

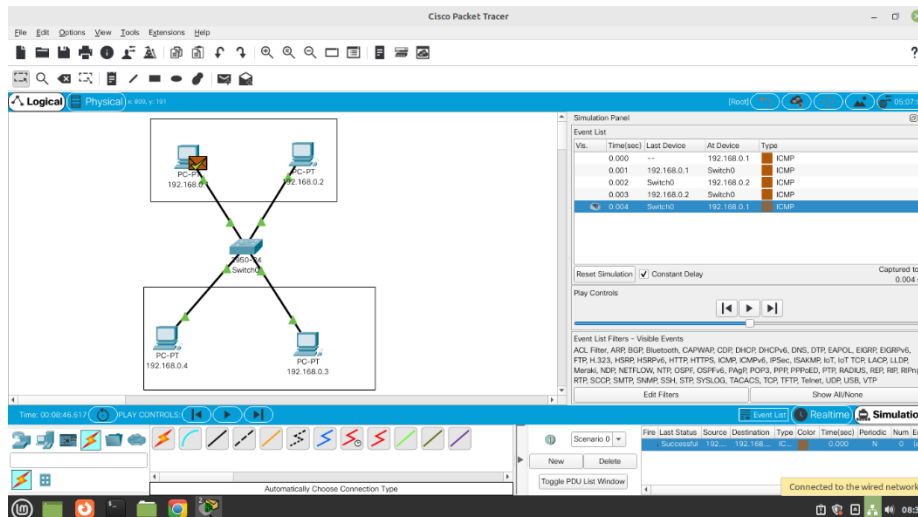
Lab Practical #05:

Study the concept of VLAN using packet tracer.

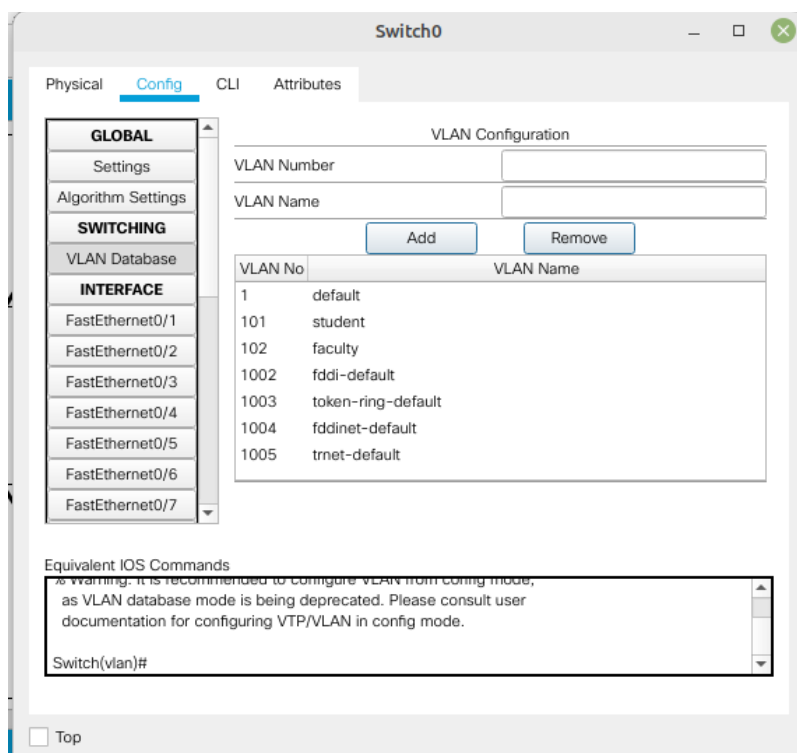
Practical Assignment #05:

1. Implement the different network structures in VLAN and VLAN trunking. Also check connectivity between them using ping command or PDU utility.

