

# **COMPUTER NETWORKS**

## **PRACTICUM 6**



**By:**

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**NIM: L200183043**

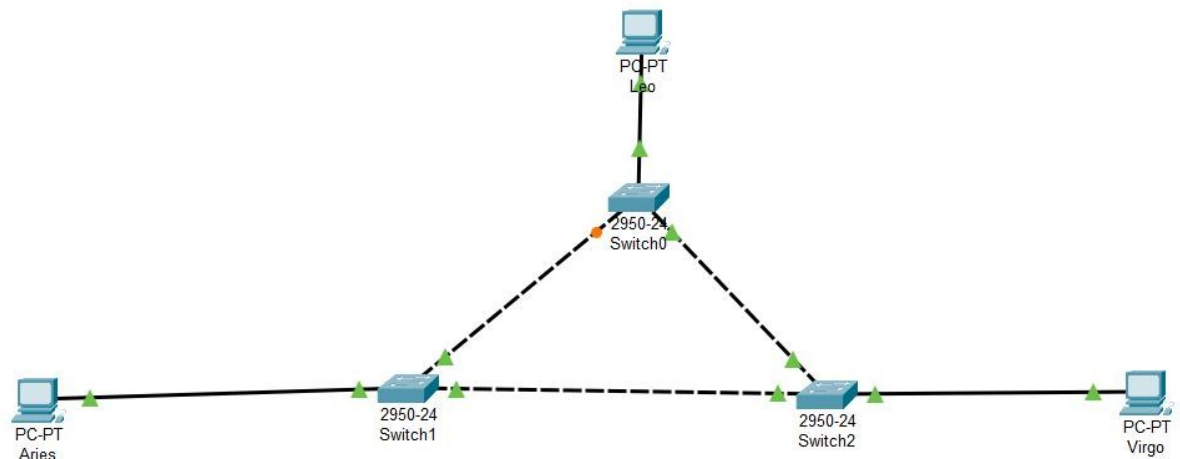
**INFORMATION TECHNOLOGY**

**FACULTY OF COMMUNICATION AND INFORMATICS**

**UNIVERSITY OF MUHAMMADIYAH SURAKARTA**

**2020**

## 1. Activity 1



Picture 1.1 Set of computer network

### a. Assignment 1A

Write the step of making topology!

#### Answer

- 1) Put 3 PC-PT and 3 Switch type 2950-24
- 2) Connect PC-PT and Switch with straight cable. and connect the switch with other switch using cross cables

### b. Assignment 2A

Write the step of giving switch name!

