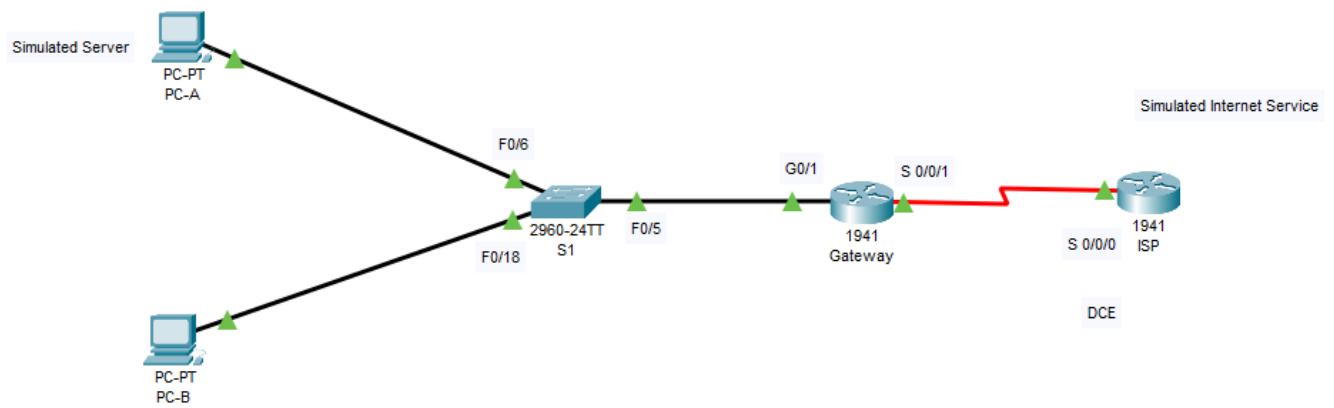# DCCN - ISE 2

Date: 17/10/2020

Abhir Singh 2018130008

Ebrahim Gabajiwala 2018130010

Tanay Bagayatkar 2019230065

Task 1: Build the Network and Verify Connectivity

PC-A

Physical Config **Desktop** Programming Attributes

IP Configuration   X

Interface   FastEthernet0   ∨

IP Configuration

○ DHCP   ● Static

IP Address   192.168.1.20

Subnet Mask   255.255.255.0

Default Gateway   192.168.1.1

DNS Server   0.0.0.0

IPv6 Configuration

○ DHCP   ○ Auto Config   ● Static

IPv6 Address   [   ] / [   ]

Link Local Address   FE80::2D0:BAFF:FE35:9437

IPv6 Gateway   [   ]

IPv6 DNS Server   [   ]

802.1X

☐ Use 802.1X Security

☐ Top

PC-B

Physical Config **Desktop** Programming Attributes

IP Configuration   X

Interface   FastEthernet0   ∨

IP Configuration

○ DHCP   ● Static

IP Address   192.168.1.21

Subnet Mask   255.255.255.0

Default Gateway   192.168.1.1

DNS Server   0.0.0.0

IPv6 Configuration

○ DHCP   ○ Auto Config   ● Static

IPv6 Address   [   ] / [   ]

Link Local Address   FE80::209:7CFF:FED7:4A7

IPv6 Gateway   [   ]

IPv6 DNS Server   [   ]

802.1X

☐ Use 802.1X Security

☐ Top

ISP — IOS Command Line Interface

```
Would you like to enter the initial configuration dialog? [yes/no]:
no


Press RETURN to get started!



Router>enable
Router#configure
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#no ip domain-lookup
Router(config)#service password-encryption
Router(config)#enable secret class
Router(config)#banner motd #
Enter TEXT message.  End with the character '#'.
Unauthorized access is strictly prohibited. #

Router(config)#line con 0
Router(config-line)#password cisco
Router(config-line)#login
Router(config-line)#logging synchronous
Router(config-line)#line vty 0 4
```
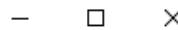
Ctrl+F6 to exit CLI focus

