

# **COMPUTER NETWORKS**

## **PRACTICUM 6**



By :

**Name : Azie Melasari**

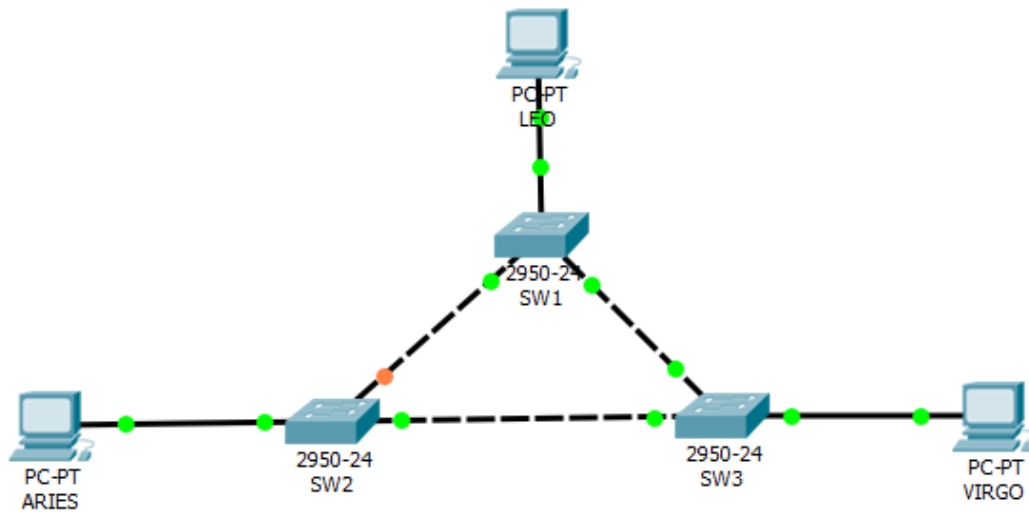
**NIM : L200183174**

**Class : X**

**INFORMATION TECHNOLOGY**  
**FACULTY OF COMMUNICATION AND INFORMATICS MUHAMMADIYAH**  
**UNIVERSITY OF SURAKARTA**  
**2020**

## Activity 1

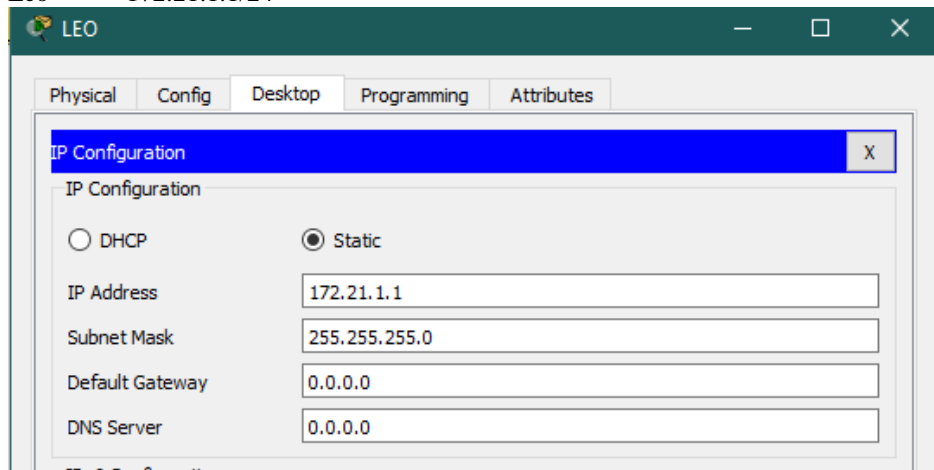
### 1A. Create Topology



### 2A. Given switch name

- Configuration each PC with IP Address :

