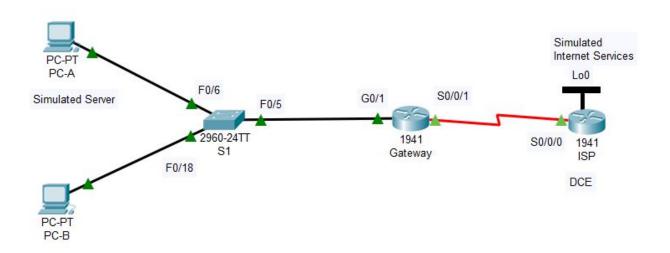
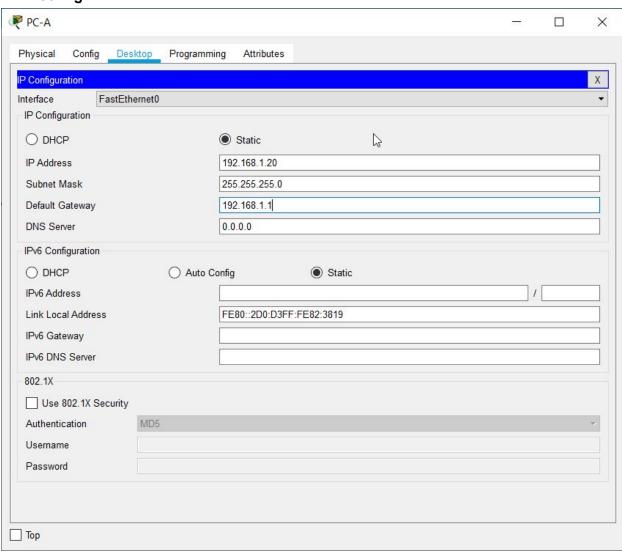
# **DCCN ISE 2**

Group: 3 Prathamesh Bagekari - 2018130002 Akshat Bhat - 2018130003 Arka Haldi - 2018130014