ISP — IOS Command Line Interface

```
Router(config)#line con 0
Router(config-line)#password cisco
Router(config-line)#login
Router(config-line)#logging synchronous
Router(config-line)#line vty 0 4
Router(config-line)#password cisco
Router(config-line)#login
Router(config-line)#
Router(config-line)#exit
Router(config)#hostname ISP
ISP(config)#interface serial 0/0/0
ISP(config-if)#ip address 209.165.201.17 255.255.255.252
ISP(config-if)#no shutdown

ISP(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

ISP(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed
state to up

ISP(config-if)#exit
ISP(config)#interface loopback 0
ISP(config-if)#
```
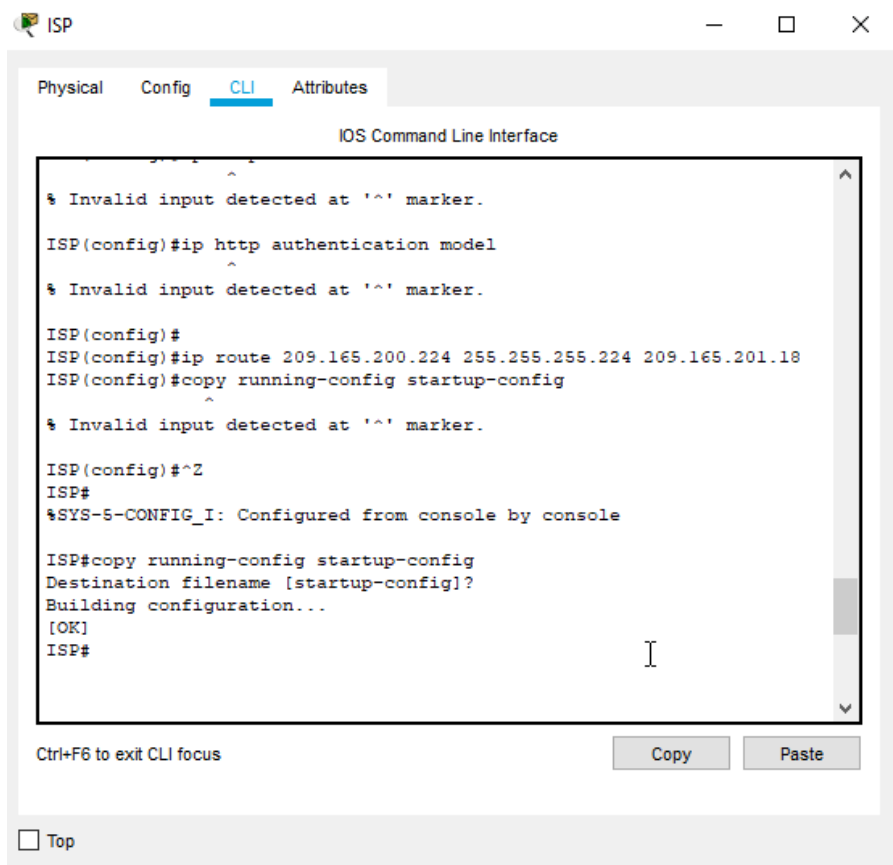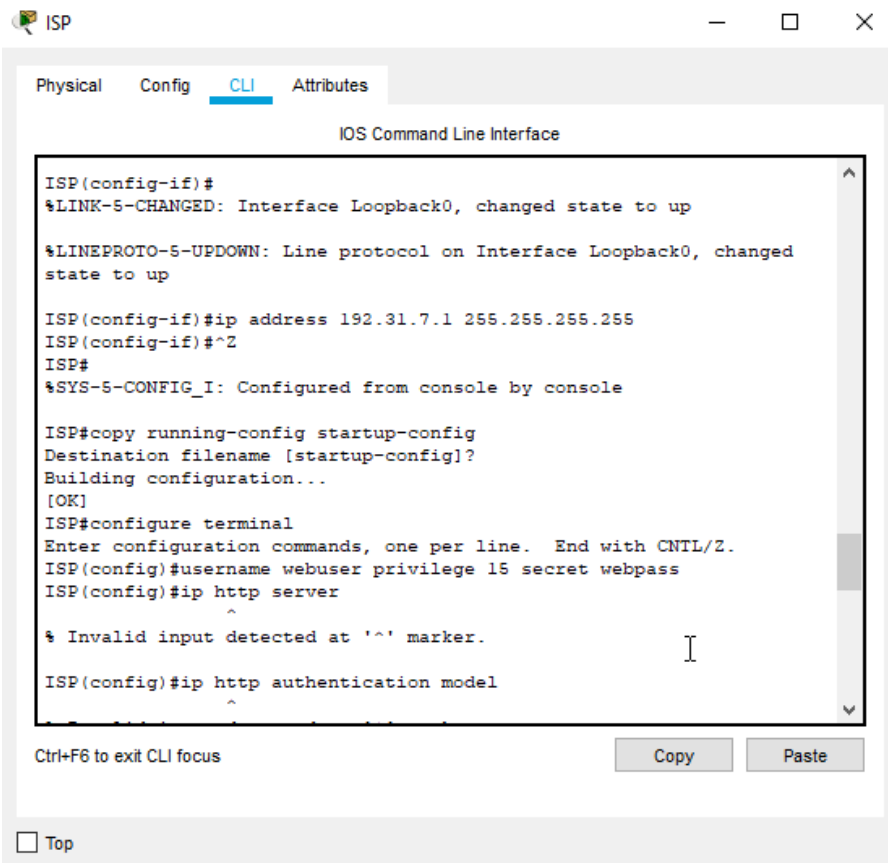
Ctrl+F6 to exit CLI focus

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
ISP(config-if)#
%LINK-5-CHANGED: Interface Loopback0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed
state to up

ISP(config-if)#ip address 192.31.7.1 255.255.255.255
ISP(config-if)#^Z
ISP#
%SYS-5-CONFIG_I: Configured from console by console

ISP#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ISP#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ISP(config)#username webuser privilege 15 secret webpass
ISP(config)#ip http server
                         ^
% Invalid input detected at '^' marker.