- o Leo = 172.21.1.1/24



- o Aries = 172.21.1.2/24

ARIES

Physical Config Desktop Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.1.2

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

- Virgo = 172.21.1.3/24

VIRGO

Physical Config Desktop Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.1.3

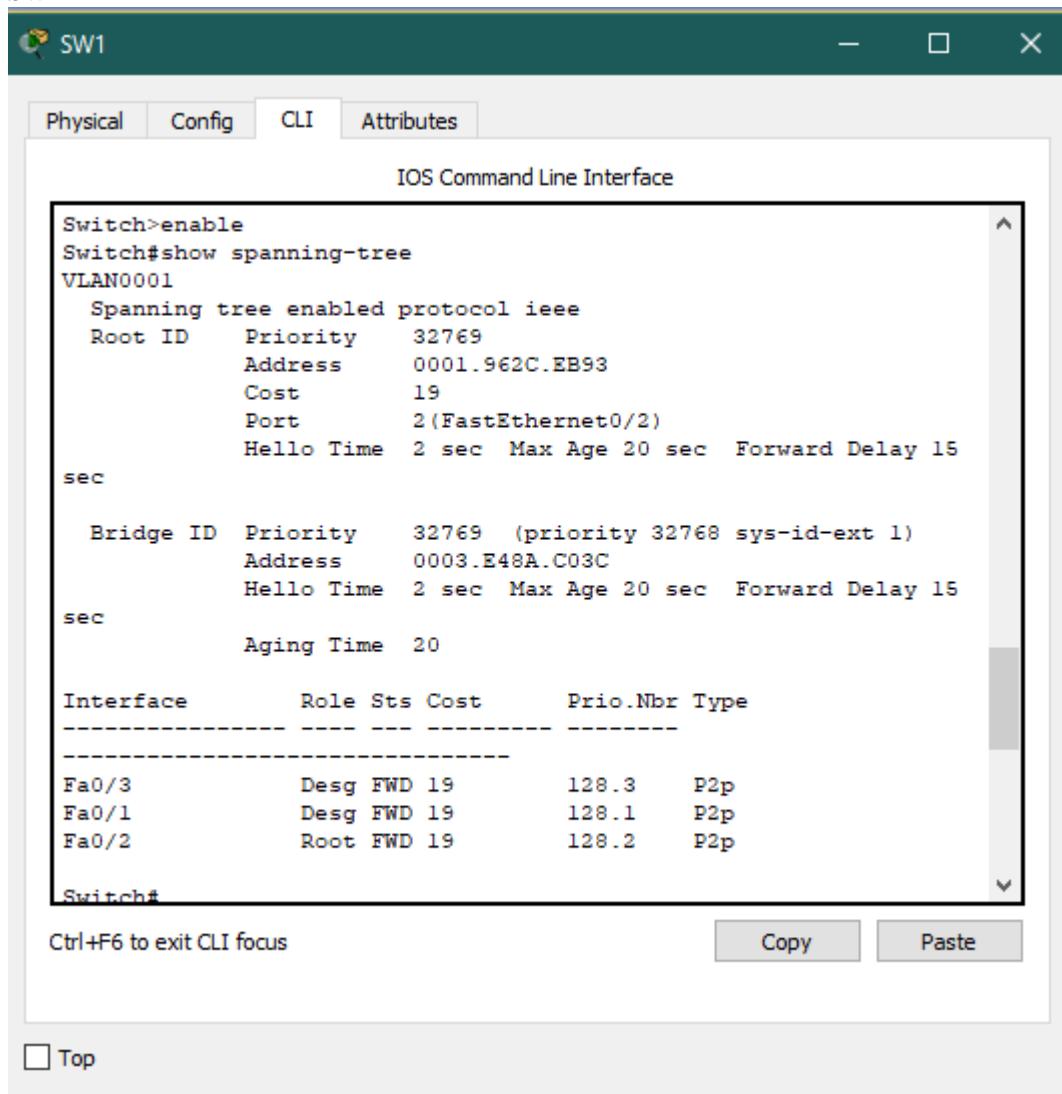
Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

