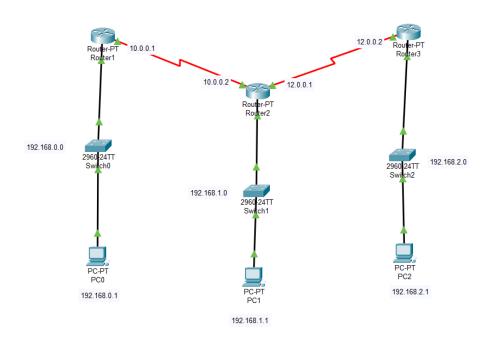# COMPUTER NETWORKS

LAB-7

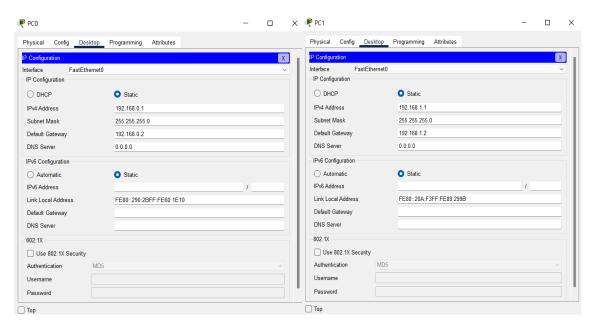**Name: Majjiga jaswanth**

Reg.No : 20bcd7171

Topology:

IP ADDRESS :

PC2 — IP Configuration

Interface: FastEthernet0

IP Configuration
- ○ DHCP ● Static
- **IPv4 Address:** 192.168.2.1
- **Subnet Mask:** 255.255.255.0
- **Default Gateway:** 192.168.2.2
- **DNS Server:** 0.0.0.0

IPv6 Configuration
- ○ Automatic ● Static
- **IPv6 Address:** ___ / ___
- **Link Local Address:** FE80::2D0:58FF:FE79:B890
- **Default Gateway:**
- **DNS Server:**

802.1X
- ☐ Use 802.1X Security
- **Authentication:** MD5
- **Username:**
- **Password:**

☐ Top

ROUTER IP :

Router3 — Config

FastEthernet0/0

- **Port Status:** ☑ On
- **Bandwidth:** ○ 100 Mbps ○ 10 Mbps ☑ Auto
- **Duplex:** ○ Half Duplex ● Full Duplex ☑ Auto
- **MAC Address:** 00D0.D3B2.6EE3

IP Configuration
- **IPv4 Address:** 192.168.0.2
- **Subnet Mask:** 255.255.255.0

Tx Ring Limit: 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

Router5 — Config

FastEthernet0/0

- **Port Status:** ☑ On
- **Bandwidth:** ○ 100 Mbps ○ 10 Mbps ☑ Auto
- **Duplex:** ○ Half Duplex ● Full Duplex ☑ Auto
- **MAC Address:** 00D0.5891.43B1

IP Configuration
- **IPv4 Address:** 192.168.2.2
- **Subnet Mask:** 255.255.255.0

Tx Ring Limit: 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

Router4 — Config — FastEthernet0/0

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

FastEthernet0/0

Port Status ☑ On
Bandwidth ○ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ● Full Duplex ☑ Auto
MAC Address 000A.419C.1C19

IP Configuration
IPv4 Address 192.168.1.2
Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands
```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```
☐ Top

ROUTER Serial IP:

Router3 — Config — Serial2/0

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Serial2/0

Port Status ☑ On
Duplex ● Full Duplex
Clock Rate 2000000

IP Configuration
IPv4 Address 10.0.0.1
Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands
```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```
☐ Top

Router4 — Config — Serial2/0

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Serial2/0

Port Status ☑ On
Duplex ● Full Duplex
Clock Rate 2000000

IP Configuration
IPv4 Address 10.0.0.2
Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands
```
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```
☐ Top

Router5 — Config — Serial3/0

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Serial3/0

Port Status ☑ On
Duplex ● Full Duplex
Clock Rate 2000000

IP Configuration
IPv4 Address 12.0.0.2
Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands
```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial3/0
Router(config-if)#
```
☐ Top

Network and next hop :

Router3

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Static Routes

Network
Mask
Next Hop

Add

Network Address

192.168.1.0/24 via 10.0.0.2

192.168.2.0/24 via 10.0.0.2

Remove

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#
Router(config)#
```

☐ Top

Router4

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Static Routes

Network
Mask
Next Hop

Add

Network Address

192.168.0.0/24 via 10.0.0.1

192.168.2.0/24 via 12.0.0.2

Remove

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#
Router(config)#
```

☐ Top

Router5

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Static Routes

Network
Mask
Next Hop

Add

Network Address

192.168.1.0/24 via 12.0.0.1

192.168.0.0/24 via 12.0.0.1

Remove

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#
Router(config)#
```

☐ Top

CHECKING PING :

PC0

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.1: bytes=32 time=3ms TTL=125
Reply from 192.168.2.1: bytes=32 time=10ms TTL=125
Reply from 192.168.2.1: bytes=32 time=12ms TTL=125

Ping statistics for 192.168.2.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 12ms, Average = 8ms

C:\>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Reply from 192.168.2.1: bytes=32 time=2ms TTL=125
Reply from 192.168.2.1: bytes=32 time=2ms TTL=125
Reply from 192.168.2.1: bytes=32 time=2ms TTL=125
Reply from 192.168.2.1: bytes=32 time=10ms TTL=125

Ping statistics for 192.168.2.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 10ms, Average = 4ms
```

Top

PC2

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=2ms TTL=125
Reply from 192.168.0.1: bytes=32 time=27ms TTL=125
Reply from 192.168.0.1: bytes=32 time=2ms TTL=125
Reply from 192.168.0.1: bytes=32 time=10ms TTL=125

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 27ms, Average = 10ms

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=126
Reply from 192.168.1.1: bytes=32 time=1ms TTL=126
Reply from 192.168.1.1: bytes=32 time=1ms TTL=126
Reply from 192.168.1.1: bytes=32 time=2ms TTL=126

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms
```

Top