ISP(config)#ip http authentication model
                         ^
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

```
                         ^
% Invalid input detected at '^' marker.

ISP(config)#ip http authentication model
                         ^
% Invalid input detected at '^' marker.

ISP(config)#
ISP(config)#ip route 209.165.200.224 255.255.255.224 209.165.201.18
ISP(config)#copy running-config startup-config
                   ^
% Invalid input detected at '^' marker.

ISP(config)#^Z
ISP#
%SYS-5-CONFIG_I: Configured from console by console

ISP#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ISP#
```
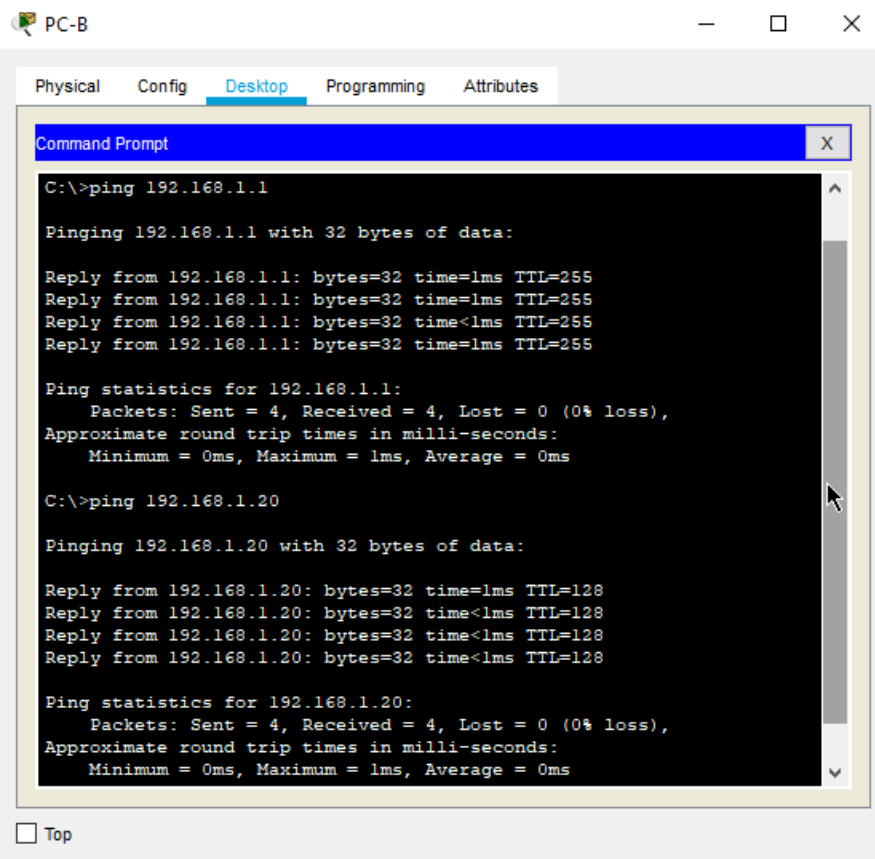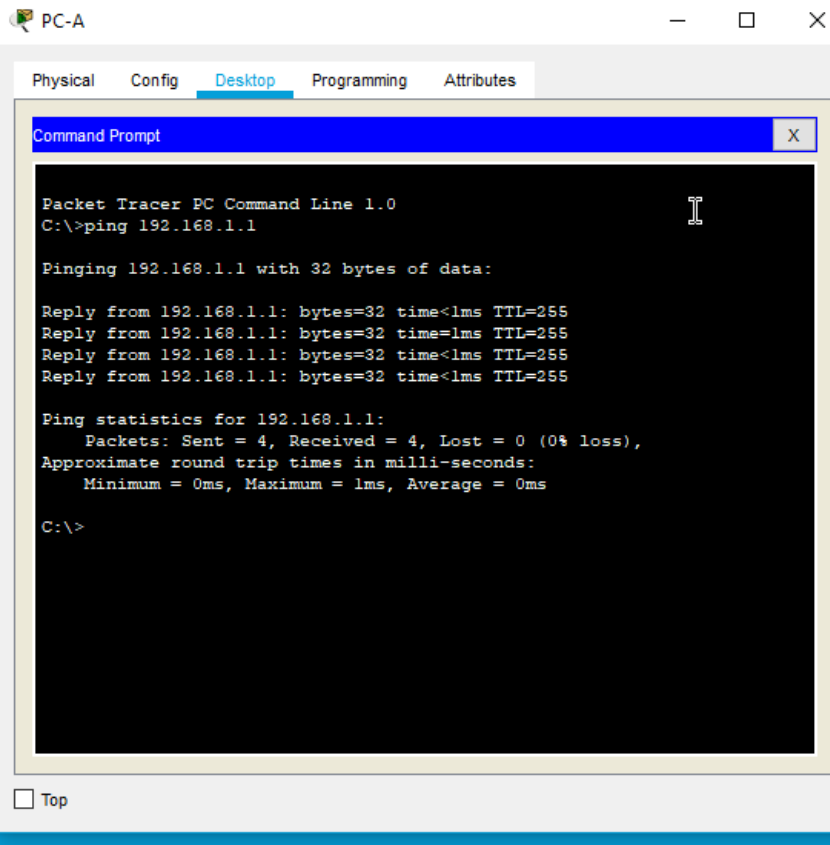
Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Gateway — □ ×