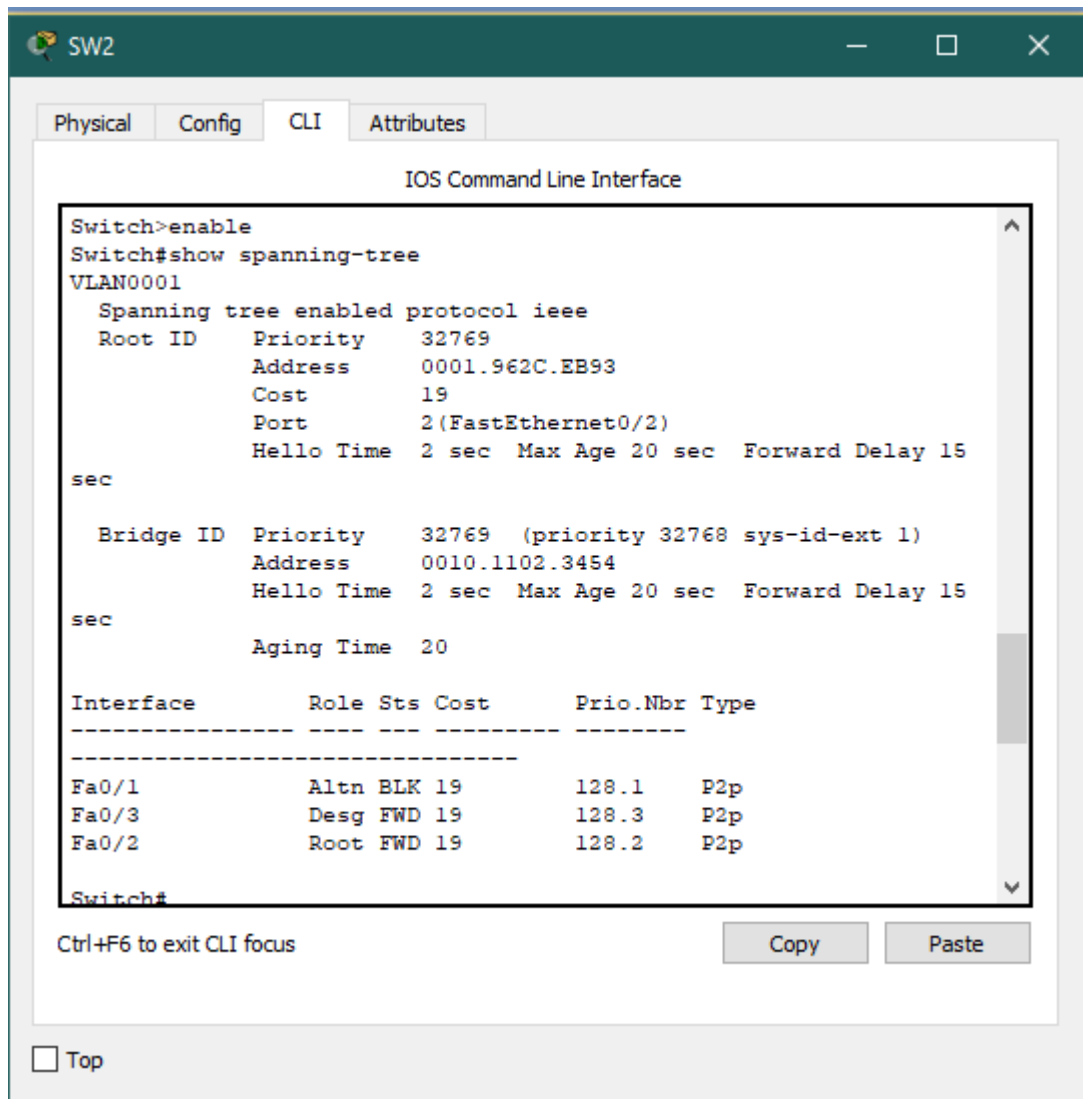
#### 4A. Capture status STP Switch display