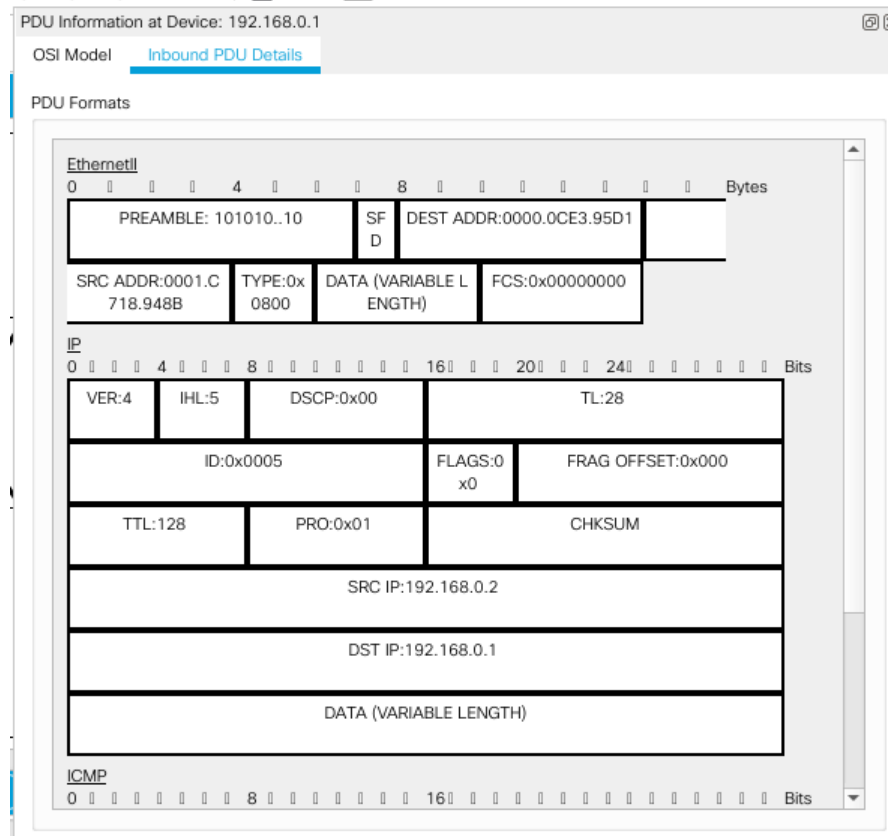
1. VLAN - 1 :



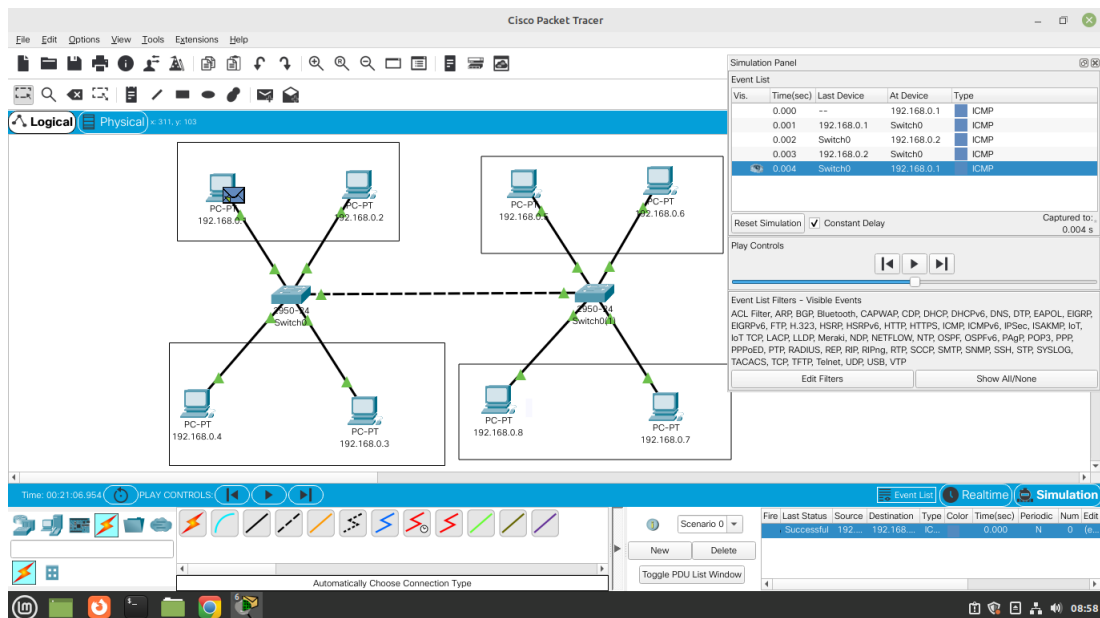
2. VLAN – 1 (Database) :