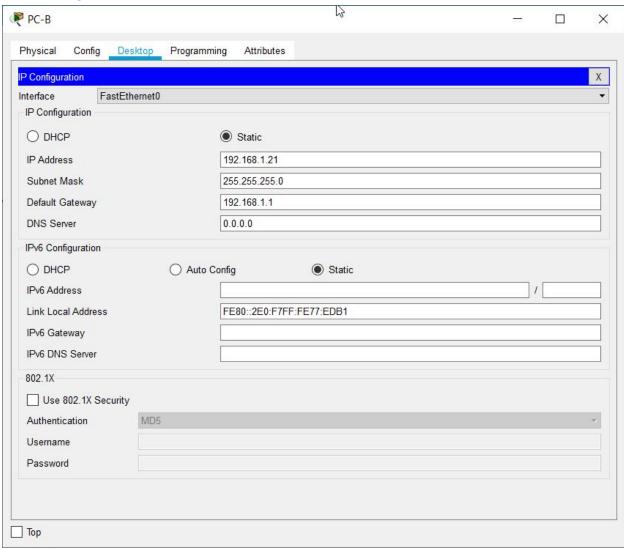
TASK 1:
Network Topology



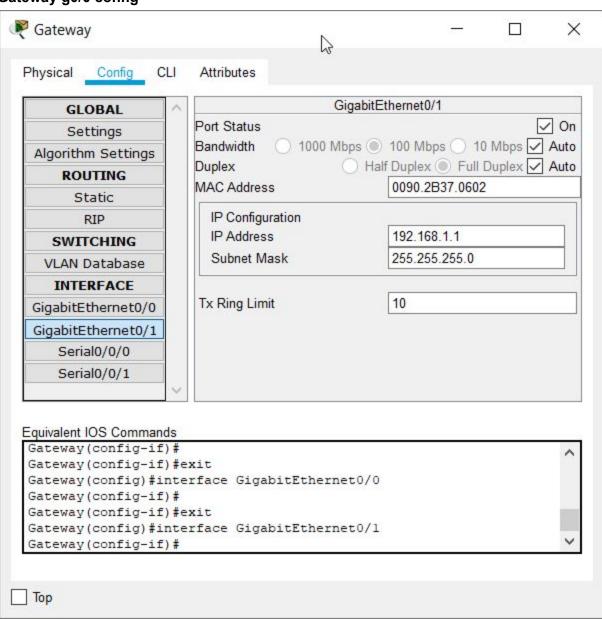
# **PC-A** config



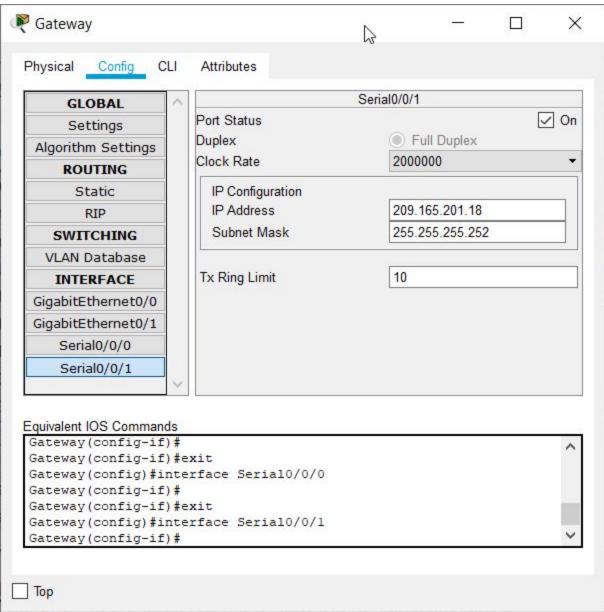
# PC-B config



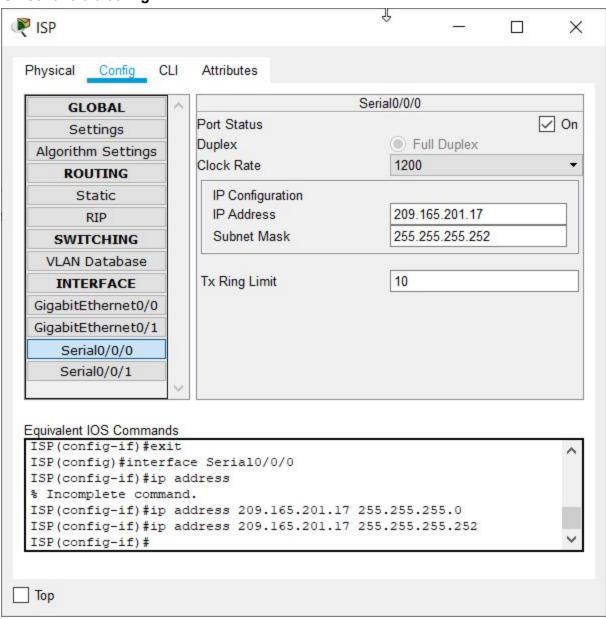
# Gateway g0/0 config



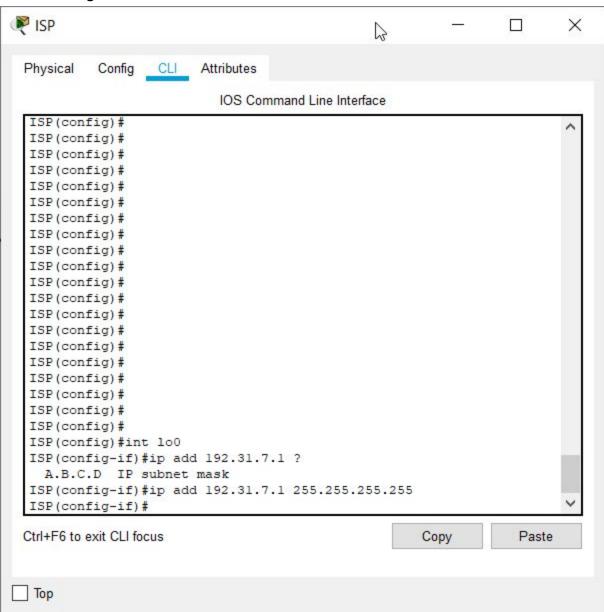
# Gateway s0/0/1



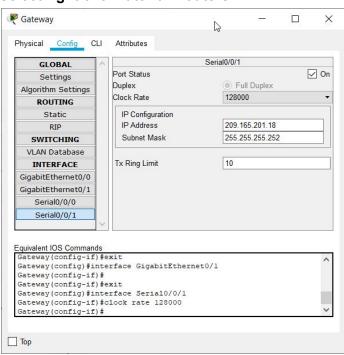
## ISP serial 0/0/0 config

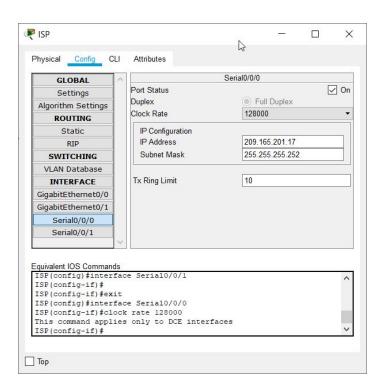


## ISP Io0 config

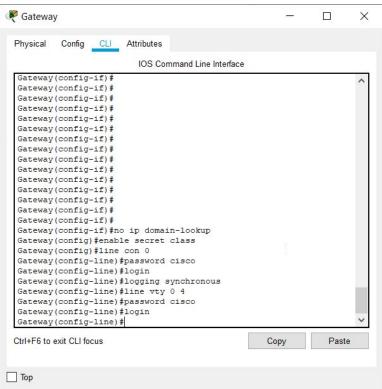


# Select right click rate for Routers

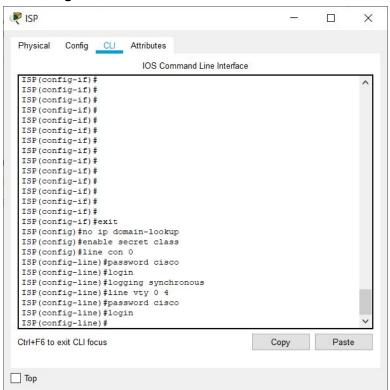




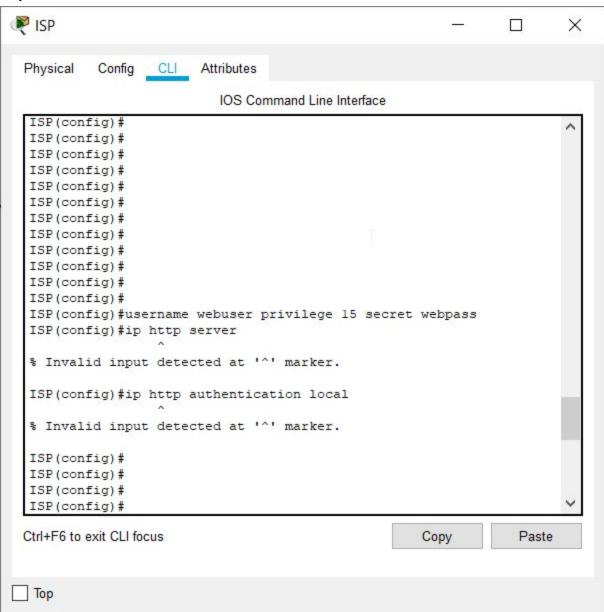
# **Gateway config**

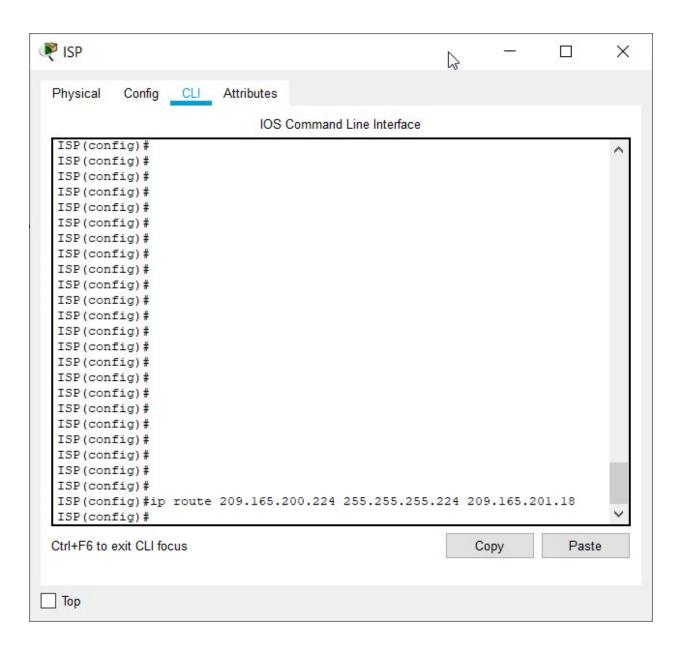


