COMPUTER NETWORKS LAB

LAB TASK # 03

Submitted By

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Submitted To

MS.HURMAT HIDAYAT

(INSTRUCTOR CS)

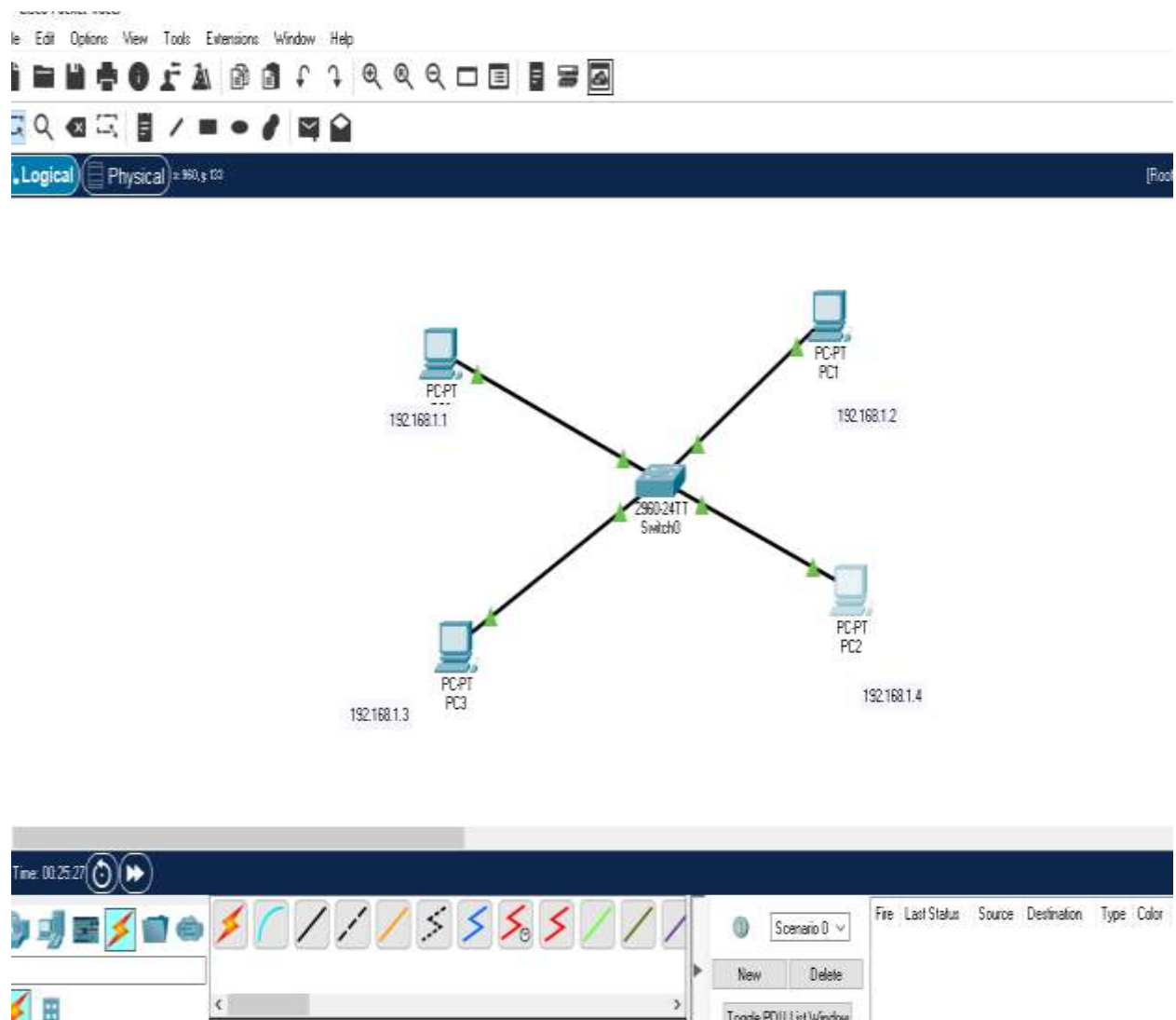**Fast National University of Computer and Emerging**