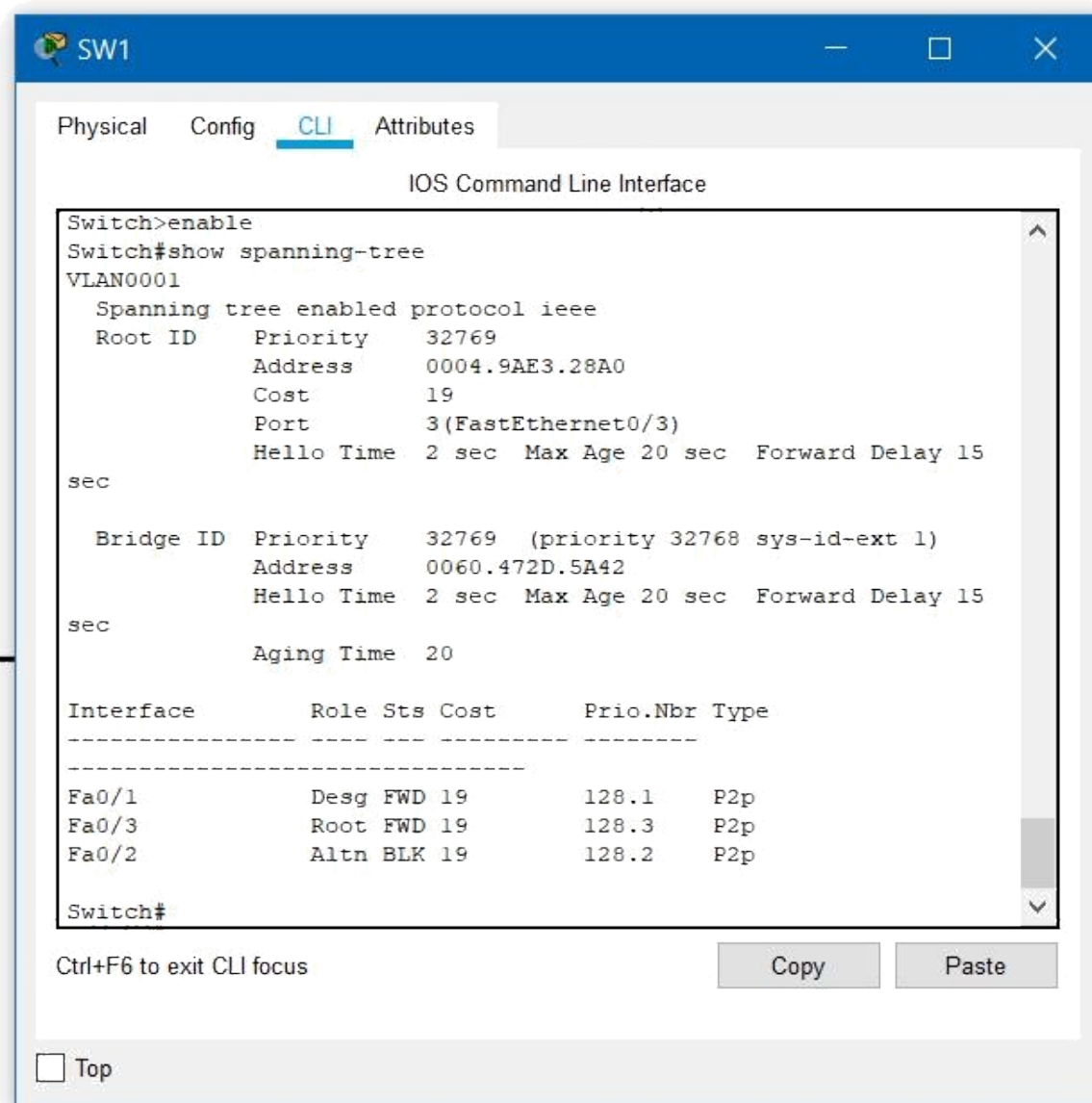
#### Answer

- 1) Click on the switch
- 2) Go to the config menu
- 3) Give a name in Display Name textfield

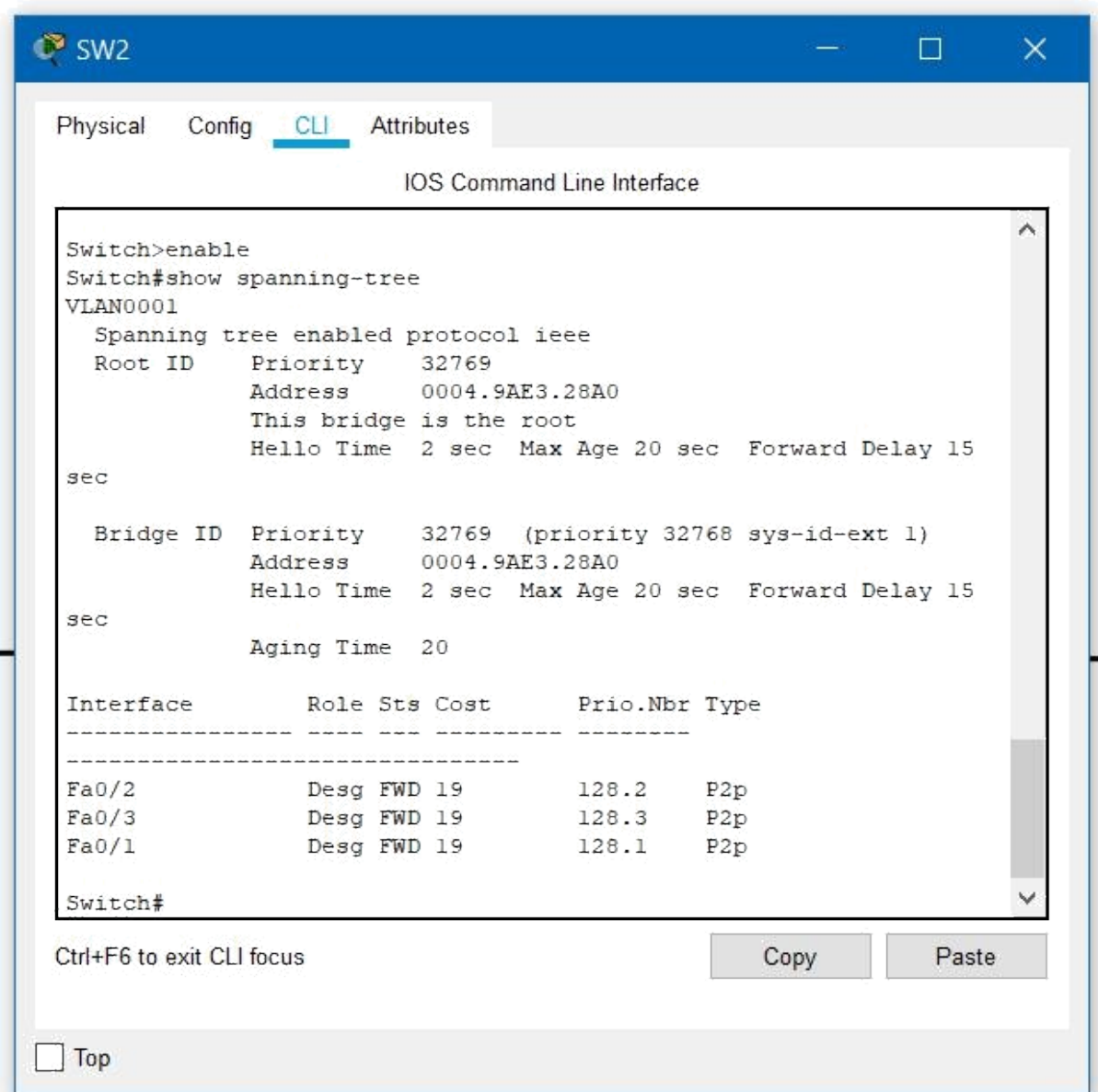
### c. Assignment 3A

By default, capture each STP switch status display (SW1, SW2, and SW3)!