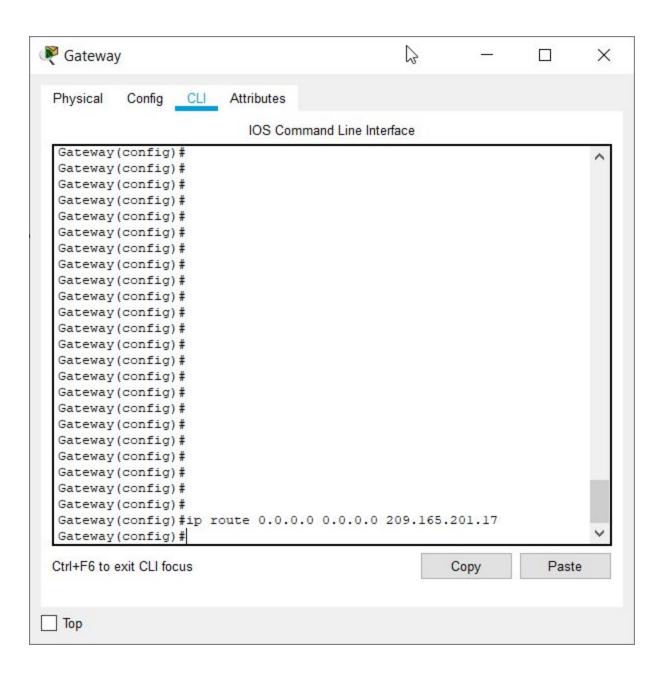
#### ISP config

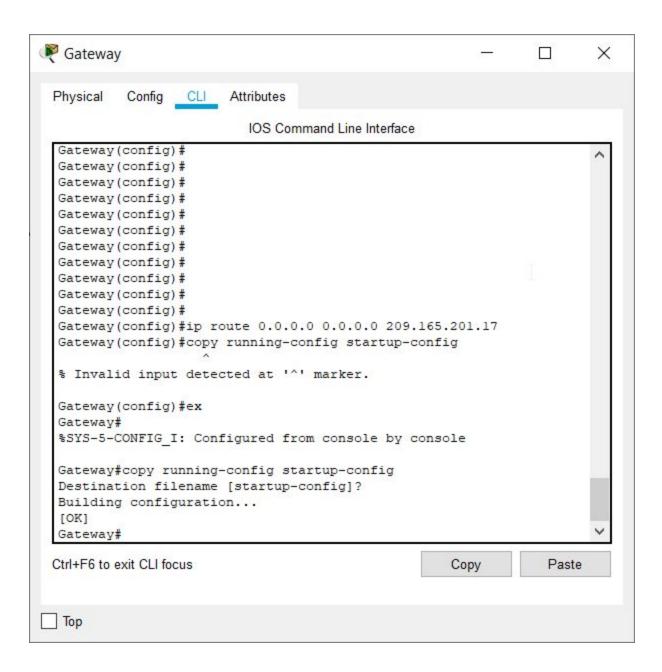


#### Http error

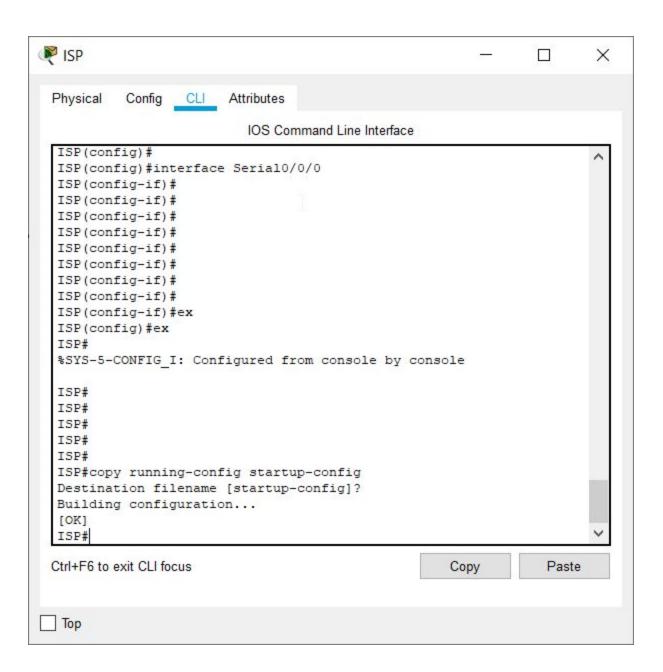


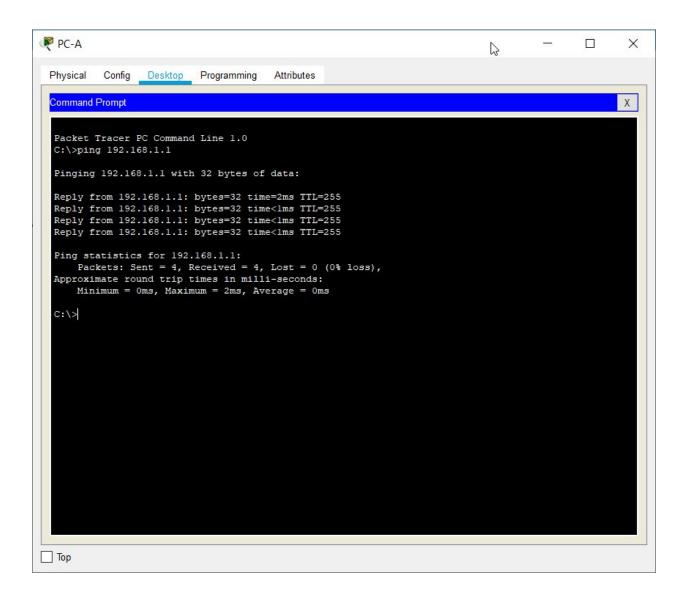


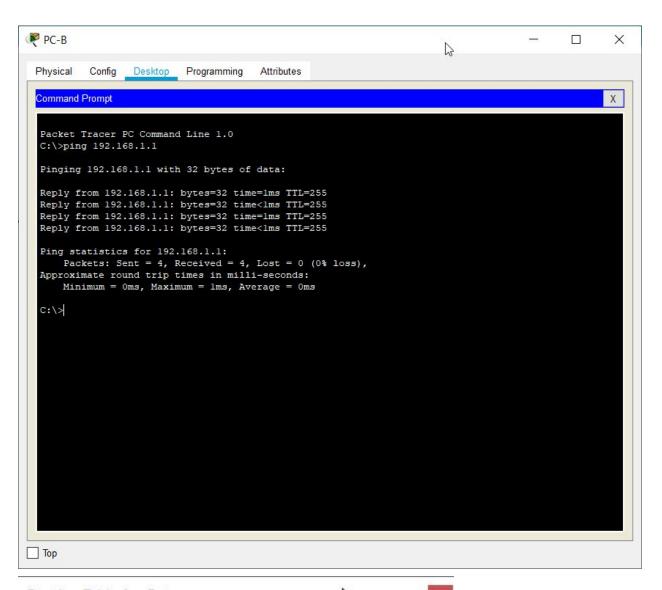








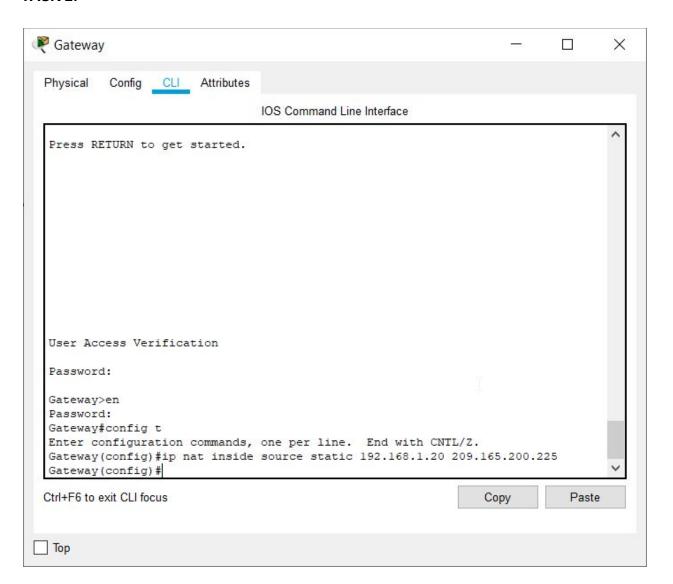


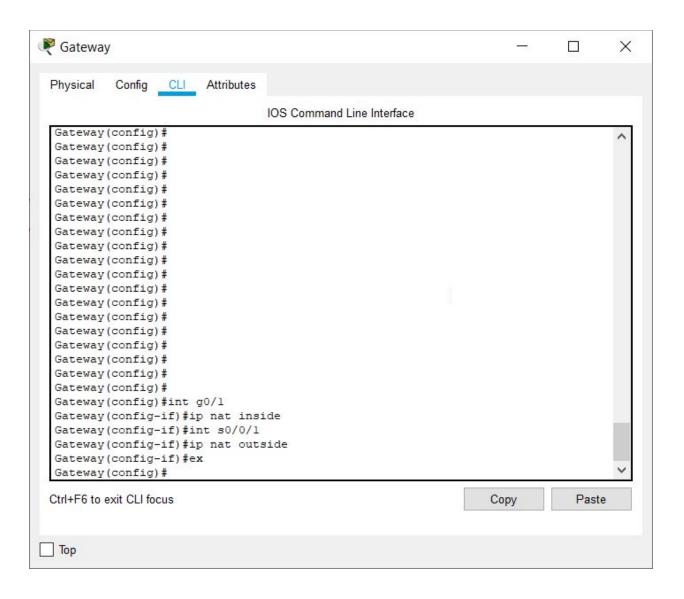


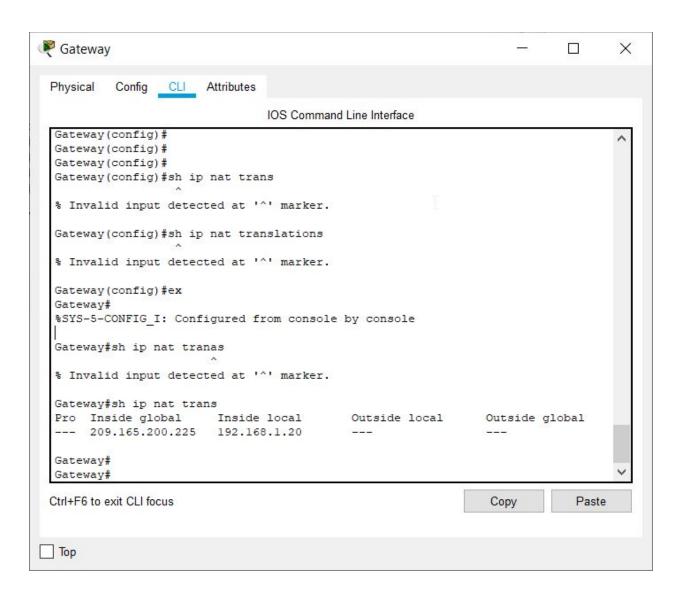
#### Routing Table for Gateway Next Type Network Port Metric Hop IP S 0.0.0.0/0 209.165.201.17 1/0 192.168.1.0/24 GigabitEthernet0/1 ---0/0 192.168.1.1/32 L GigabitEthernet0/1 ---0/0 C 209.165.201.16/30 Serial0/0/1 0/0 L 209.165.201.18/32 Serial0/0/1 0/0

Routing Table for ISP			₩ ×	
Туре	Network	Port	Next Hop IP	Metric