Physical   Config   CLI   Attributes

IOS Command Line Interface

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

Gateway(config-if)#exit
Gateway(config)#interface serial 0/0/1
Gateway(config-if)#ip address 209.165.201.18 255.255.255.252
Gateway(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to down
Gateway(config-if)#^Z
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed
state to up

Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Gateway — □ ×

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Gateway con0 is now available




Press RETURN to get started.








Unauthorized access is strictly prohibited.

User Access Verification
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Gateway

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Gateway>enable
Password:
Password:
Gateway#password
Translating "password"
% Unknown command or computer name, or unable to find computer
address

Gateway#ip route 0.0.0.0 0.0.0.0 209.165.201.17
                ^
% Invalid input detected at '^' marker.

Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#ip route 0.0.0.0 0.0.0.0 209.165.201.17
Gateway(config)#^Z
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

PC-A — □ ✕

Physical | Config | Desktop | Programming | Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

☐ Top

PC-B — □ ✕

Physical | Config | Desktop | Programming | Attributes

Command Prompt   X

```
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 192.168.1.20

Pinging 192.168.1.20 with 32 bytes of data:

Reply from 192.168.1.20: bytes=32 time=1ms TTL=128
Reply from 192.168.1.20: bytes=32 time<1ms TTL=128
Reply from 192.168.1.20: bytes=32 time<1ms TTL=128
Reply from 192.168.1.20: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

☐ Top

Gateway

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Password:
Password:
Password:
Gateway#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is 209.165.201.17 to network 0.0.0.0

     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, GigabitEthernet0/1
L       192.168.1.1/32 is directly connected, GigabitEthernet0/1
     209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       209.165.201.16/30 is directly connected, Serial0/0/1
L       209.165.201.18/32 is directly connected, Serial0/0/1
S*    0.0.0.0/0 [1/0] via 209.165.201.17

Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

ISP

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
ISP>enable
Password:
Password:
ISP#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     192.31.7.0/32 is subnetted, 1 subnets
C       192.31.7.1/32 is directly connected, Loopback0
     209.165.200.0/27 is subnetted, 1 subnets
S       209.165.200.224/27 [1/0] via 209.165.201.18
     209.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       209.165.201.16/30 is directly connected, Serial0/0/0
L       209.165.201.17/32 is directly connected, Serial0/0/0

ISP#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Task 2: Configure and Verify Static NAT


```
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#ip nat inside source static ?
  A.B.C.D  Inside local IP address
  tcp      Transmission Control Protocol
  udp      User Datagram Protocol
Gateway(config)#ip nat inside source static 192.168.1.20?
A.B.C.D
Gateway(config)#ip nat inside source static 192.168.1.20 ?
  A.B.C.D  Inside global IP address
Gateway(config)#ip nat inside source static 192.168.1.20
209.165.200.225
Gateway(config)#interface gigabitEthernet 0/1
Gateway(config-if)#ip nat inside
Gateway(config-if)#exit
Gateway(config)#interface serial 0/0/1
Gateway(config-if)#ip nat outside
Gateway(config-if)#^Z
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#show ip nat translations
```



```
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#show ip nat translations
Pro  Inside global     Inside local     Outside local
Outside global
---  209.165.200.225   192.168.1.20     ---              ---