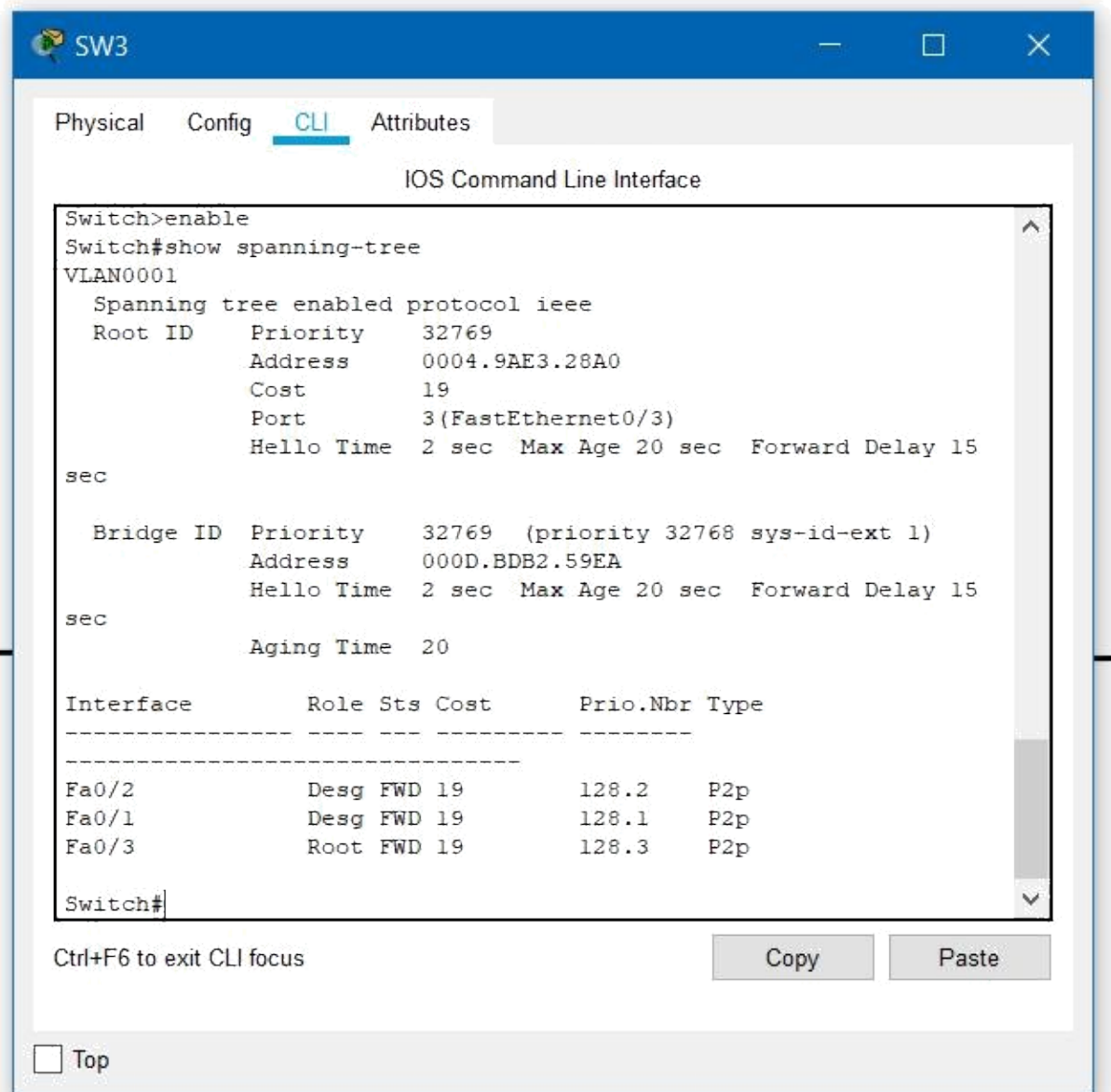
#### Answer



Picture 1.2. Result from SW1



Picture 1.3. Result from SW2



Picture 1.4. Result from SW3

**d. Assignment 3A**

For each switch, fill in the table!