С	192.31.7.1/32	Loopback0		0/0
S	209.165.200.224/27		209.165.201.18	1/0
С	209.165.201.16/30	Serial0/0/0	<u></u>	0/0
L	209.165.201.17/32	Serial0/0/0		0/0

## TASK 2:







Q.What is the translation of the Inside local host address?

**192.168.1.20 = 209.165.200.225** 

Q. The Inside global address is assigned by?

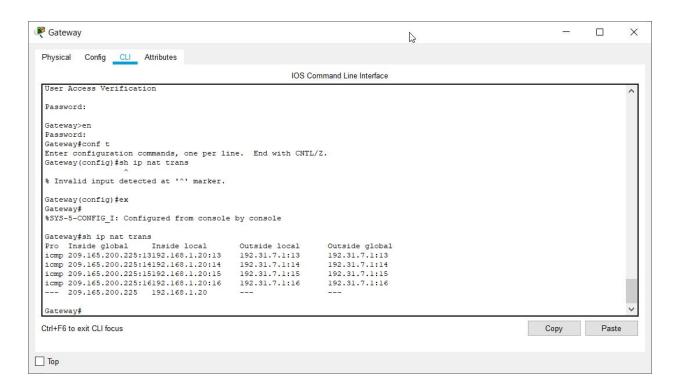
ISP(static) and NAT pool(dynamic)

Q.The Inside local address is assigned by?

**System Administrator** 

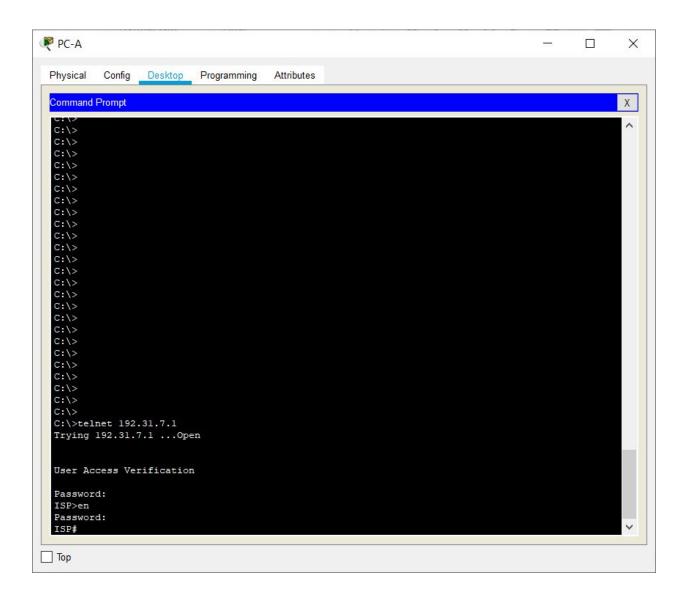
## **Pinging Lo0 interface**

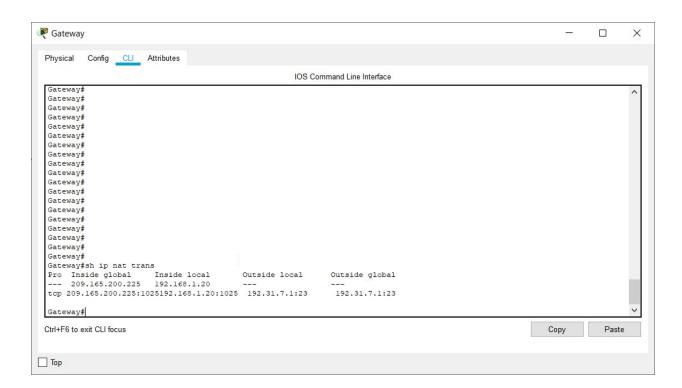
```
PC-A
                                                                                                                                                                                    X
   Physical Config Desktop Programming Attributes
   Command Prompt
                                                                                                                                                                                                Χ
   C: \>
    C:\>
C:\>
   C: \>
C: \>
C: \>
C: \>
C: \>
   C:\>
C:\>
C:\>
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=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 = 2ms, Average = 1ms
Тор
```



## What port number was used in this ICMP exchange?

4 port nos. were used for 4 ICMP exchanges for 4 pings. They are 13, 14, 15, 16.

