

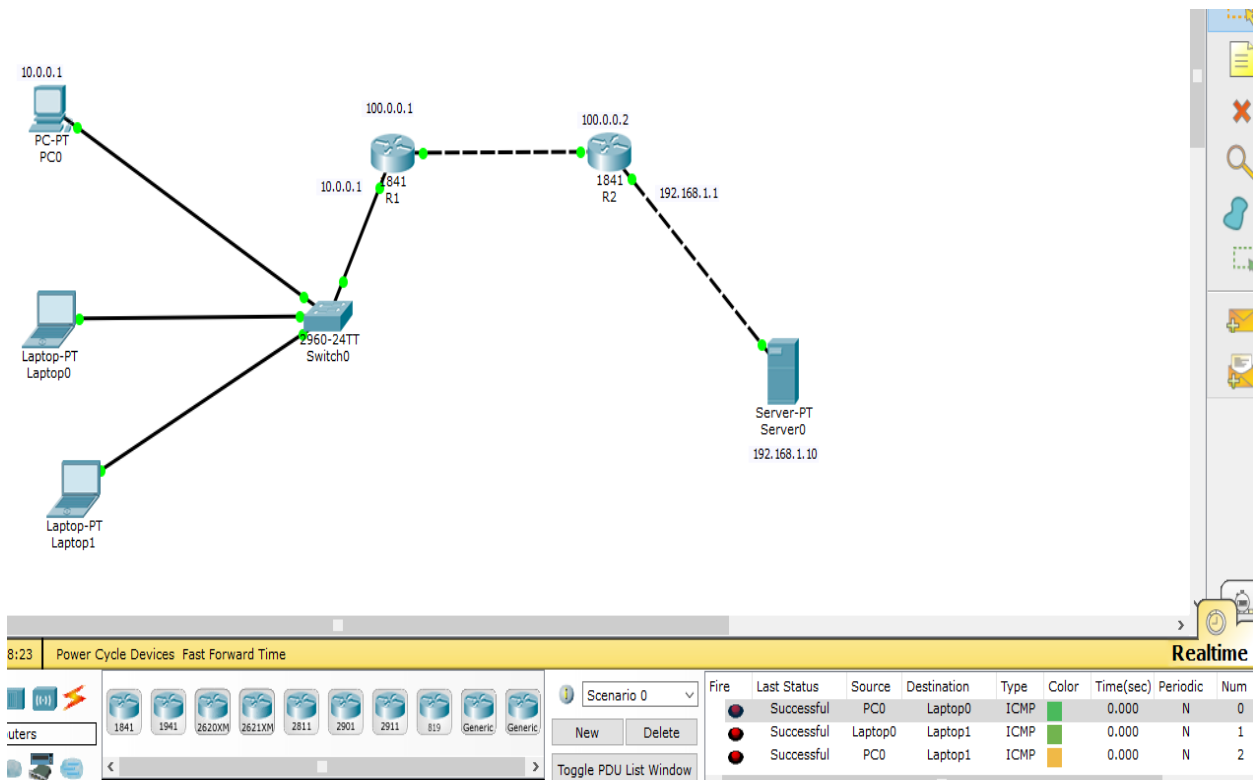


NAME : IBRAR BABAR

ROLL NO. P19-0104

CN LAB WORK (9)

SECTION (B)



**IP Configuration** X

## IP Configuration

☐ DHCP☒ Static

IP Address

10.0.0.30

Subnet Mask

255.0.0.0

Default Gateway

10.0.0.1

DNS Server

## IPv6 Configuration

☐ DHCP☐ Auto Config☒ Static

IPv6 Address

Link Local Address

FE80::2D0:97FF:FE14:242E

IPv6 Gateway

IPv6 DNS Server

**IP Configuration** X

## IP Configuration

☐ DHCP ☒ Static

IP Address 10.0.0.20

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server

## IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::205:5EFF:FEE9:C28D

IPv6 Gateway

IPv6 DNS Server



Physical Config Desktop Custom Interface

## IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 10.0.0.10

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:F7FF:FE0C:362C

IPv6 Gateway

IPv6 DNS Server

Server0

PhysicalConfigServicesDesktopCustom Interface

IP Configuration

InterfaceFastEthernet0

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.10

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::201:96FF:FE2A:CC3E

IPv6 Gateway

IPv6 DNS Server



Physical Config CLI

## IOS Command Line Interface

```
Enter enable password: ibrar123

The virtual terminal password is used to protect
access to the router over a network interface.
Enter virtual terminal password:

Press RETURN to get started!

Router>
Router>
Router>
Router>
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up
exit
```