**Answer**

SW1

| No | Variable             | Value          |
|----|----------------------|----------------|
| 1  | Priority             | 32769          |
| 2  | MAC Address          | 0004.9AE3.28A0 |
| 3  | Cost (0/1, 0/2, 0/3) | 19, 19, 19     |
| 4  | Hello Time           | 2              |
| 5  | Max Age              | 20             |
| 6  | Forward Delay        | 15             |

SW2

| No | Variable             | Value          |
|----|----------------------|----------------|
| 1  | Priority             | 32769          |
| 2  | MAC Address          | 0004.9AE3.28A0 |
| 3  | Cost (0/1, 0/2, 0/3) | 19, 19, 19     |
| 4  | Hello Time           | 2              |
| 5  | Max Age              | 20             |
| 6  | Forward Delay        | 15             |

SW3

| No | Variable             | Value          |
|----|----------------------|----------------|
| 1  | Priority             | 32769          |
| 2  | MAC Address          | 0004.9AE3.28A0 |
| 3  | Cost (0/1, 0/2, 0/3) | 19, 19, 19     |
| 4  | Hello Time           | 2              |
| 5  | Max Age              | 20             |
| 6  | Forward Delay        | 15             |

**e. Assignment 3B**

Under these defaults, which switches and ports are:

- 1) Become the root bridge
- 2) Become a designated bridge
- 3) Become the root port
- 4) Become a designated port

**Answer**

- 1) SW2
- 2) SW1 & SW3
- 3) Fa0/3
- 4) Fa0/1

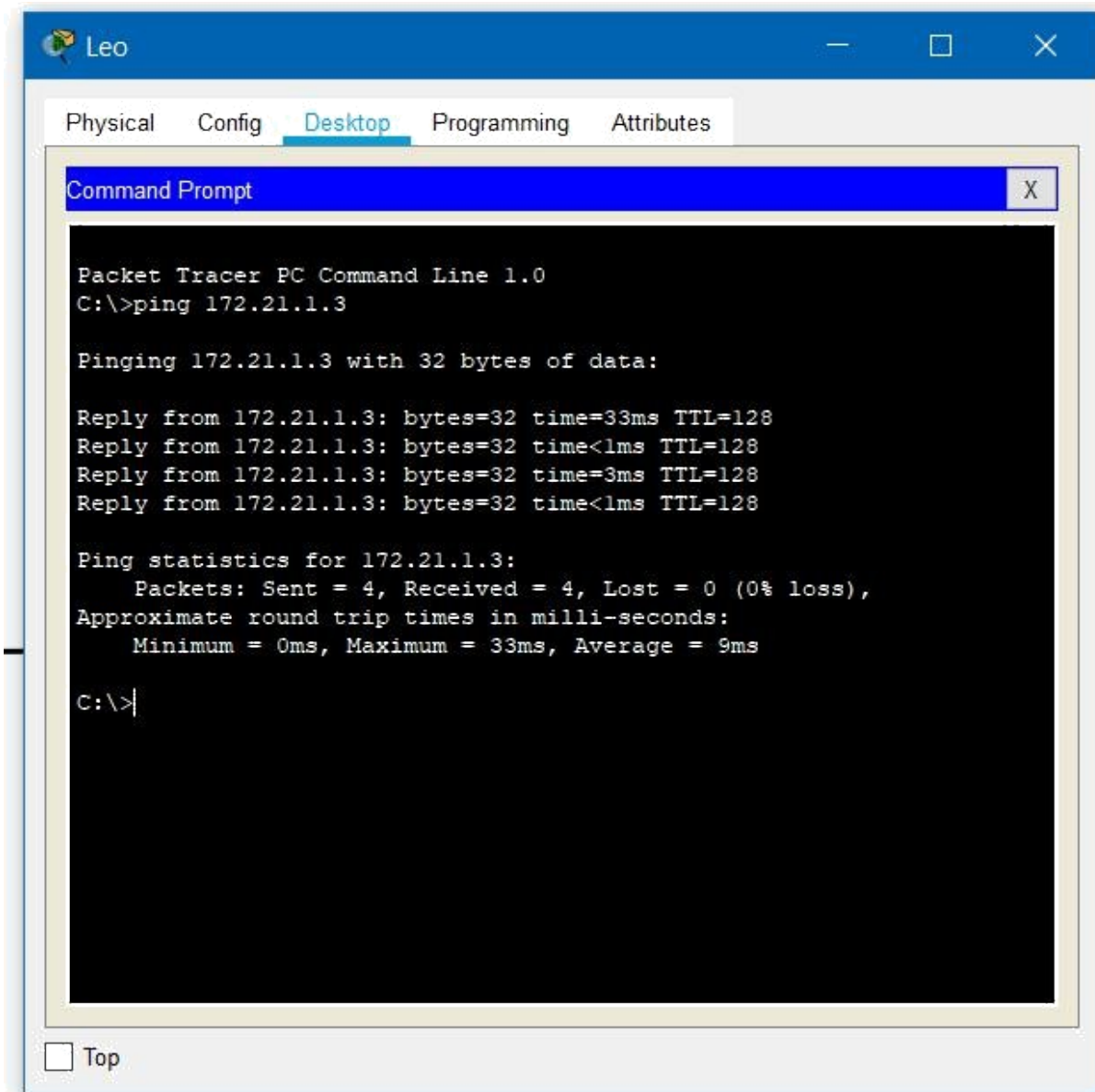
**f. Assignment 3C**

Under these default conditions, and which ports are:

- 1) Is in a forwarding state
- 2) Is in a blocking state
- 3) From PC Leo ping to PC Virgo

**Answer**

- 1) Fa0/1 and Fa0/3
- 2) Fa0/2
- 3)



Picture 1.5. Pinging from PC Leo to PC Virgo

**g. Assignment 3D**

Write the steps to do the ping command!