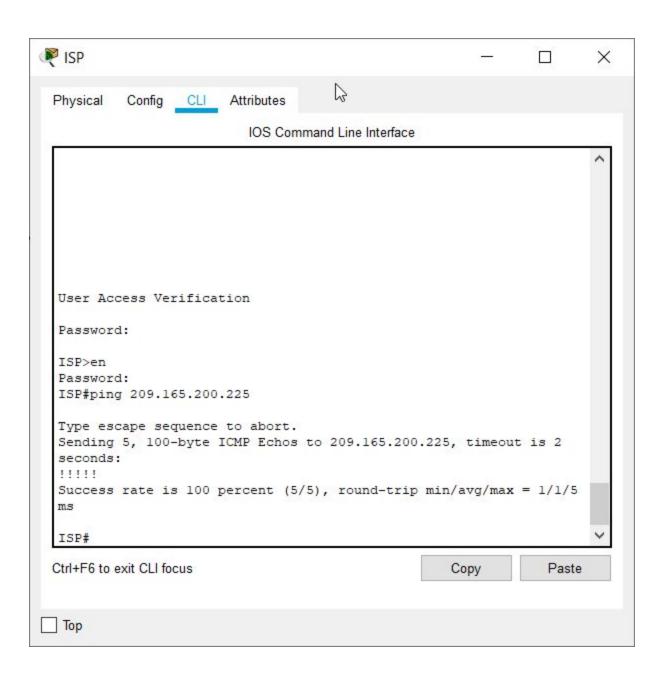


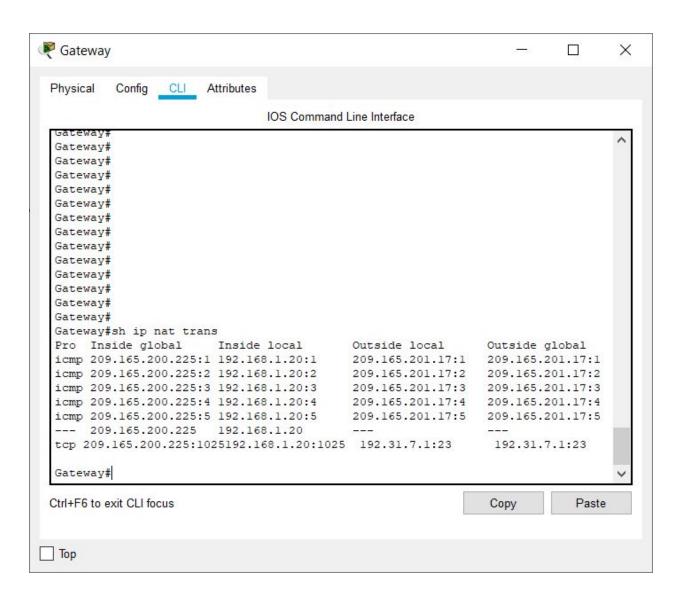


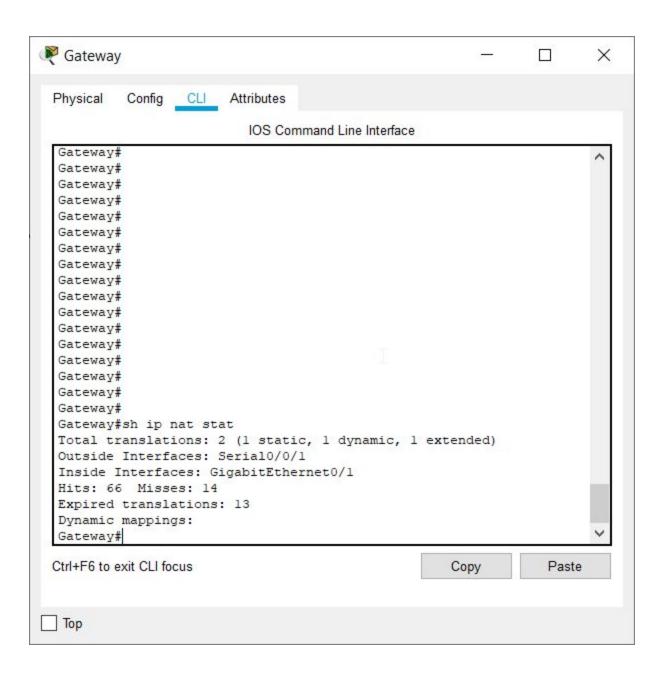
What was the protocol used in this translation? TCP

What are the port numbers used?

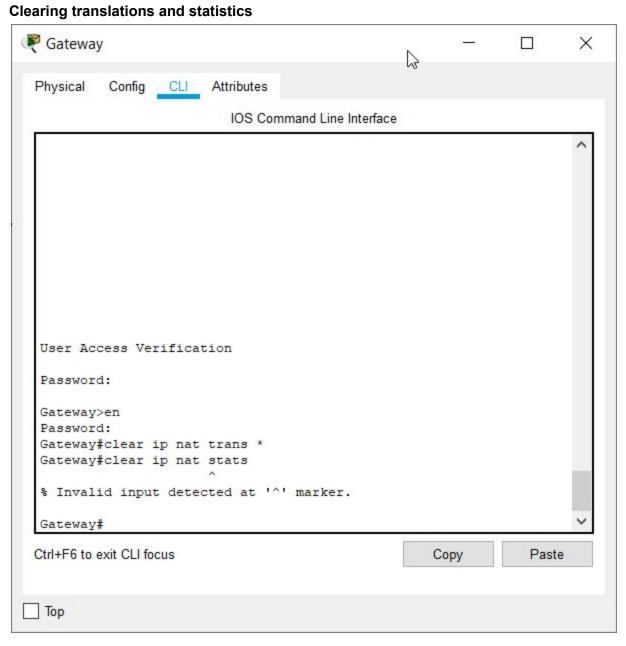
Inside global / local: 1025 Outside global / local: 23