- SW 1



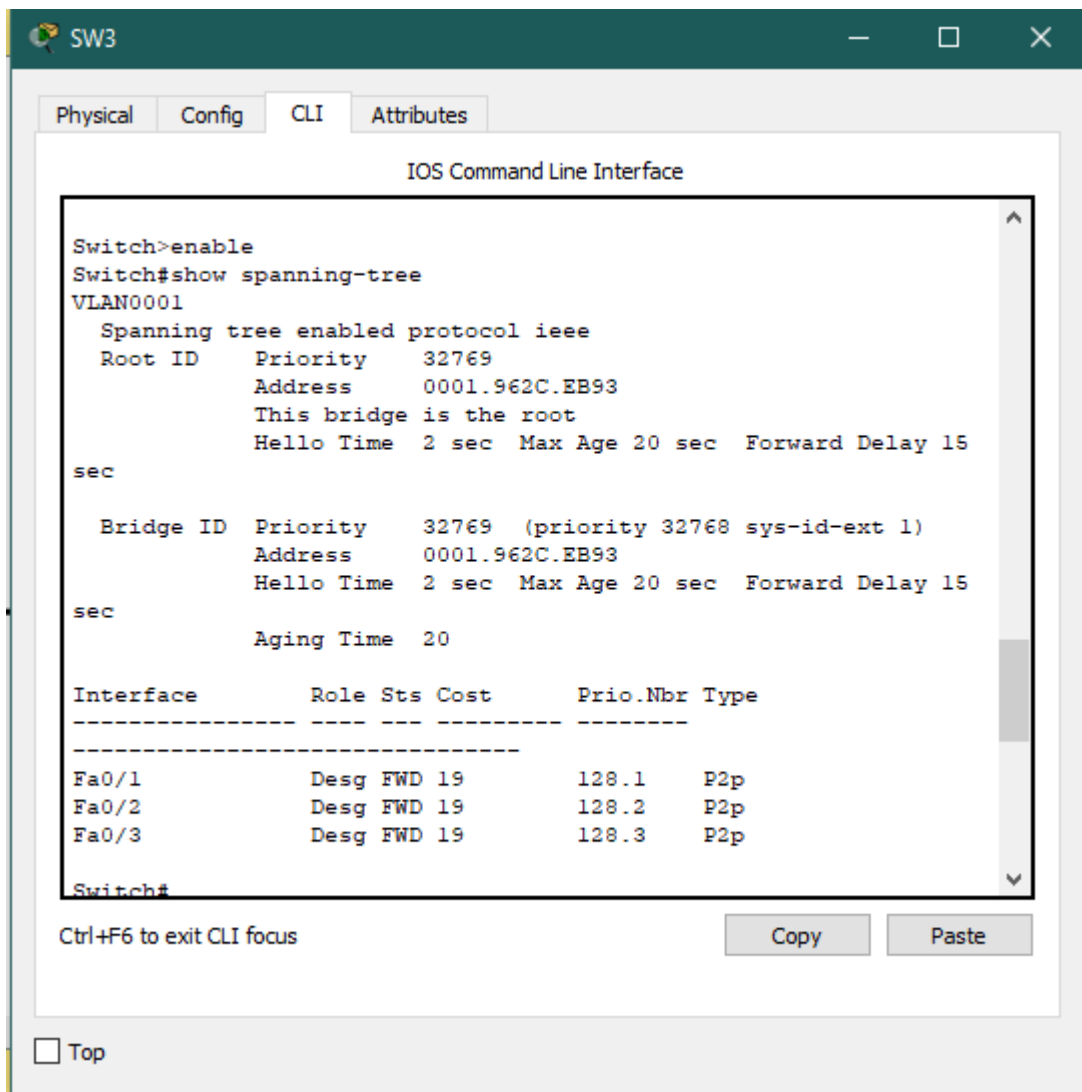
no	variable	value
1	Root id	32769 : 0001.962C.EB93
2	Priority	32769
3	Mac address	0003.E48A.C03C
4	Bridge id	32769 : 0003.E48A.C03C
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec

- SW2



no	variable	value
1	Root id	32769 : 0001.962c.eb93
2	Priority	32769
3	Mac address	0010.1102.3454
4	Bridge id	32769 : 0010.1102.3454
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec

- SW3



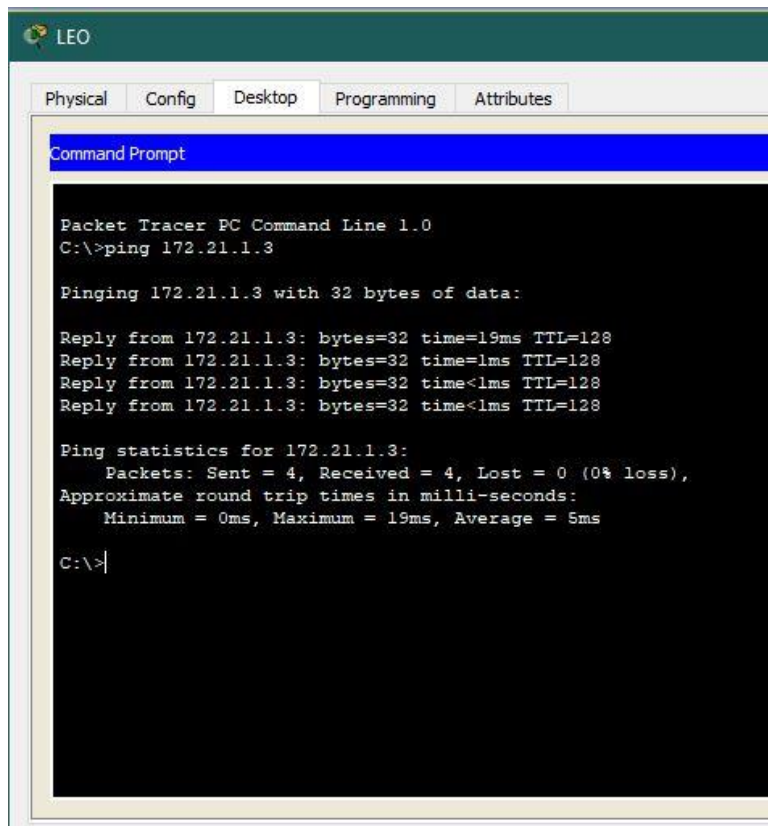
no	variable	Value
1	Root id	32769 : 0001.962C.EB93
2	Priority	32769
3	Mac address	0001.962C.EB93
4	Bridge id	32769 : 0001.962C.EB93
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec

4C.

- Root bridge = sw3
- Design bridge = sw1, sw2
- Root port = sw1 Fa0/2, Sw2 Fa0/2
- Design port = sw1 (Fa0/1, Fa0/3), sw2 Fa0/3, sw3 (Fa0/1, Fa0/2, Fa0/3)

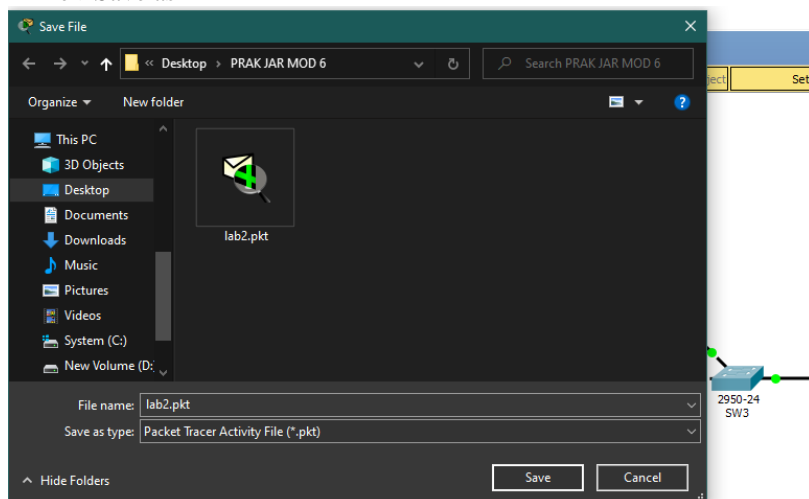
4D.

