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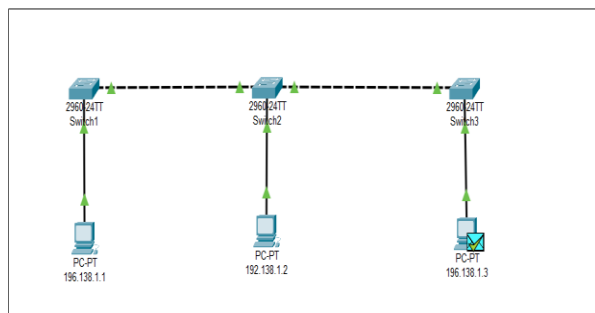
### Lab Practical #04:

Installation of Network Simulator (Packet Tracer) and Implement different LAN topologies.

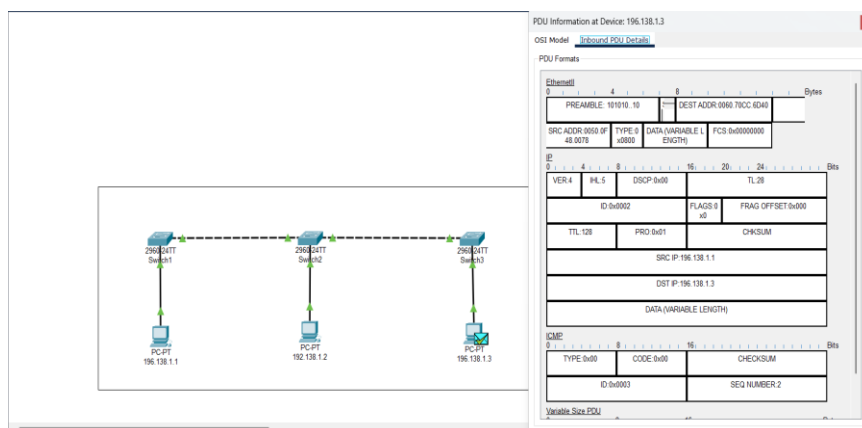
### Practical Assignment #04:

1. Create a simple network with switch and two or more pc. Also check connectivity between them using ping command or PDU utility.
2. Implement different topologies in packet tracer.
  - a. Bus
  - b. Ring
  - c. Star
  - d. Mesh
  - e. Tree