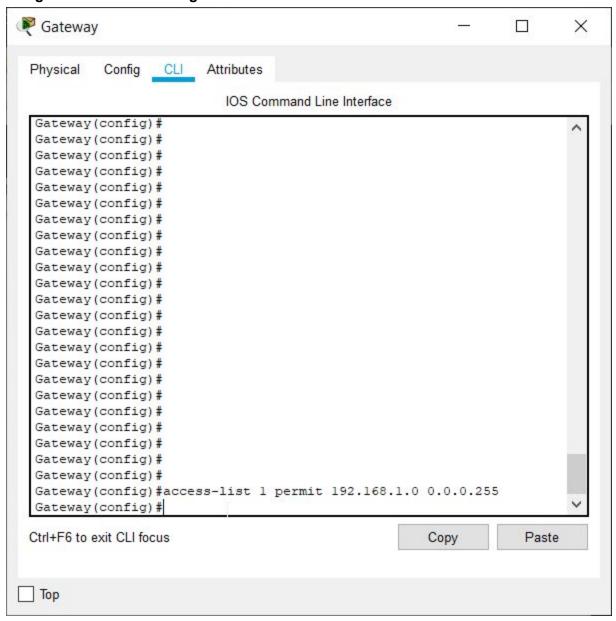




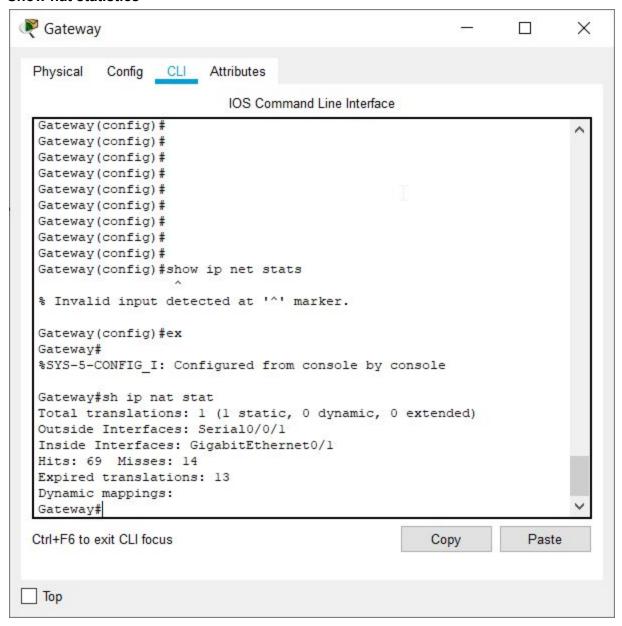
TASK 3:



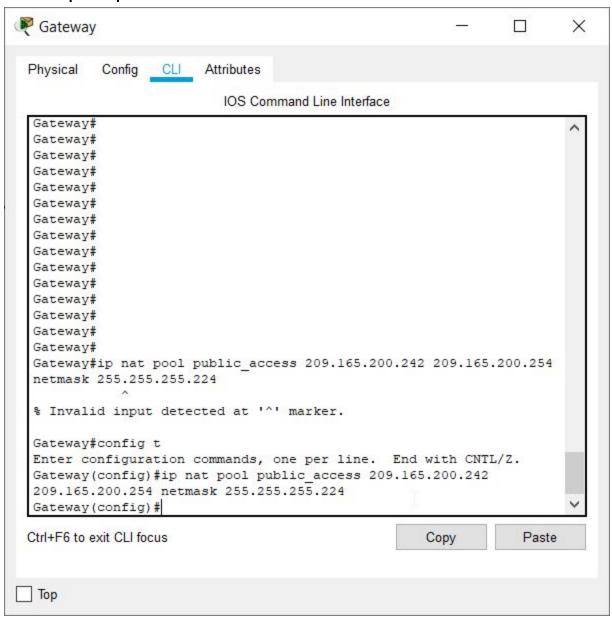
## Assign access-list 1 to range 192.168.1.0 - 192.168.1.255



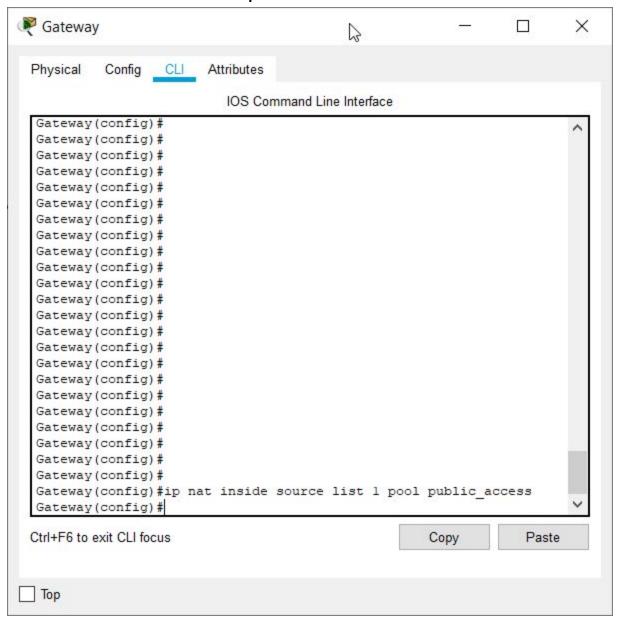
#### Show nat statistics



## Make nat public pool 209.165.200.242 - 209.165.200.254 netmask 255.255.255.224



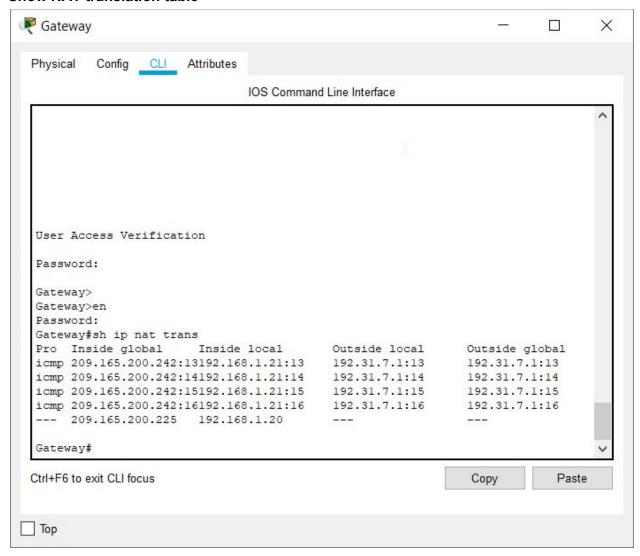
## Link inside source-list to the outer pool



