1. **Keg 1**
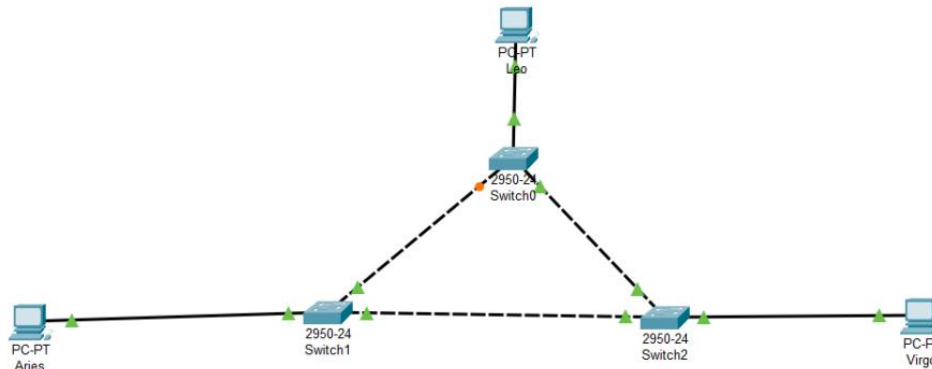

1A = Set up 3 switch type 2950-24 and 3 PC-PT. Then connect them all with cables.(PC-PT to Switch [Straight], Switch to Switch [Cross]).

2A = Change the name of the switch by double click and go to config menu. Change the switches to Switch0, Switch1, Switch2.
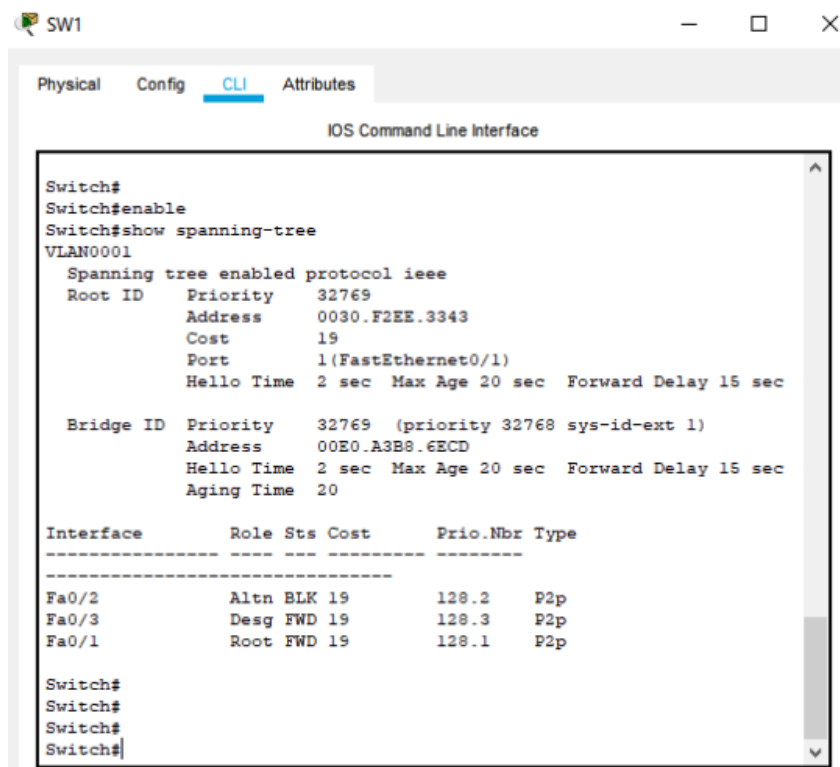
PC ip :
Leo = 172.21.1.1/24
Aries = 172.21.1.2/24
Virgo = 172.21.1.3/24

4A = Status STP Switch

SW 2

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Switch>enable
Switch#spt
Translating "spt"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer
address

Switch#enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             This bridge is the root
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0030.F2EE.3343
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time   20

Interface         Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- --------
-------------------------------
Fa0/1             Desg FWD 19        128.1    P2p
Fa0/3             Desg FWD 19        128.3    P2p
Fa0/2             Desg FWD 19        128.2    P2p