Gateway#show ip nat translations
Pro  Inside global     Inside local     Outside local
Outside global
---  209.165.200.225   192.168.1.20     ---              ---
```

What is the translation of the Inside local host address?
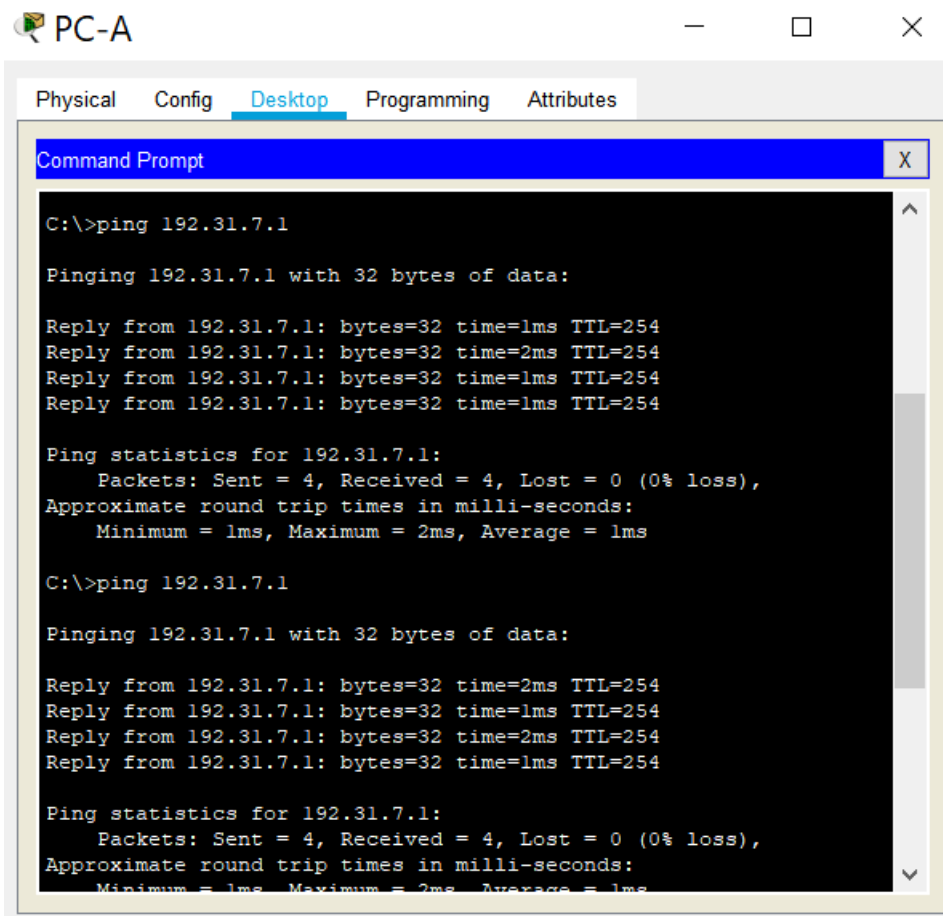
172.168.1.20 = 209.165.200.225

The Inside global address is assigned by?

ISP(Static) NAT Pool (Dynamic)

The Inside local address is assigned by?

System Administrator

What port number was used in this ICMP exchange?

4 port numbers were used for 4 ICMP exchanges for 4 pings.

They are 10 11 12 9

```
GATEWAY                                      —    □    ✕

  Physical   Config   CLI   Attributes

                    IOS Command Line Interface

 Outside global
 icmp 209.165.200.225:10192.168.1.20:10     192.31.7.1:10
 192.31.7.1:10
 icmp 209.165.200.225:11192.168.1.20:11     192.31.7.1:11
 192.31.7.1:11
 icmp 209.165.200.225:12192.168.1.20:12     192.31.7.1:12
 192.31.7.1:12
 icmp 209.165.200.225:9 192.168.1.20:9      192.31.7.1:9
 192.31.7.1:9
 ---   209.165.200.225    192.168.1.20      ---           ---