**Answer**

- 1) Click PC Leo
- 2) Go to desktop menu
- 3) Click Command Prompt
- 4) Type "ping 172.21.1.3"

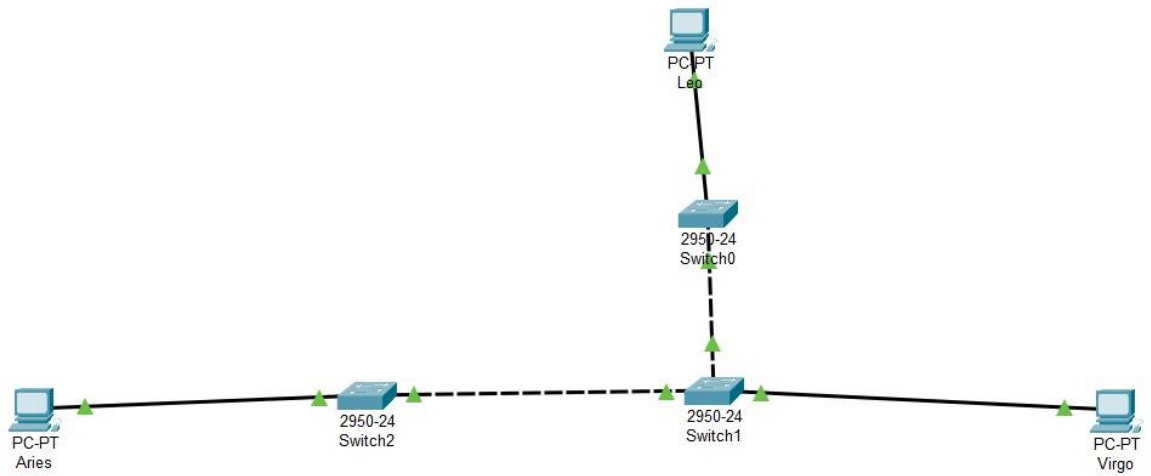
**h. Assignment 3E**

Write steps to save network configuration!