3. VLAN – 1 (PDU Information) :

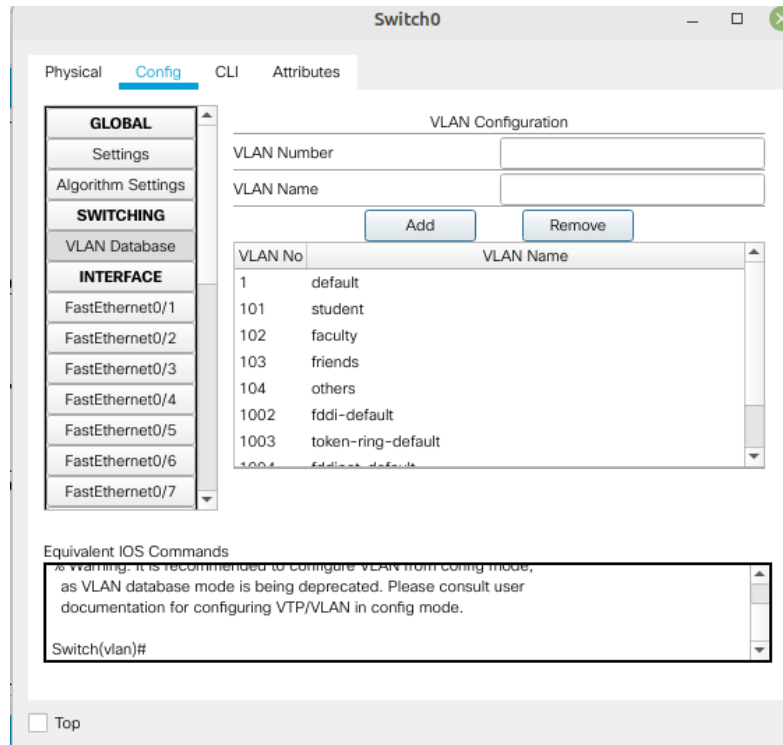


4. VLAN - 2 :



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5. VLAN - 2 (Database) :

