

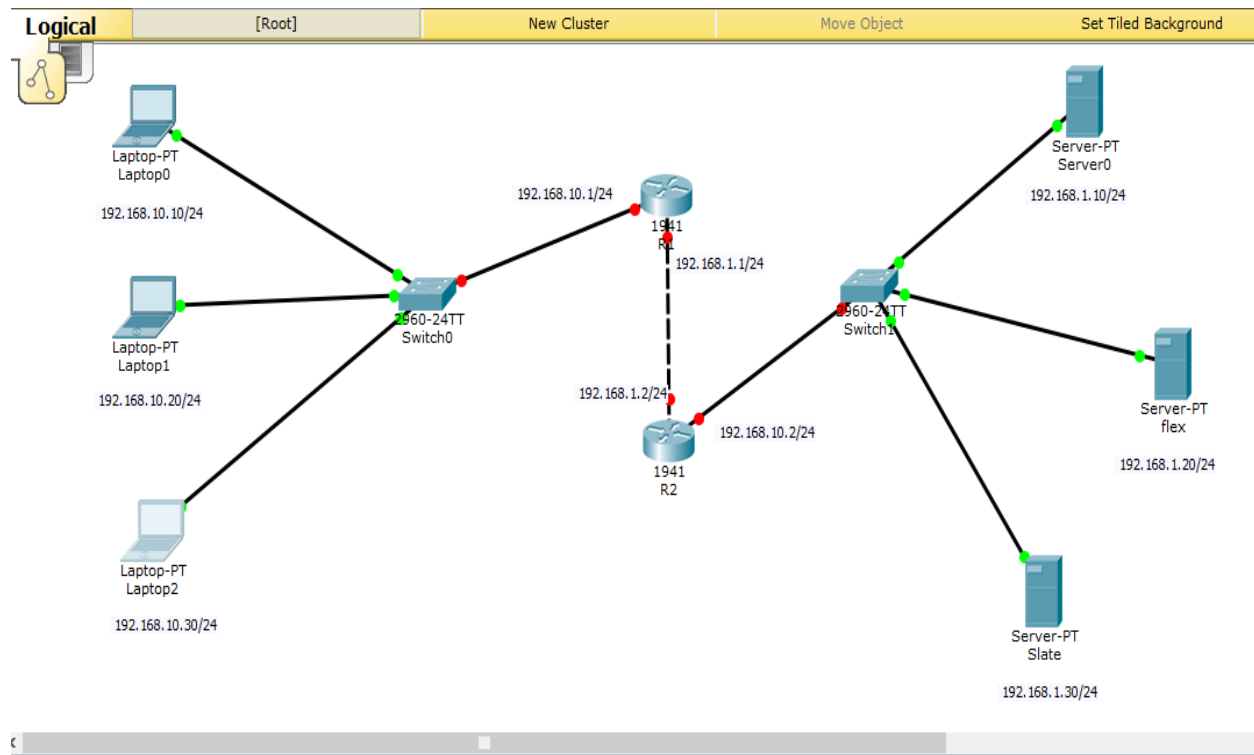


**NAME :: IBRAR BABAR**

**ROLL NO. :: 19P-0104**

**CN LAB HOMEWORK :: 11**

**SECTION (B)**



**IP Configuration** X

## IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.10.10

Subnet Mask 255.255.255.0

Default Gateway 192.168.10.1

DNS Server

## IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::209:7CFF:FE66:9076

IPv6 Gateway

IPv6 DNS Server



Laptop1

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□

×

PhysicalConfigDesktopCustom Interface

IP Configuration

X

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.10.20

Subnet Mask

255.255.255.0

Default Gateway

192.168.10.1

DNS Server

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address


/

Link Local Address

FE80::2D0:97FF:FE2A:3CCD

IPv6 Gateway

IPv6 DNS Server



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**IP Configuration** X

## IP Configuration

☐ DHCP ☒ Static

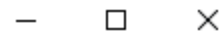
IP Address	192.168.10.30
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
DNS Server	

## IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address	
Link Local Address	FE80::201:64FF:FEDD:550E
IPv6 Gateway	
IPv6 DNS Server	





Physical Config CLI

## IOS Command Line Interface

```
R1(config-if)#exx
^
% Invalid input detected at '^' marker.

R1(config-if)#ex
R1(config)#ex
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#conf ter
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#int g0/1
R1(config-if)#ip add 192.168.1.1 255.255.255.0
R1(config-if)#no shut

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

R1(config-if)#ex
R1(config)#int g0/0
R1(config-if)#ip add 192.168.10.1 255.255.255.0
R1(config-if)#no shut

R1(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

R1(config-if)#
```