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Physical Config CLI

## IOS Command Line Interface

```
Router>
Router>
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up
exit
R1(config)#
R1(config)#interface f0/1
R1(config-if)#ip address 100.0.0.1 255.0.0.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
```

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Physical

Config

CLI

## IOS Command Line Interface

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R2
R2(config)#interface FastEthernet0/1
R2(config-if)#ip address 192.168.1.1 255.255.255.0
R2(config-if)#no shutdown

R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up

R2(config-if)#no shutdown
R2(config-if)#exit
R2(config)#ip address 100.0.0.2 255.0.0.0
      ^
% Invalid input detected at '^' marker.

R2(config)#interface FastEthernet0/0
R2(config-if)#ip address 100.0.0.2 255.0.0.0
R2(config-if)#no shutdown

R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up

R2(config-if)#exit
R2(config)#
```

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R1



Physical

Config

CLI

## IOS Command Line Interface

```
R1>configure terminal
      ^
% Invalid input detected at '^' marker.

R1>enable
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#ip nat inside source static 10.0.0.10 50.0.0.10
R1(config)#interface FastEthernet 0/0
R1(config-if)#ip nat inside
R1(config-if)#exit
R1(config)#
R1(config)#interface FastEthernet 0/1
R1(config-if)#ip nat outside
R1(config-if)#exit
R1(config)#
```

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R1



Physical Config CLI

## IOS Command Line Interface

```
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
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R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#ip nat inside source static 10.0.0.20 50.0.0.20  
R1(config)#ip nat inside source static 10.0.0.30 50.0.0.30  
R1(config)#
```

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Physical Config CLI

## IOS Command Line Interface

```
R2>enable
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip nat inside source static 192.168.1.10
% Incomplete command.
R2(config)#ip nat inside source static 192.168.1.10 200.0.0.10
R2(config)#interface FastEthernet 0/1
R2(config-if)#ip nat inside
R2(config-if)#exit
R2(config)#
R2(config)#interface FastEthernet 0/0
R2(config-if)#ip nat outside
R2(config-if)#exit
R2(config)#
```

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R1

Physical

Config

CLI

## IOS Command Line Interface

```
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#ip nat inside source static 10.0.0.20 50.0.0.20  
R1(config)#ip nat inside source static 10.0.0.30 50.0.0.30  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#  
R1(config)#ip route 200.0.0.0 255.255.255.0 100.0.0.2  
R1(config)#
```

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Physical

Config

CLI



## IOS Command Line Interface

```
R2>enable
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip nat inside source static 192.168.1.10
% Incomplete command.
R2(config)#ip nat inside source static 192.168.1.10 200.0.0.10
R2(config)#interface FastEthernet 0/1
R2(config-if)#ip nat inside
R2(config-if)#exit
R2(config)#
R2(config)#interface FastEthernet 0/0
R2(config-if)#ip nat outside
R2(config-if)#exit
R2(config)#ip route 50.0.0.0 255.0.0.0 100.0.0.1
R2(config)#
```

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## Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 200.0.0.10

Pinging 200.0.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 200.0.0.10: bytes=32 time=12ms TTL=126
Reply from 200.0.0.10: bytes=32 time=10ms TTL=126

Ping statistics for 200.0.0.10:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 12ms, Average = 11ms

PC>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=11ms TTL=126
Reply from 200.0.0.10: bytes=32 time=10ms TTL=126
Reply from 200.0.0.10: bytes=32 time=12ms 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 = 1ms, Maximum = 12ms, Average = 8ms

PC>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

PC0