 Gateway#show ip nat translations
 Pro  Inside global     Inside local      Outside local
 Outside global
 ---   209.165.200.225   192.168.1.20      ---           ---
 tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23
 192.31.7.1:23
```

What was the protocol used in this translation?

 TCP

What are the port numbers used?

Inside global / local: 1025

Outside global / local: 23

ISP

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Unauthorized access is srtictly prohibited.

User Access Verification

Password:

ISP>enable
Password:
ISP#ping 209.165.200.225

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 209.165.200.225, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/7
ms

ISP#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Gateway#ip nat translations
              ^
% Invalid input detected at '^' marker.

Gateway#show ip nat translations
Pro  Inside global     Inside local       Outside local
Outside global
icmp 209.165.200.225:1 192.168.1.20:1     209.165.201.17:1
209.165.201.17:1
icmp 209.165.200.225:2 192.168.1.20:2     209.165.201.17:2
209.165.201.17:2
icmp 209.165.200.225:3 192.168.1.20:3     209.165.201.17:3
209.165.201.17:3
icmp 209.165.200.225:4 192.168.1.20:4     209.165.201.17:4
209.165.201.17:4
icmp 209.165.200.225:5 192.168.1.20:5     209.165.201.17:5
209.165.201.17:5
---  209.165.200.225   192.168.1.20       ---            ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23
192.31.7.1:23

Gateway#show ip nat statistics
Total translations: 2 (1 static, 1 dynamic, 1 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
209.165.201.17:3
icmp 209.165.200.225:4 192.168.1.20:4    209.165.201.17:4
209.165.201.17:4
icmp 209.165.200.225:5 192.168.1.20:5    209.165.201.17:5
209.165.201.17:5
--- 209.165.200.225   192.168.1.20        ---              ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23
192.31.7.1:23

Gateway#show ip nat statistics
Total translations: 2 (1 static, 1 dynamic, 1 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 78  Misses: 14
Expired translations: 13
Dynamic mappings:
Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

ISP

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Unauthorized access is strictly prohibited.

User Access Verification

Password:

ISP>enable
Password:
ISP#ping 209.165.200.225

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 209.165.200.225, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/10 ms

ISP#
```
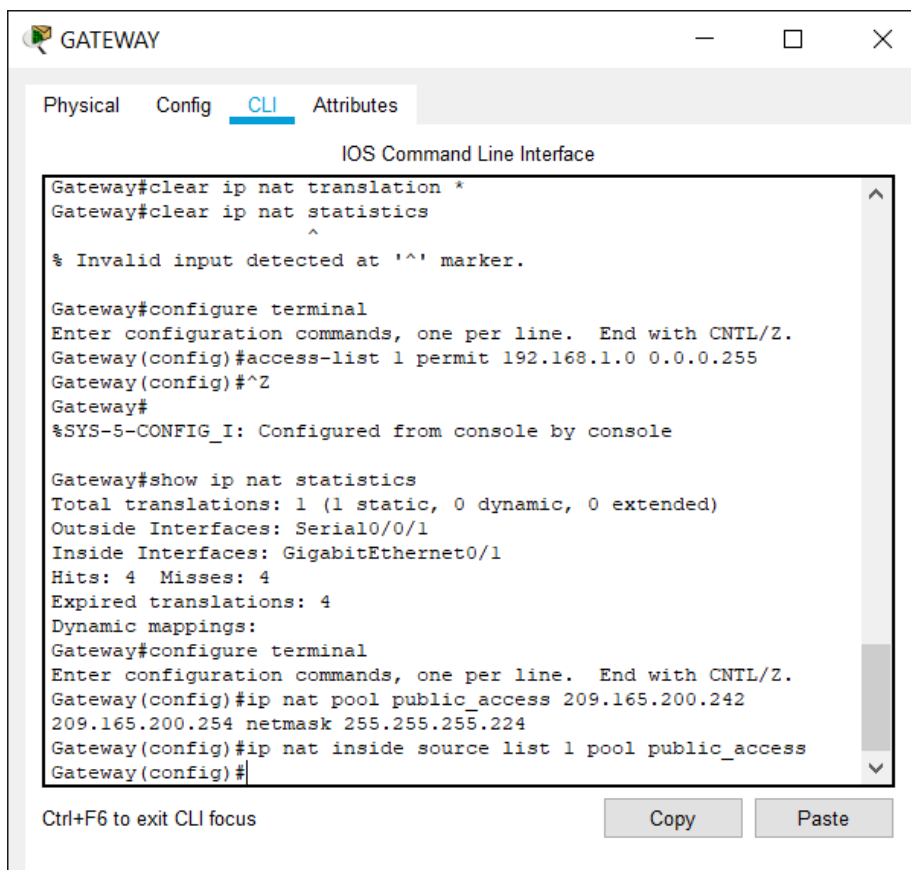
Ctrl+F6 to exit CLI focus   Copy   Paste
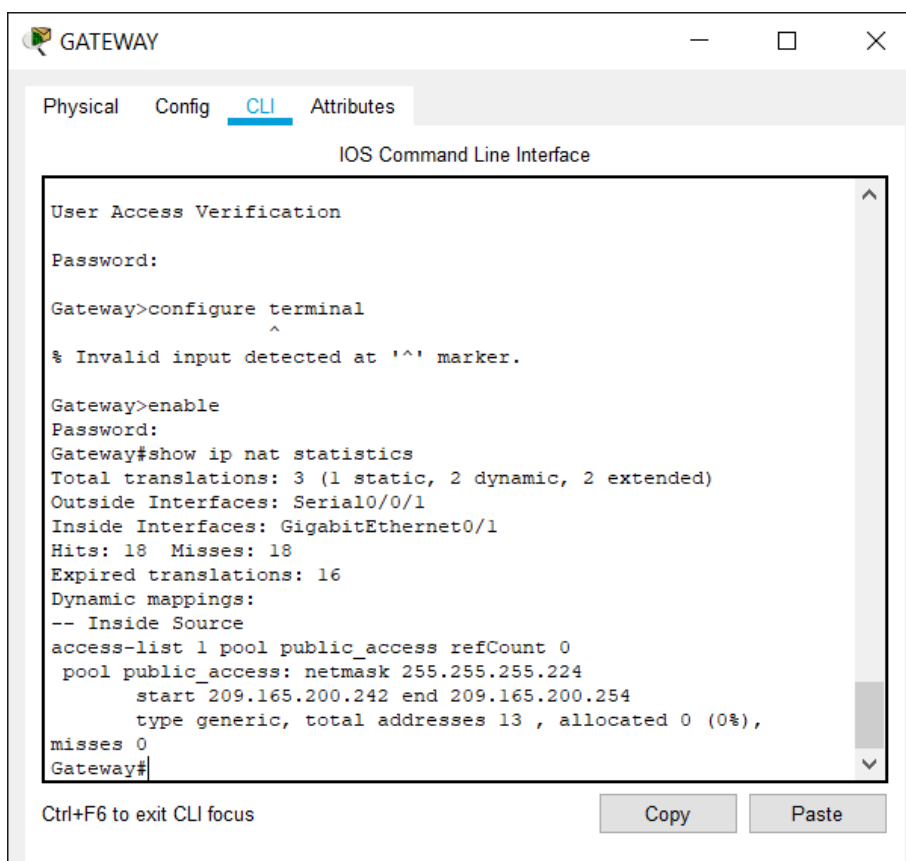
☐ Top