**Answer**

- 1) Click save button
- 2) Name it with "lab2"
- 3) Click save button

## 2. Activity 2



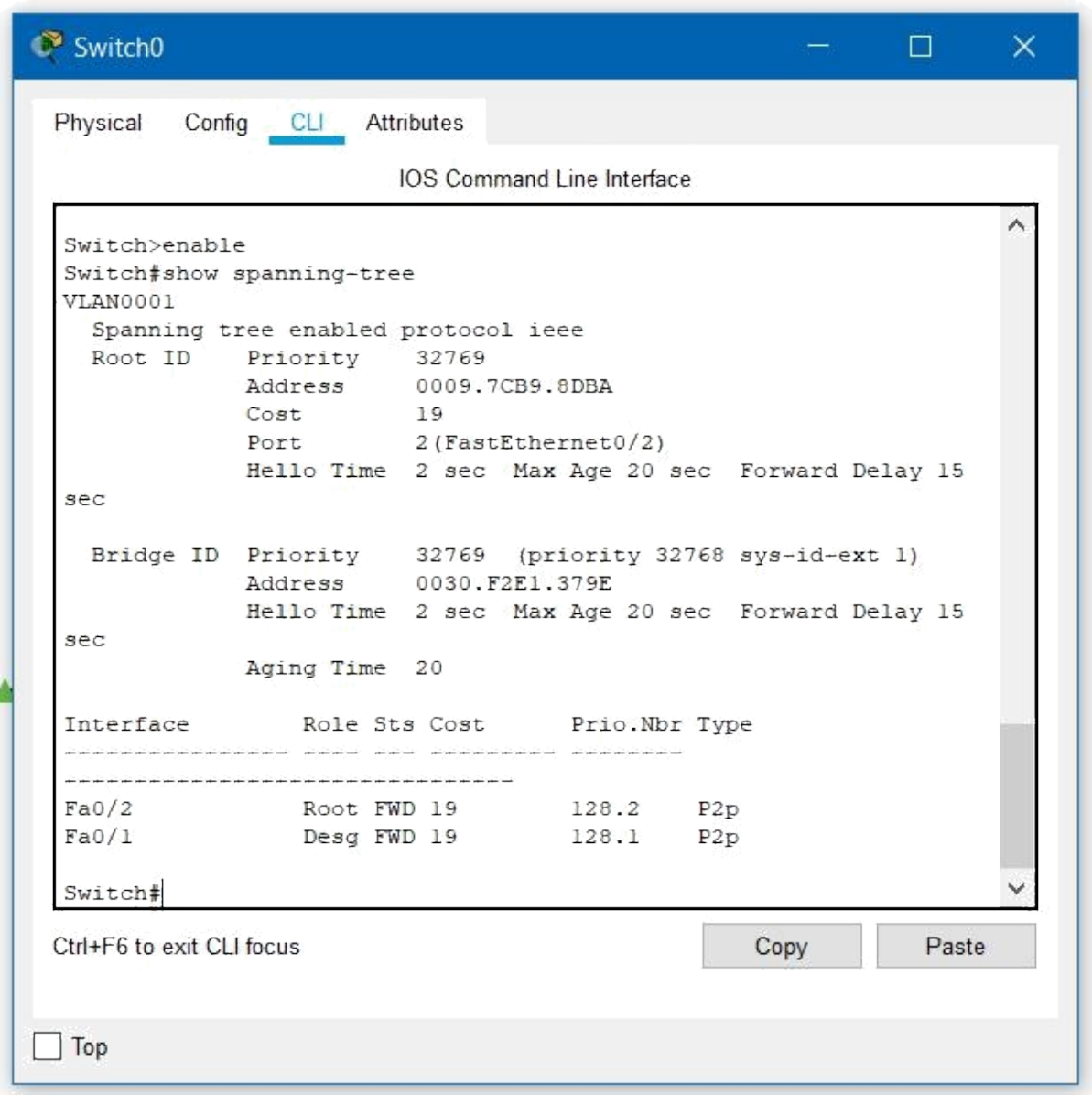
Picture 2.1. Set of computer network

### a. Assignment 3A

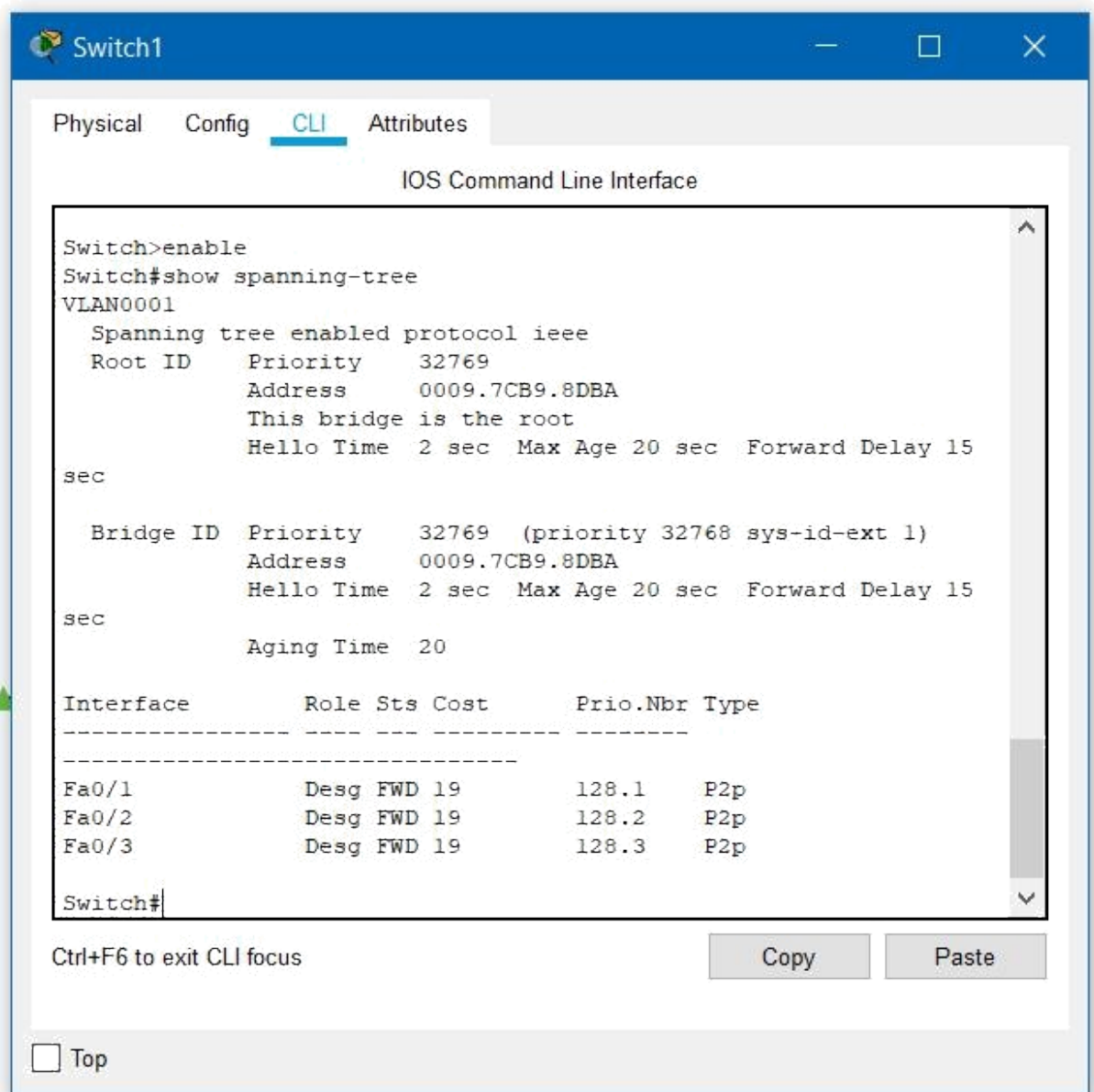
By default, capture each STP switch status display (SW1, SW2, and SW3)!