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Physical

Config

CLI

## IOS Command Line Interface

```
Router>conf ter
^
% Invalid input detected at '^' marker.

Router>en
Router#conf ter
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R2
R2(config)#int g0/0
R2(config-if)#ip add 192.168.1.2 255.255.255.0
R2(config-if)#no shut

R2(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

R2(config-if)#ex
R2(config)#int g0/1
R2(config-if)#ip add 192.168.10.2 255.255.255.0
R2(config-if)#no shut

R2(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-if)#
```

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## R1 Dynamic NAT Configuration

access-list 1 permit 192.168.10.0 0.0.0.255

ip nat pool ccna 193.0.0.1 193.0.0.2 netmask 255.255.255.0

ip nat inside source list 1 pool ccna

 R1

Physical Config CLI

IOS Command Line Interface

```
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#access-list 1 permit 192.168.10.0 0.0.0.255
R1(config)#ip nat pool ccna 193.0.0.1 193.0.0.2 netmask 255.255.255.0
R1(config)#ip nat inside source list 1 pool ccna
R1(config)#^
% Invalid input detected at '^' marker.

R1(config)#ip nat inside source list 1 pool ccna
R1(config)#
R1(config)#en
% Ambiguous command: "en"
R1(config)#ex
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#
R1#conf ter
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#access-list 1 permit 192.168.10.0 0.0.0.255
R1(config)#ip nat pool ccna 193.0.0.1 193.0.0.2 netmask 255.255.255.0
R1(config)#ip nat inside source list 1 pool ccna
R1(config)#interface FastEthernet 0/1
%Invalid interface type and number
R1(config)#interface GigabitEthernet 0/1
R1(config-if)#ip nat inside
R1(config-if)#exit
R1(config)#interface GigabitEthernet 0/0
R1(config-if)#ip nat outside
R1(config-if)#exit
R1(config)#
```

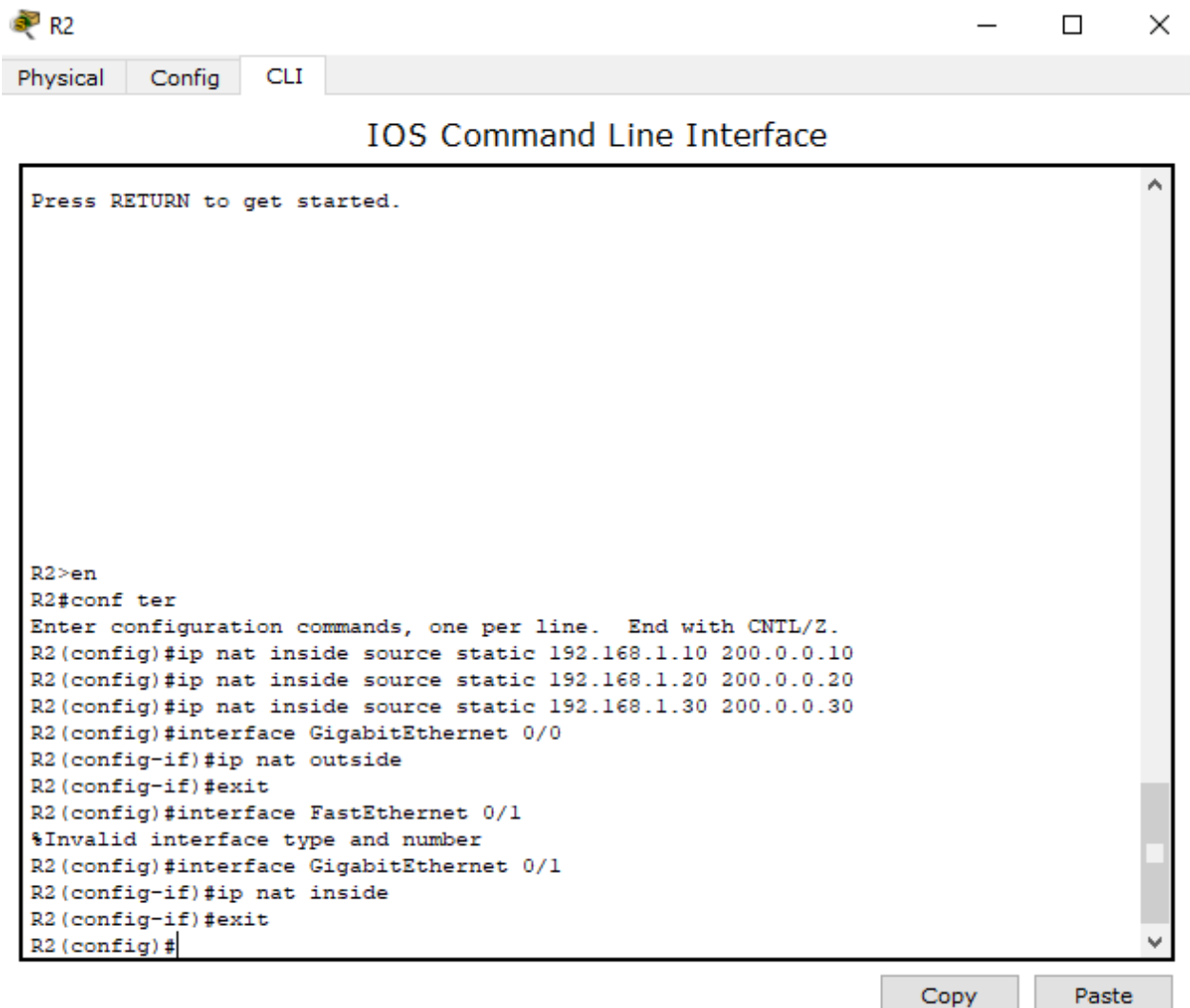
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## R2 Dynamic NAT Configuration