Task 3: Configure and Verify Dynamic NAT

```
GATEWAY                                    —    □    ✕

Physical   Config   CLI   Attributes
                    IOS Command Line Interface
Gateway#clear ip nat translation *
Gateway#clear ip nat statistics
                  ^
% Invalid input detected at '^' marker.

Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#access-list 1 permit 192.168.1.0 0.0.0.255
Gateway(config)#^Z
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#show ip nat statistics
Total translations: 1 (1 static, 0 dynamic, 0 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 4  Misses: 4
Expired translations: 4
Dynamic mappings:
Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#ip nat pool public_access 209.165.200.242
209.165.200.254 netmask 255.255.255.224
Gateway(config)#ip nat inside source list 1 pool public_access
Gateway(config)#

Ctrl+F6 to exit CLI focus              Copy        Paste
```

```
GATEWAY                                    —    □    ✕

Physical   Config   CLI   Attributes
                    IOS Command Line Interface
User Access Verification

Password:

Gateway>configure terminal
               ^
% Invalid input detected at '^' marker.

Gateway>enable
Password:
Gateway#show ip nat statistics
Total translations: 3 (1 static, 2 dynamic, 2 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 18  Misses: 18
Expired translations: 16
Dynamic mappings:
-- Inside Source
access-list 1 pool public_access refCount 0
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 0 (0%),
misses 0
Gateway#

Ctrl+F6 to exit CLI focus              Copy        Paste
```

GATEWAY — □ ×

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
User Access Verification

Password:

Gateway>configure terminal
                ^
% Invalid input detected at '^' marker.

Gateway>enable
Password:
Gateway#show ip nat statistics
Total translations: 3 (1 static, 2 dynamic, 2 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 18  Misses: 18
Expired translations: 16
Dynamic mappings:
-- Inside Source
access-list 1 pool public_access refCount 0
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 0 (0%),
misses 0
Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

PC-B

Physical | Config | Desktop | Programming | Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

PC-A

Physical | Config | Desktop | Programming | Attributes

Command Prompt   X

```
Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=2ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=13ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 13ms, Average = 4ms

C:\>
```

PC-B

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=2ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
% Invalid input detected at '^' marker.