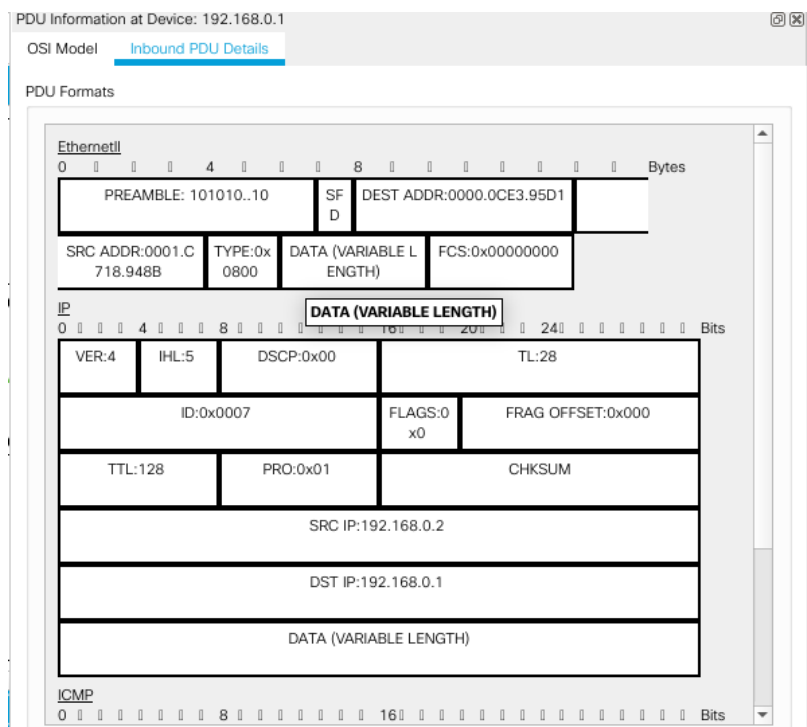


The screenshot shows the 'Switch0' configuration window with the 'Config' tab selected. The 'VLAN Configuration' section is active, displaying a table of VLANs. The table has two columns: 'VLAN No' and 'VLAN Name'. The table lists the following VLANs:

VLAN No	VLAN Name
1	default
101	student
102	faculty
103	friends
104	others
1002	fdi-default
1003	token-ring-default
1004	fdi-ring-default

Below the table, there is a section for 'Equivalent IOS Commands' with a text area containing the command: `Switch(vlan)#`. At the bottom left, there is a 'Top' button.

6. VLAN – 2 (PDU Information) :



The screenshot shows the 'PDU Information at Device: 192.168.0.1' window. The 'OSI Model' tab is selected, and the 'Inbound PDU Details' section is active. The PDU is an Ethernet II frame, and the details are as follows:

Ethernet II			
Bytes			
PREAMBLE: 101010..10		SF D	DEST ADDR: 0000.0CE3.95D1
SRC ADDR: 0001.C718.948B	TYPE: 0x0800	DATA (VARIABLE LENGTH)	
FCS: 0x00000000			

The PDU is an IP packet, and the details are as follows:

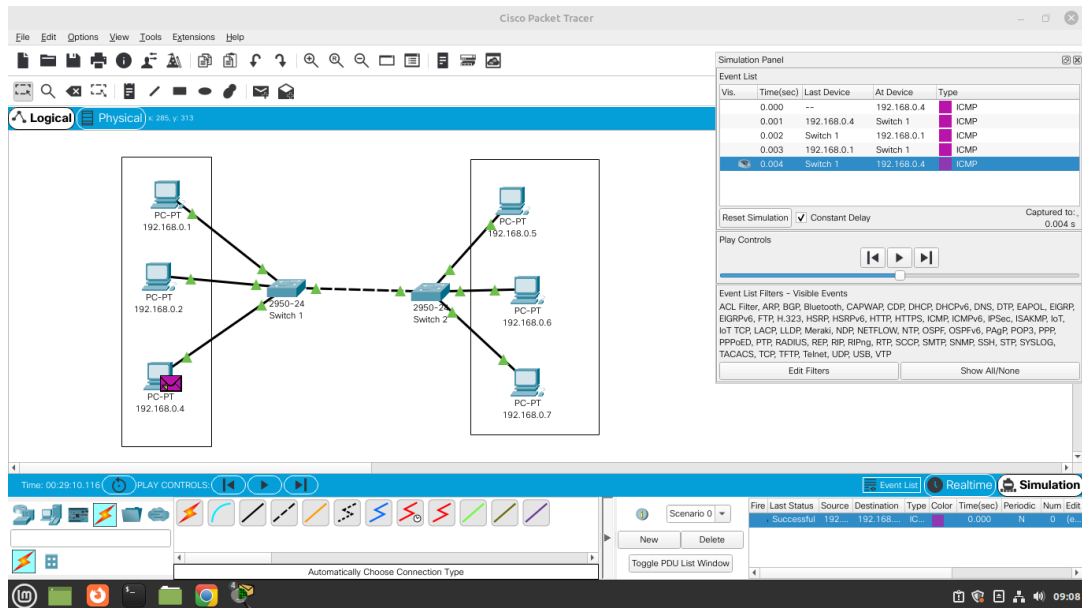
IP			
Bits			
VER: 4	IHL: 5	DSCP: 0x00	TL: 28
ID: 0x0007		FLAGS: 0x0	FRAG OFFSET: 0x000
TTL: 128	PRO: 0x01	CHKSUM	
SRC IP: 192.168.0.2			
DST IP: 192.168.0.1			
DATA (VARIABLE LENGTH)			