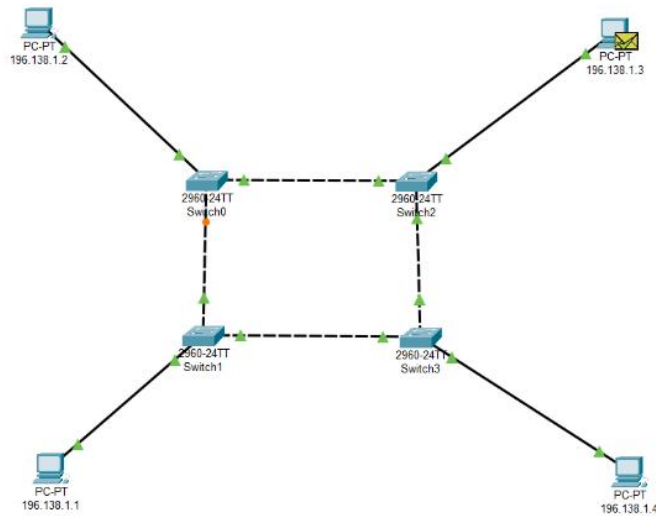
#### 1. Bus Topology Structure



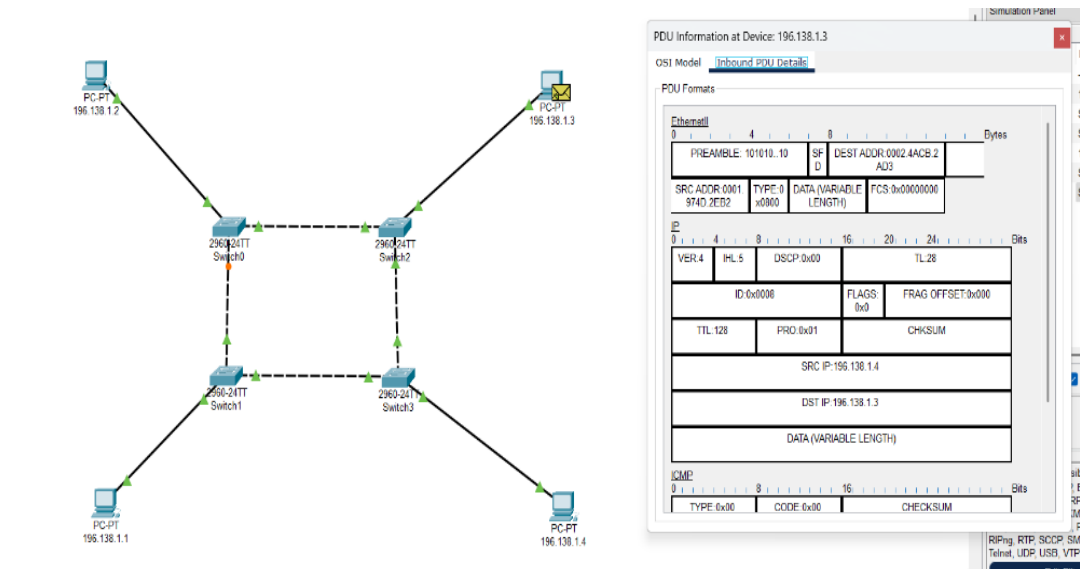
- IP Address: 196.138.1.3



## 2. Ring Topology Structure

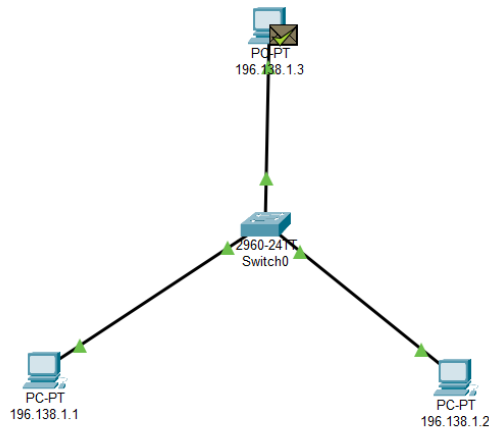


- IP Address: 196.138.1.3

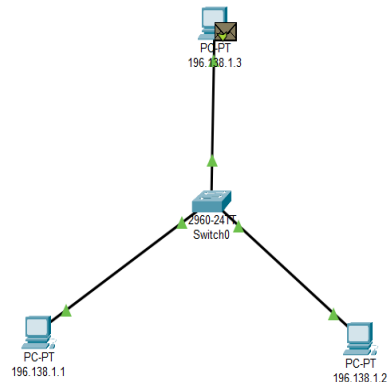


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### 3. Star Topology Structure



- IP Address: 196.138.1.3



PDU Information at Device: 196.138.1.3

OST Model [Inbound PDU Details](#)

PDU Formats

EthernetII

048Bytes

PREAMBLE: 101010.10

SF D

DEST ADDR: 0003 E439 1D 27

SRC ADDR: 000C CF28 799C

TYPE: 0 x0800

DATA (VARIABLE LENGTH)

FCS: 0x00000000

IP

048162024Bits

VER: 4

IHL: 5

DSCP: 0x00

TL: 28

ID: 0x0002

FLAGS: 0x0

FRAG OFFSET: 0x000

TTL: 128

PRO: 0x01

CHKSUM

SRC IP: 196.138.1.2

DST IP: 196.138.1.3

DATA (VARIABLE LENGTH)

ICMP

0816Bits

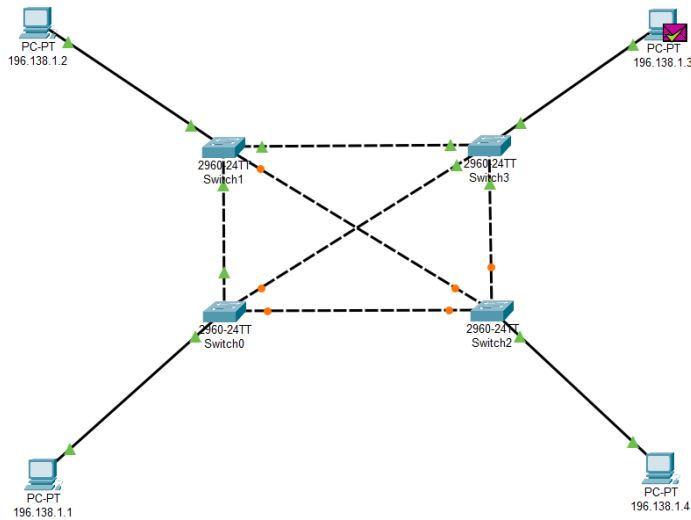
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CODE: 0x00