- Forwarding = Sw1(fa0/1, fa0/2, fa 0/3), sw2(fa 0/2, fa 0/3), sw3(fa0/1, fa0/2, fa0/3)
- Blocking = sw2 fa0/1
- Ping Leo to Virgo



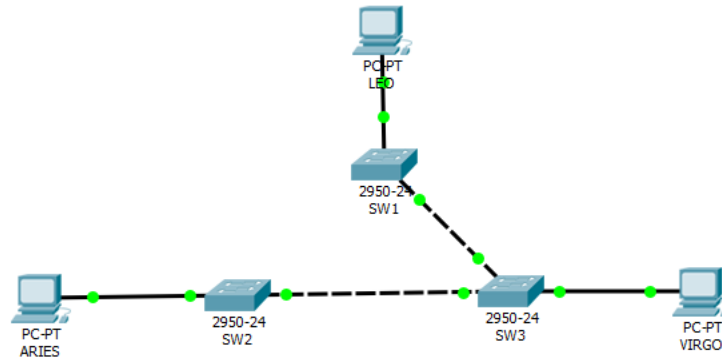
5A. Step ping leo to virgo  
= ping 172.21.1.3

6A. Step to save configuration network  
= File->Save as

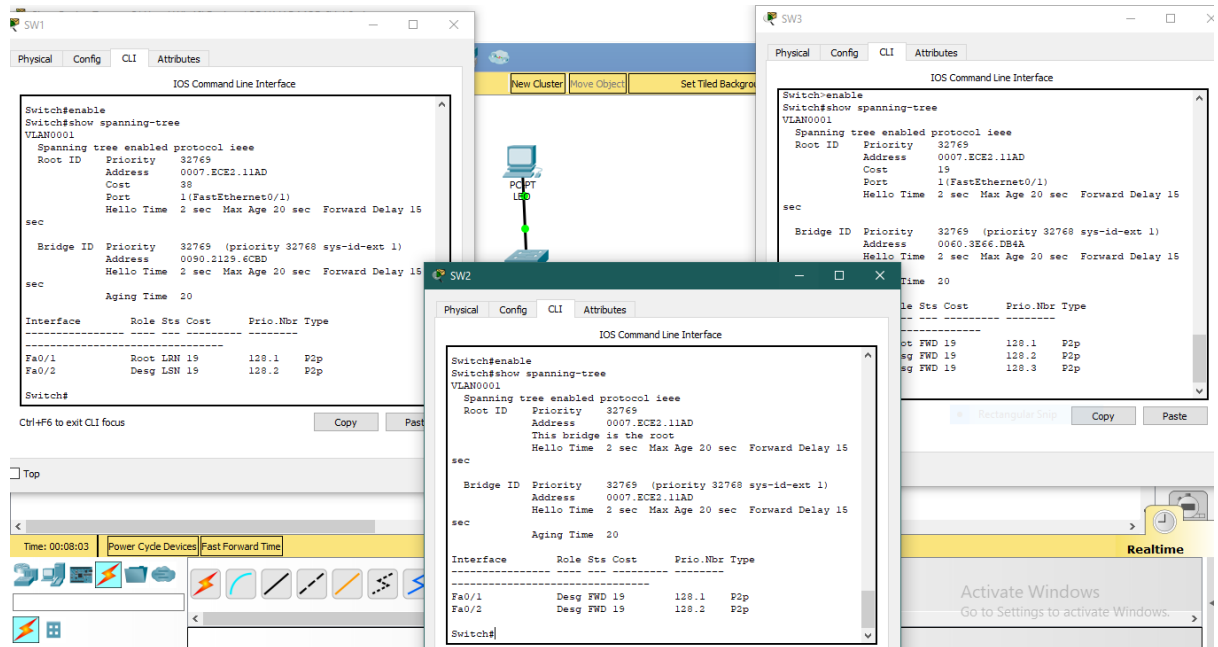


## Activity 2

a. Create topology



9A.