The PDU is an ICMP packet, and the details are as follows:

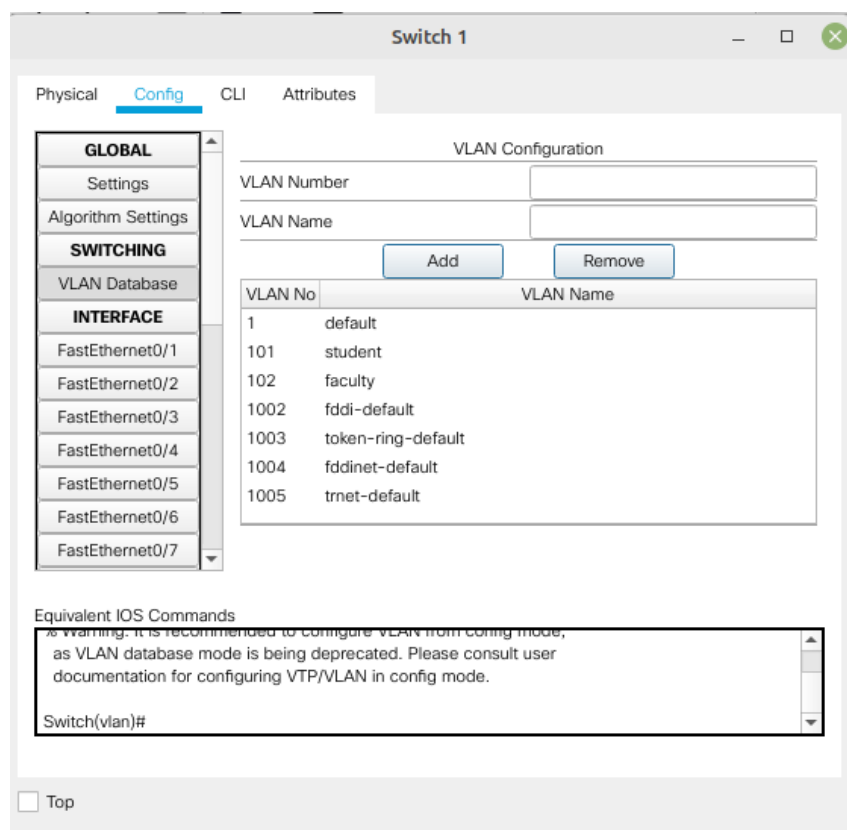
ICMP			
Bits			
0			

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7. VLAN - 3 :



8. VLAN – 3 (Database) :



The configuration window for Switch 1 shows the VLAN Configuration tab. The VLAN Database table lists VLANs 1 through 1005 with their names.

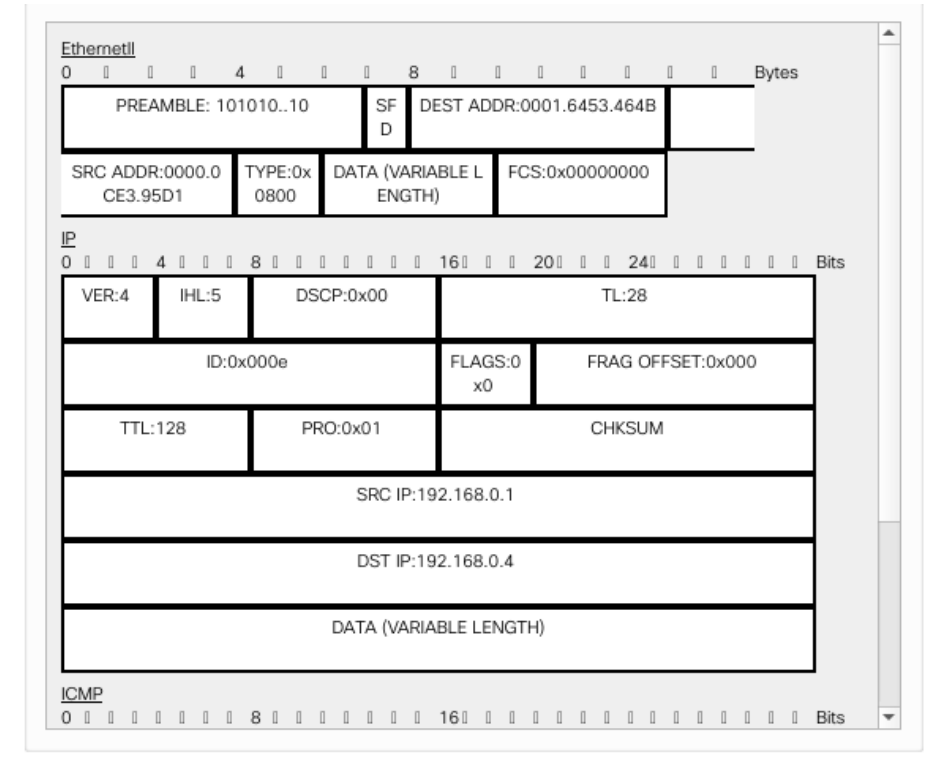
VLAN No	VLAN Name
1	default
101	student
102	faculty
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default