**Answer**

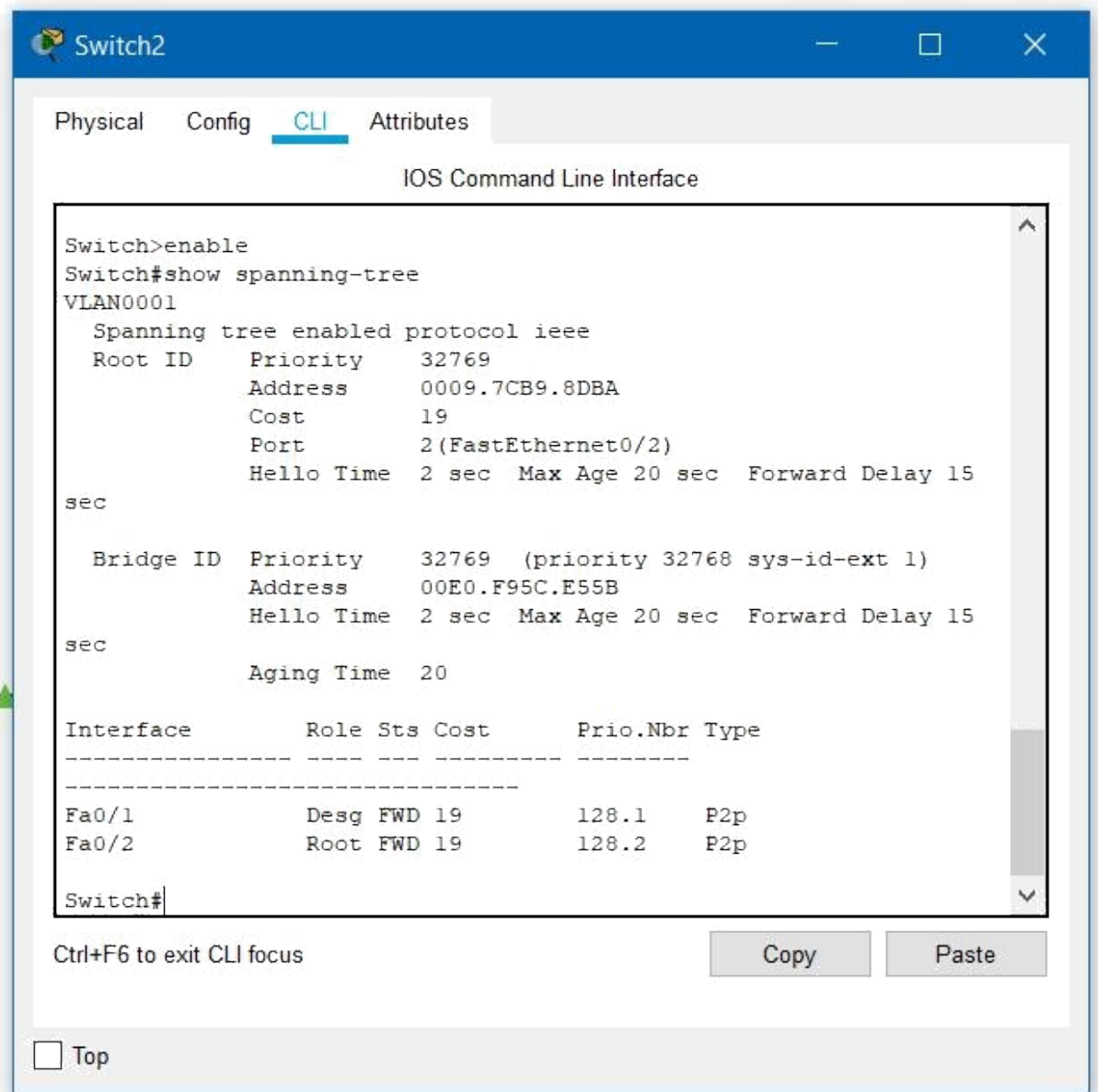




Picture 2.2. Result from SW1



Picture 2.3. Result from SW2



Picture 2.4. Result from SW3

**b. Assignment 3B**

For each switch, fill in the table!

**Answer**

**er**

SW1

| No | Variable        | Value          |
|----|-----------------|----------------|
| 1  | Priority        | 32769          |
| 2  | MAC Address     | 0009.7CB9.8DBA |
| 3  | Cost (0/1, 0/2) | 19, 19         |
| 4  | Hello Time      | 2              |
| 5  | Max Age         | 20             |
| 6  | Forward Delay   | 15             |

**SW2**

| No | Variable             | Value          |
|----|----------------------|----------------|
| 1  | Priority             | 32769          |
| 2  | MAC Address          | 0009.7CB9.8DBA |
| 3  | Cost (0/1, 0/2, 0/3) | 19, 19, 19     |
| 4  | Hello Time           | 2              |
| 5  | Max Age              | 20             |
| 6  | Forward Delay        | 15             |