Gateway>enable
Password:
Password:
Password:
Gateway#show ip nat statistics
Total translations: 8 (0 static, 8 dynamic, 8 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 40  Misses: 40
Expired translations: 32
Dynamic mappings:
-- Inside Source
access-list 1 pool public_access refCount 8
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 2 (15%),
misses 0
Gateway#show ip nat translations
Pro  Inside global     Inside local       Outside local
Outside global
icmp 209.165.200.243:13192.168.1.20:13    192.31.7.1:13
192.31.7.1:13
icmp 209.165.200.243:14192.168.1.20:14    192.31.7.1:14
```
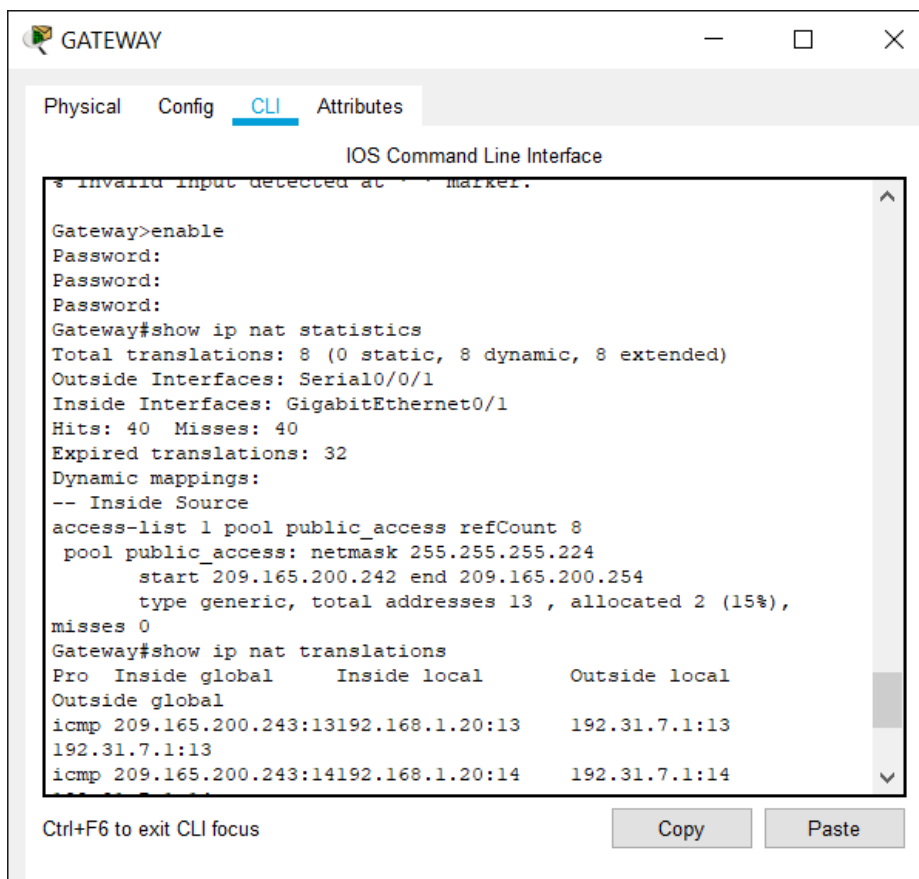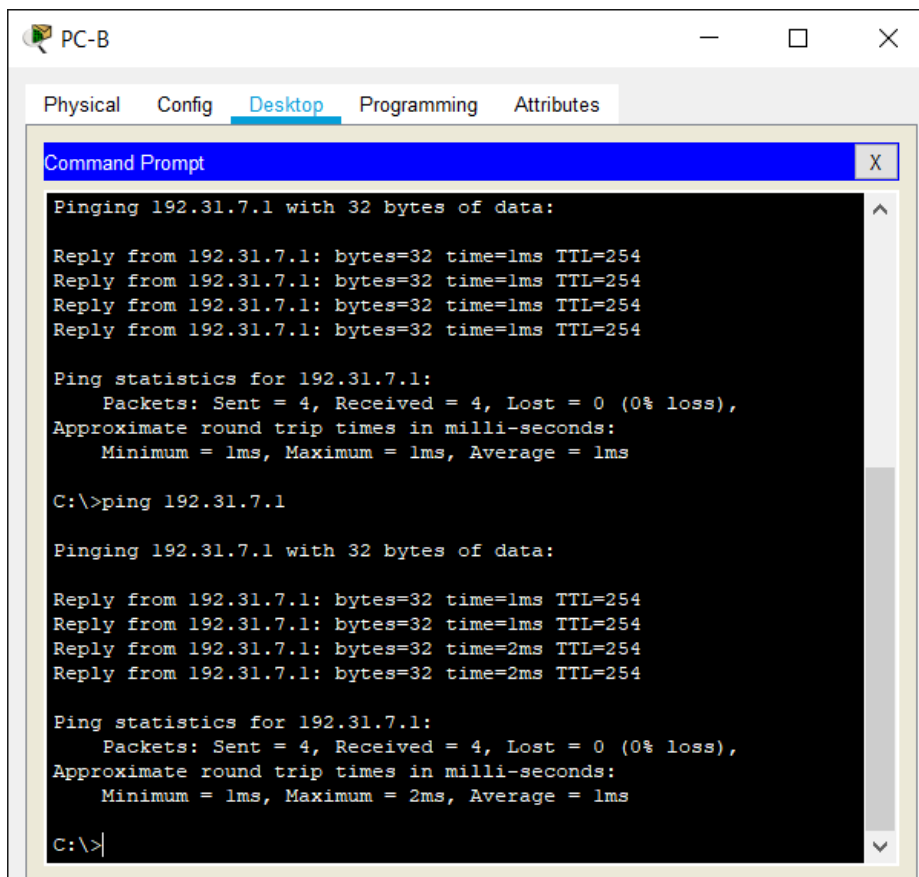
Ctrl+F6 to exit CLI focus   Copy   Paste

```
pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 2 (15%),
misses 0
Gateway#show ip nat translations
Pro  Inside global     Inside local        Outside local
Outside global
icmp 209.165.200.243:13192.168.1.20:13    192.31.7.1:13
192.31.7.1:13
icmp 209.165.200.243:14192.168.1.20:14    192.31.7.1:14
192.31.7.1:14
icmp 209.165.200.243:15192.168.1.20:15    192.31.7.1:15
192.31.7.1:15
icmp 209.165.200.243:16192.168.1.20:16    192.31.7.1:16
192.31.7.1:16
icmp 209.165.200.244:21192.168.1.21:21    192.31.7.1:21
192.31.7.1:21
icmp 209.165.200.244:22192.168.1.21:22    192.31.7.1:22
192.31.7.1:22
icmp 209.165.200.244:23192.168.1.21:23    192.31.7.1:23
192.31.7.1:23
icmp 209.165.200.244:24192.168.1.21:24    192.31.7.1:24
192.31.7.1:24

Gateway#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

What is the translation of the Inside local host address for PC-B?

192.168.1.21 = 209.165.200.243

What port number was used in this ICMP exchange?

4 port numbers were used for 4 ICMP exchanges for 4 pings.

They are 13, 14, 15, 16.

What protocol was used in this translation?

TCP

What port numbers were used?

Inside: 13,14,15,16

Outside: 13,14,15,16

What well-known port number and service was used?

TCP service