Equivalent IOS Commands

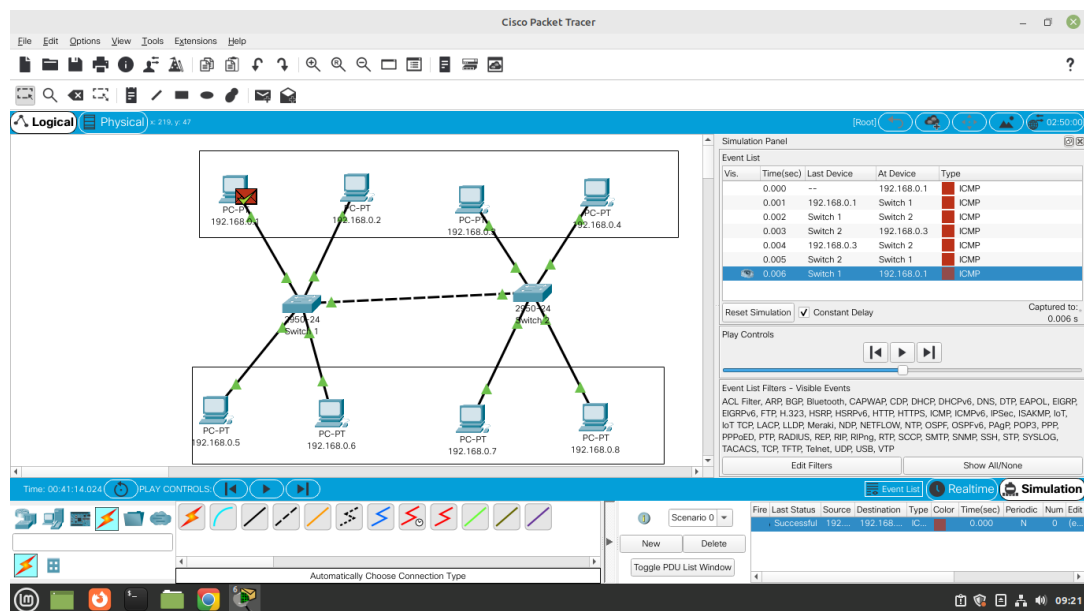
```
Switch(vlan)#
```

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9. VLAN – 3 (PDU Information) :



10.VLAN - 4 :



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11.VLAN – 4 (Database) :

Switch 2

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/1

FastEthernet0/2

FastEthernet0/3

FastEthernet0/4

FastEthernet0/5

FastEthernet0/6

FastEthernet0/7

VLAN Configuration

VLAN Number

VLAN Name

Add

Remove

VLAN No	VLAN Name
1	default
101	student
102	faculty
1002	fdi-default
1003	token-ring-default
1004	fdinet-default
1005	trnet-default

Equivalent IOS Commands

Warning: It is recommended to configure VLAN from config mode, as VLAN database mode is being deprecated. Please consult user documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#

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12.VLAN – 4(PDU Information) :