**SW3**

| No | Variable        | Value          |
|----|-----------------|----------------|
| 1  | Priority        | 32769          |
| 2  | MAC Address     | 0009.7CB9.8DBA |
| 3  | Cost (0/1, 0/2) | 19, 19         |
| 4  | Hello Time      | 2              |
| 5  | Max Age         | 20             |
| 6  | Forward Delay   | 15             |

**c. Assignment 3C**

Under these defaults, which switches and ports are:

- 1) Become the root bridge
- 2) Become a designated bridge
- 3) Become the root port
- 4) Become a designated port

**Answer**

- 1) SW2
- 2) SW1 & SW3
- 3) Fa0/2
- 4) Fa0/1

**d. Assignment 3D**

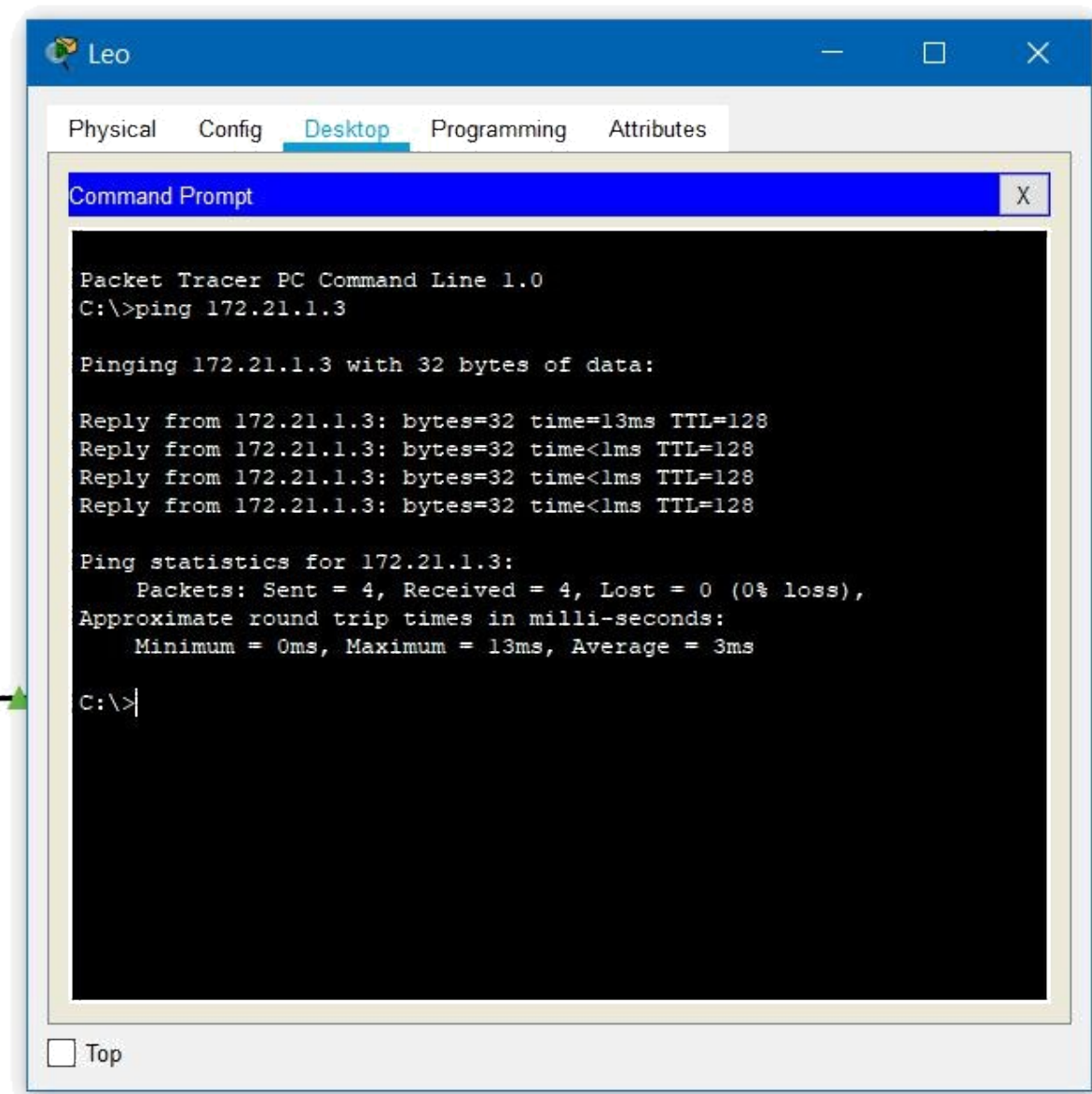
Under these default conditions, and which ports are:

- 1) Is in a forwarding state
- 2) Is in a blocking state
- 3) From PC Leo ping to PC Virgo

**Answer**

- 1) Fa0/1
- 2) None

3)



Picture 2.5. Pinging from PC Leo to PC Virgo

e. **Assignment 3D**

Write the steps to do the ping command!

**Answer**

- 1) Click PC Leo
- 2) Go to desktop menu
- 3) Click Command Prompt
- 4) Type "ping 172.21.1.3"