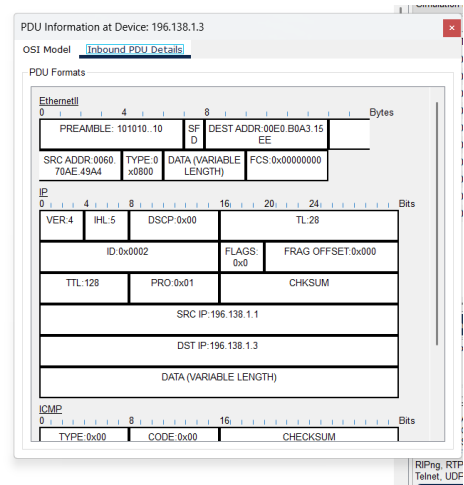
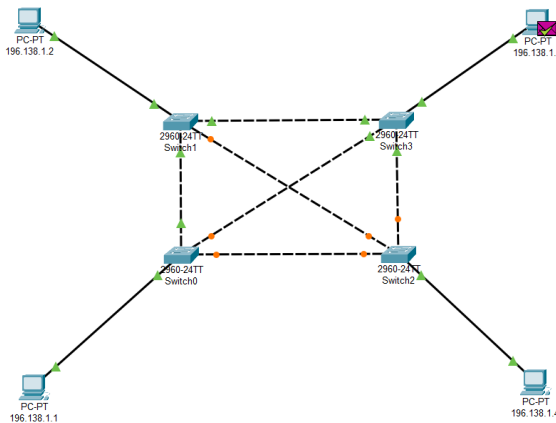
CHECKSUM

Date: / /

#### 4. Mesh Topology Structure

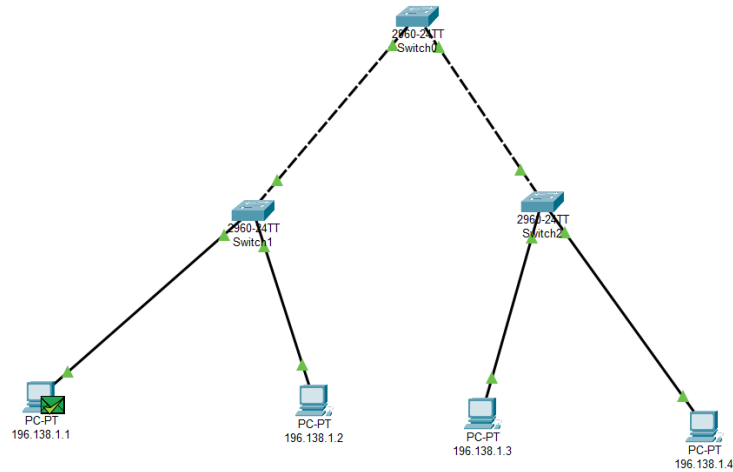


- IP Address: 196.138.1.3

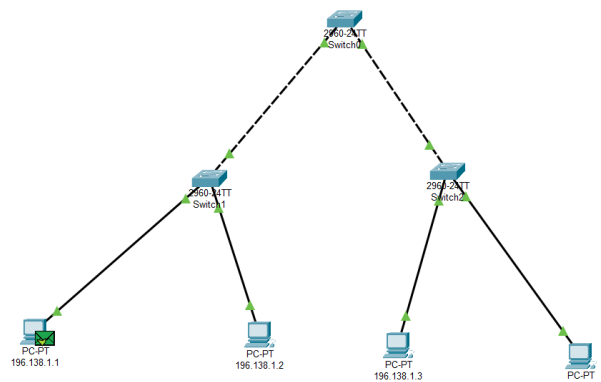


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### 5. Tree Topology Structure



- IP Address: 196.138.1.1



PDU Information at Device: 196.138.1.1

OSI Model: [Inbound PDU Details](#)

PDU Formats

Ethernet II															
Bytes															
PREAMBLE: 101010...10										SF D		DEST ADDR: 0007.EC0C.31 3A			
SRC ADDR: 0040.0B72.BA6A						TYPE: 0 x8000		DATA (VARIABLE LENGTH)				FCS: 0x00000000			
IP															
Bits															
VER: 4		IHL: 5		DSCP: 0x00				TL: 28							
ID: 0x000c						FLAGS: 0x0				FRAG OFFSET: 0x000					
TTL: 128				PRO: 0x01				CHKSUM							
SRC IP: 196.138.1.2															
DST IP: 196.138.1.1															
DATA (VARIABLE LENGTH)															
ICMP															
Bits															
TYPE: 0x00				CODE: 0x00				CHECKSUM							
ID: 0x0007				SEQ NUMBER: 12											