## Ping Loopback0 from PC-B

```
PC-B
                                                                                                                                                                          X
                                                                                                                              S
   Physical Config Desktop Programming Attributes
   Command Prompt
                                                                                                                                                                                     Χ
   C:\>
C:\>
C:\>
C:\>
C:\>
   C:\>
C:\>
C:\>
    C:\>
C:\>
   C:\>
C:\>
    C:\>
C:\>
   C:\>
C:\>
C:\>
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=7ms 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=6ms 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 = 7ms, Average = 4ms
Тор
```

#### **Show NAT translation table**

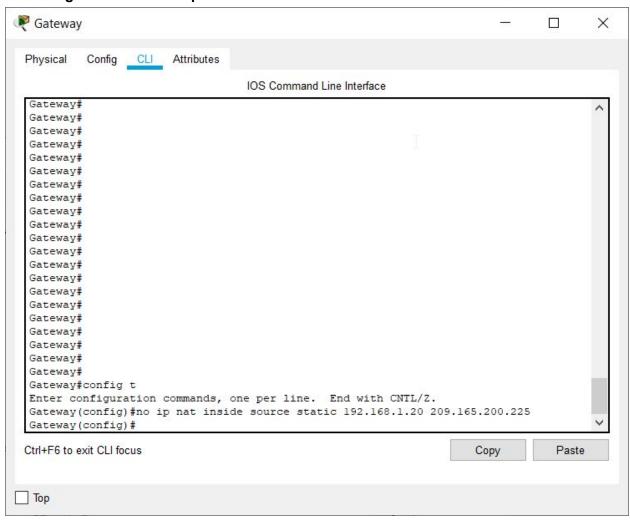


What is the translation of the Inside local host address for PC-B? 192.168.1.21 = 209.165.200.242

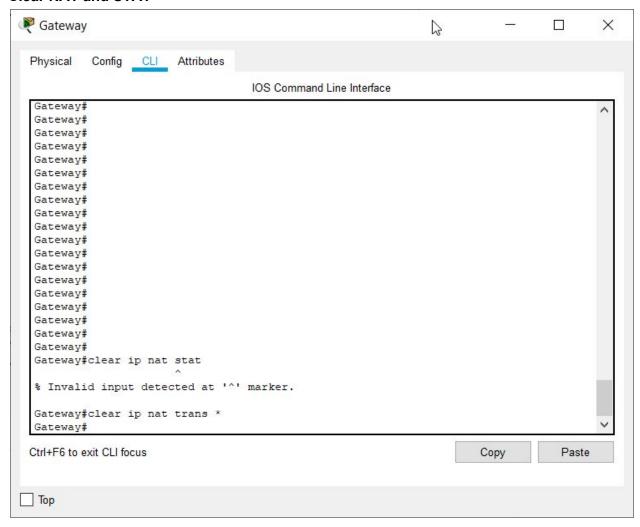
A dynamic NAT entry was added to the table with ICMP as the protocol when PC-B sent an ICMP message to 192.31.7.1 on ISP. What port number was used in this ICMP exchange?

4 port nos. were used for 4 ICMP exchanges for 4 pings. They are 13, 14, 15, 16.

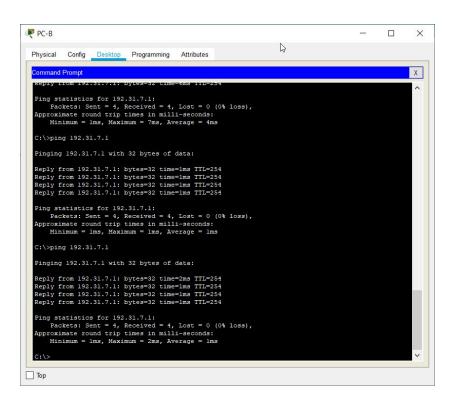
## Removing static NAT from part 2



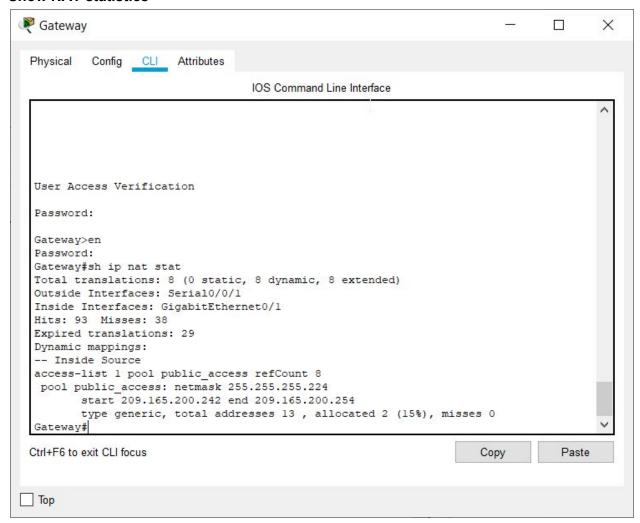
## **Clear NAT and STAT**



#### Ping ISP from both PC's



#### **Show NAT statistics**



#### Show nat translations