Sciences, Peshawar

Department of Computer Science

Task 1:

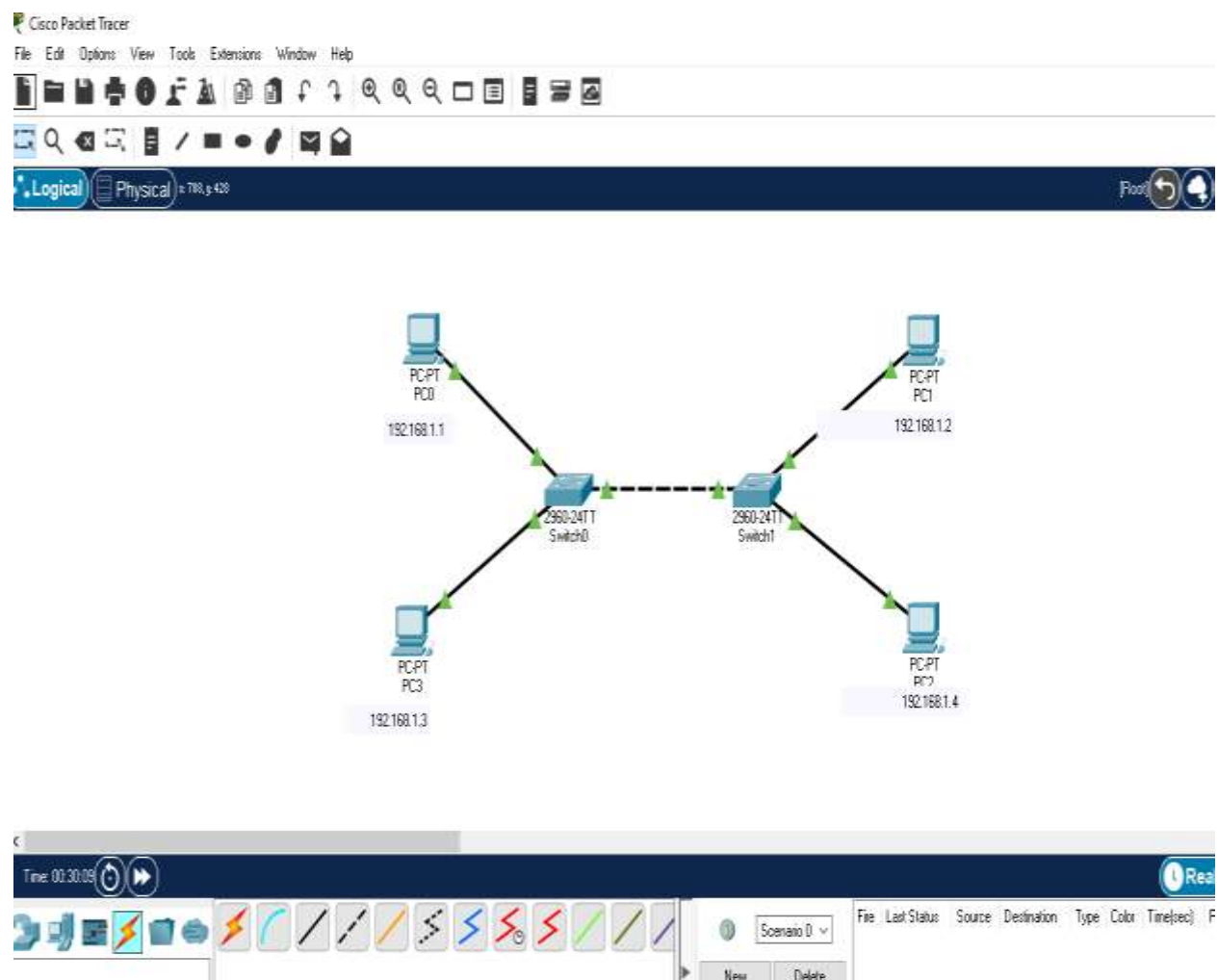Perform communication of four devices using switch