ip nat inside source static 192.168.1.10 200.0.0.10

ip nat inside source static 192.168.1.20 200.0.0.20

ip nat inside source static 192.168.1.30 200.0.0.30



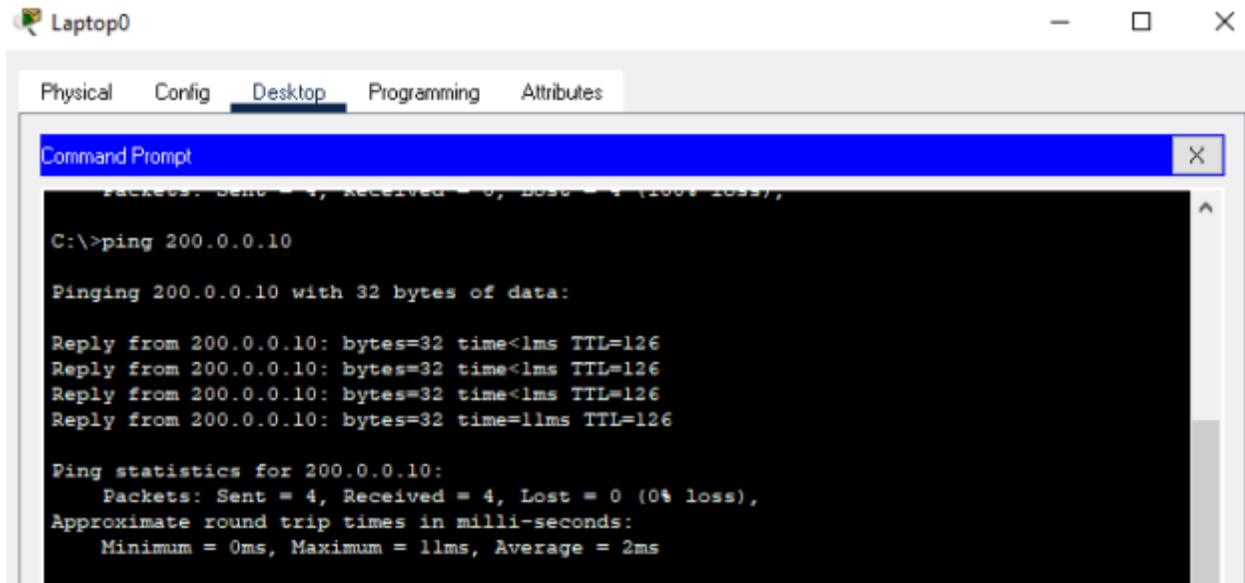
```
Press RETURN to get started.

R2>en
R2#conf ter
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip nat inside source static 192.168.1.10 200.0.0.10
R2(config)#ip nat inside source static 192.168.1.20 200.0.0.20
R2(config)#ip nat inside source static 192.168.1.30 200.0.0.30
R2(config)#interface GigabitEthernet 0/0
R2(config-if)#ip nat outside
R2(config-if)#exit
R2(config)#interface FastEthernet 0/1
%Invalid interface type and number
R2(config)#interface GigabitEthernet 0/1
R2(config-if)#ip nat inside
R2(config-if)#exit
R2(config)#
```

Copy Paste



## 4 PACKETS RECEIVED:



```
C:\>ping 200.0.0.10

Pinging 200.0.0.10 with 32 bytes of data:

Reply from 200.0.0.10: bytes=32 time<1ms TTL=126
Reply from 200.0.0.10: bytes=32 time<1ms TTL=126
Reply from 200.0.0.10: bytes=32 time<1ms TTL=126
Reply from 200.0.0.10: bytes=32 time=11ms TTL=126

Ping statistics for 200.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 2ms
```

5

## SUCCESSFUL

