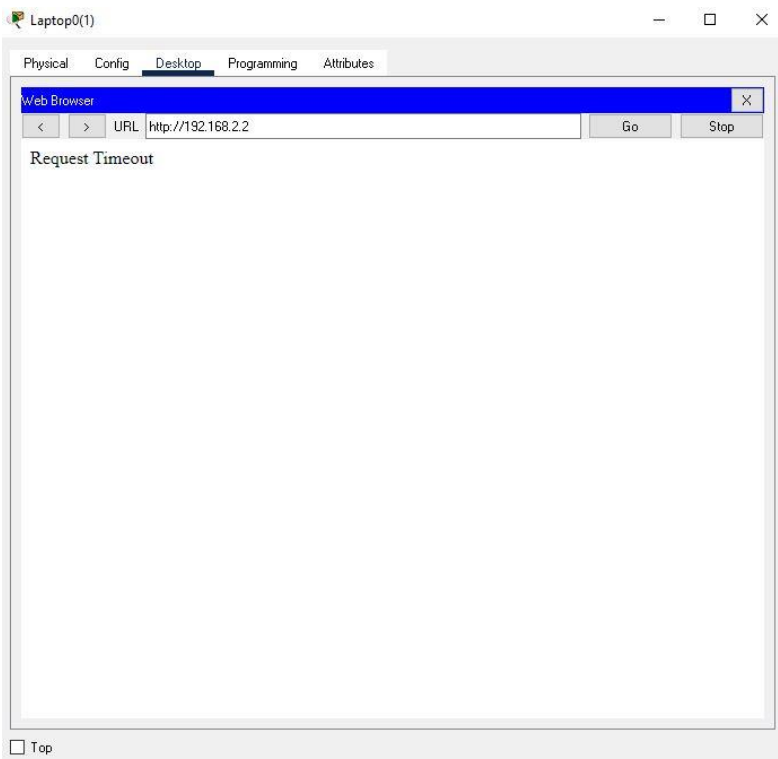
C:\>
```

Accessing Flex and Slate through their Private Ips

FLEX

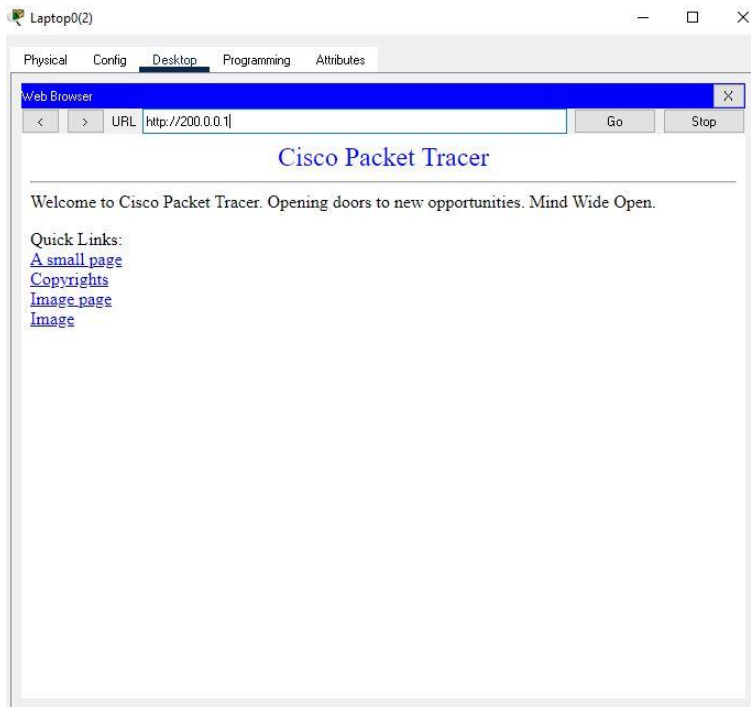


SLATE



Accessing FLEX and SLATE through their public Ips

FLEX



SLATE