• Use the IP Address of Class C

• Simulate transfer of packet between two PCs

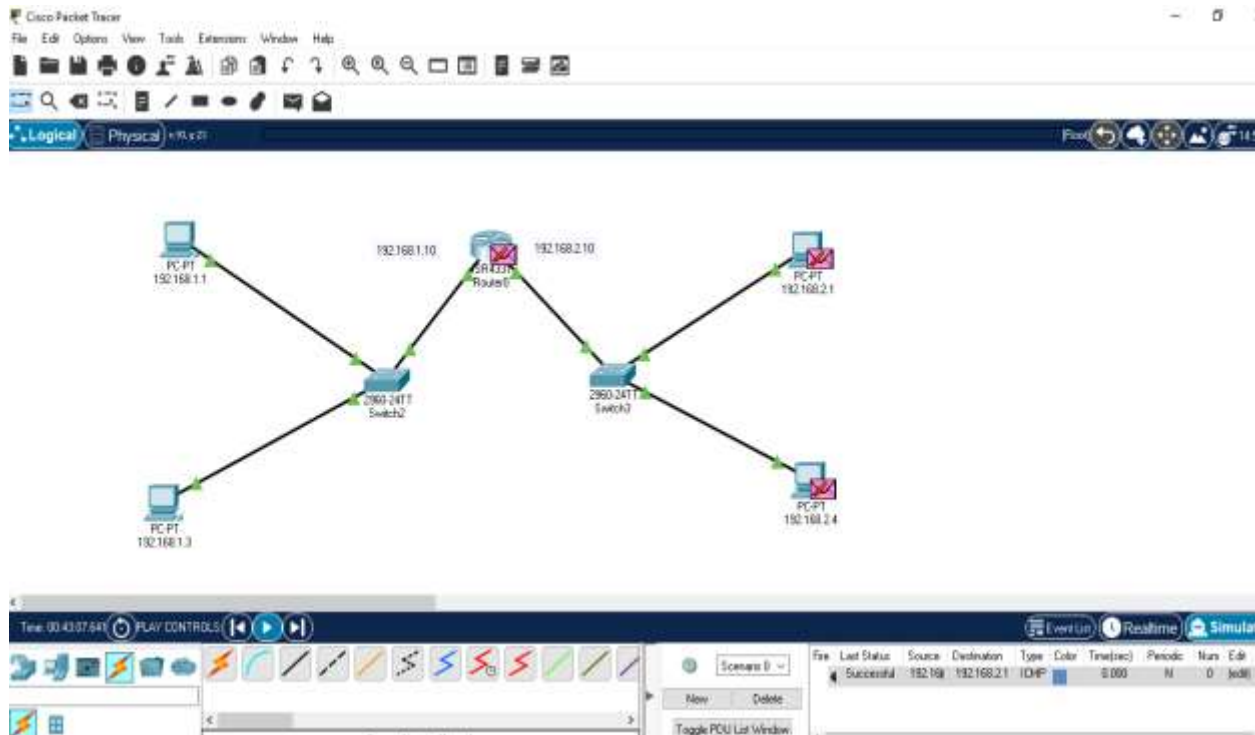• Write brief and concise description of the whole process.

Task 2:

Perform communication through multiple switches

• Use the IP Address of Class C

• Simulate transfer of packet between PC0 and PC3

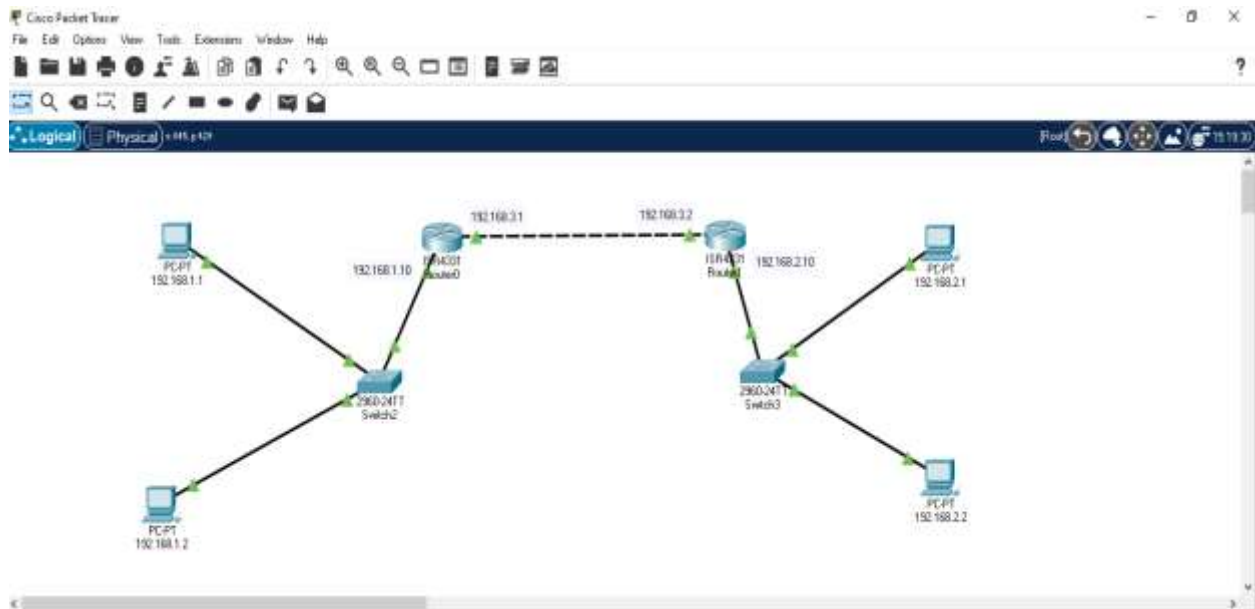• Write brief and concise description of the whole process.

Task 3:

Communication using One Router:

Task 4:

Communication using two Router.

As we know that when we use two routers we need path configuration for communication between PC's.

- NOW CONFIG THE BOTH ROUTERS..

Task 5:

Communication using three Router.

- **Topology:**

Configure routers

Physical   Config   CLI   Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/2