- SW1

no	variable	Value
1	Root id	32769 : 0007.ECE2.11AD
2	Priority	32769
3	Mac address	0090.2129.6CBD
4	Bridge id	32769 : 0090.2129.6CBD
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec

- SW 2

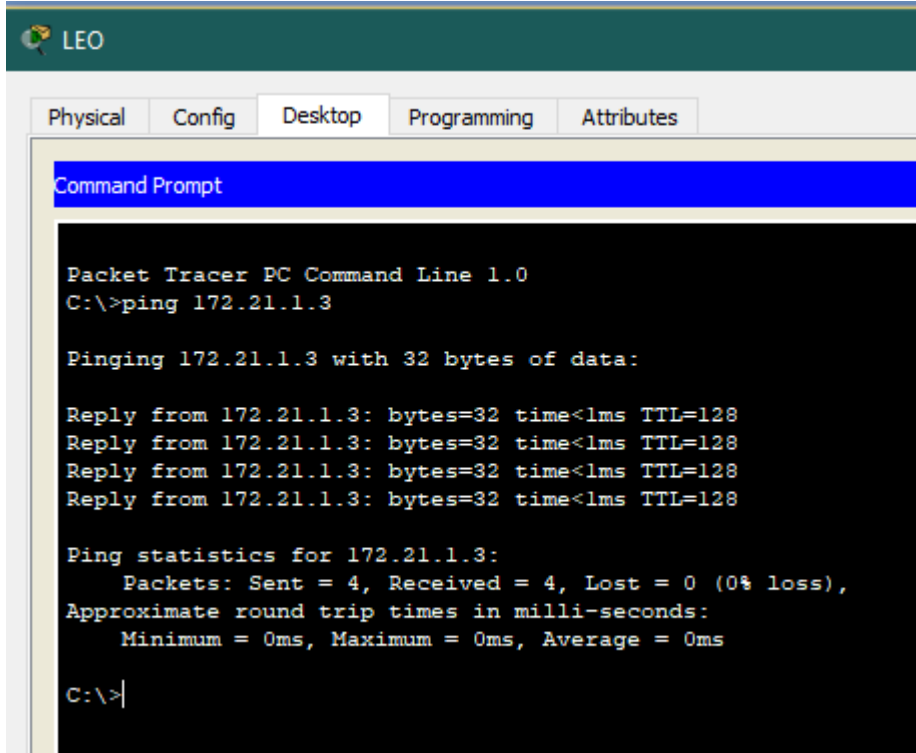
no	variable	Value
1	Root id	32769 : 0007.ECE2.11AD
2	Priority	32769
3	Mac address	0007.ECE2.11AD
4	Bridge id	32769 : 0007.ECE2.11AD
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec



- SW 3

no	variable	Value
1	Root id	32769 : 0007.ECE2.11AD
2	Priority	32769
3	Mac address	0060.3E66.DB4A
4	Bridge id	32769 : 0060.3E66.DB4A
5	Cost (0/1;0/2;0/3)	19;19;19
6	Hello time	2 sec
7	maxAge	20 sec
8	Forward Delay	15 sec

- Root bridge = sw2
- Design bridge = sw1, sw3
- Root port = sw1 fa0/1, sw3 fa0/1
- Design port = sw1 fa 0/2, sw2 (fa0/1,fa0/2), sw3 (fa0/2, fa0/3)
- Forwarding = sw2 (fa0/1,fa0/2), sw3(fa0/1, fa0/2, fa0/3)
- Blocking = -
- Learning = sw1 fa0/1
- Listening = sw 1 fa0/2
- Ping Leo to Virgo



LEO

Physical Config Desktop Programming Attributes

Command Prompt

```

Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|

```