Static Routes

Network   192.168.3.0

Mask   255.255.255.0

Next Hop   192.168.4.22

Add

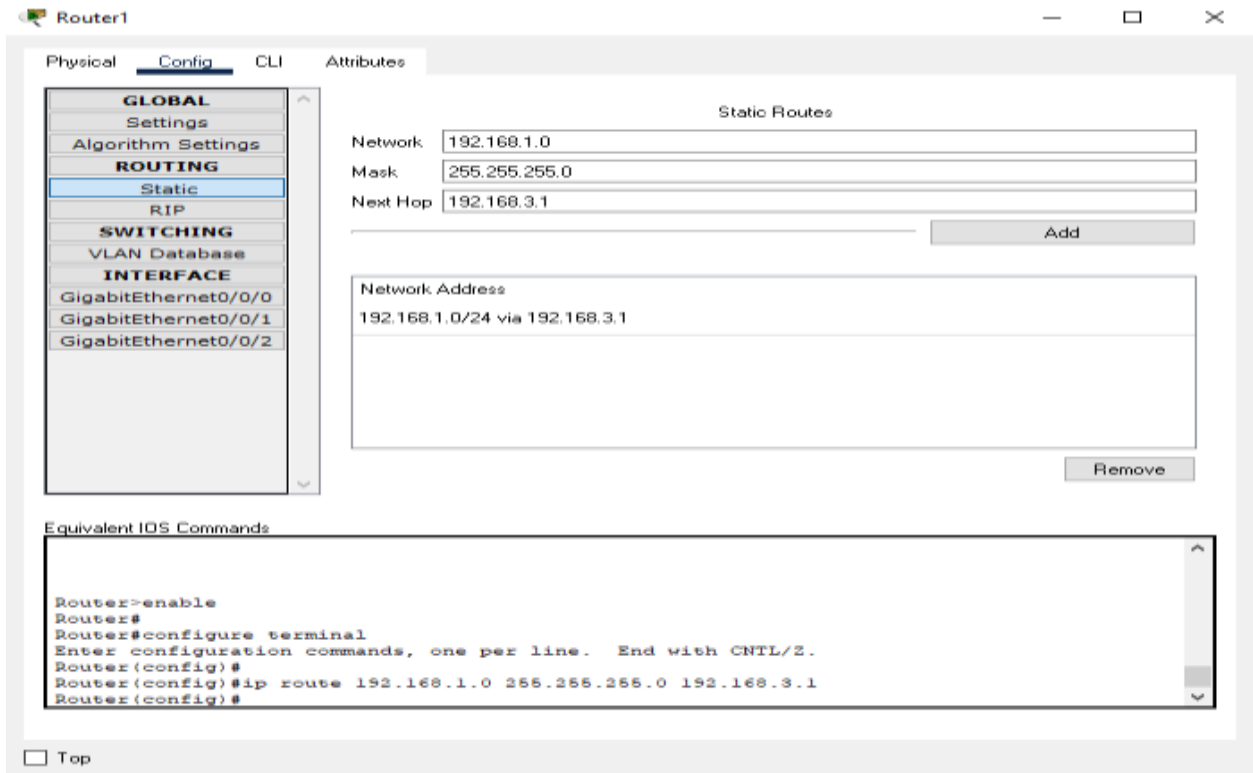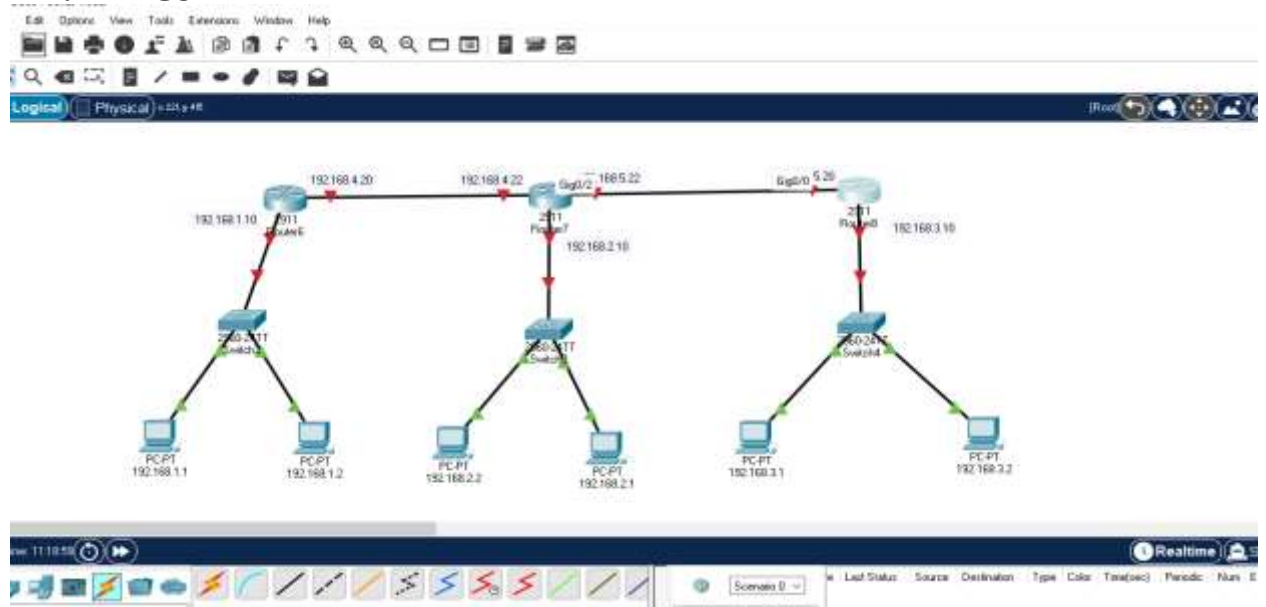Network Address

192.168.3.0/24 via 192.168.4.22

Remove

Equivalent IOS Commands

```
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/2
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Router(config-if)#exit
Router(config)#
Router(config)#ip route 192.168.3.0 255.255.255.0 192.168.4.22
Router(config)#
Router(config)#
Router(config)#
```

Router6   — □ ✕

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

Static Routes

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Mask   255.255.255.0

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