Switch#
```

SW3

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Switch>enable
Switch#show spanning tree
                       ^
% Invalid input detected at '^' marker.

Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             Cost        19
             Port        2(FastEthernet0/2)
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0060.3EA1.7E03
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time   20

Interface         Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- --------
-------------------------------
Fa0/1             Desg FWD 19        128.1    P2p
Fa0/2             Root FWD 19        128.2    P2p
Fa0/3             Desg FWD 19        128.3    P2p

Switch#
```

4B =

SW 1

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	00E0.A3B8.6ECD
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW 2

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0030.F2EE.3343
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW 3

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0060.3EA1.7E03
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

4C =

- Root Bridge : SW2
- Designated Bridge : SW1, SW3
- Root Port : SW1 FastEthernet0/1 , SW3 (FastEthernet0/2)
- Designated Port : SW1 = Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/2,Fa0/3

4D =

- Forwarding : SW1 = Fa0/1,Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/1,Fa0/2,Fa0/3
- Blocking : SW1 = Fa0/2

5A =

6A = Ctrl+S, Set name to "lab2", Save

2. Keg 2
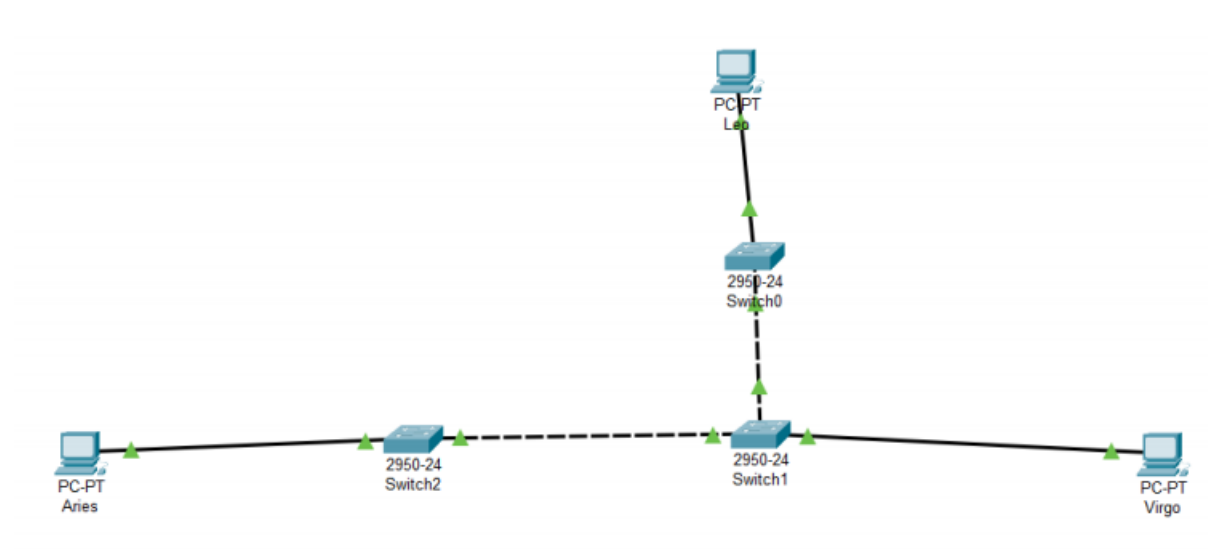
PC ip :
Leo = 172.21.1.1/24
Aries = 172.21.1.2/24
Virgo = 172.21.1.3/24

4A =

SW 2

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to down


Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             This bridge is the root
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0030.F2EE.3343
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- --------
--------------------------------
Fa0/3            Desg FWD 19        128.3    P2p
Fa0/2            Desg FWD 19        128.2    P2p

Switch#s
```

SW3

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             Cost        19
             Port        2(FastEthernet0/2)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0060.3EA1.7E03
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- --------
--------------------------------
Fa0/1            Desg FWD 19        128.1    P2p
Fa0/2            Root FWD 19        128.2    P2p
Fa0/3            Desg FWD 19        128.3    P2p

Switch#
```

4B =

SW1

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	00E0.A3B8.6ECD
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW2

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0030.F2EE.3343
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW3

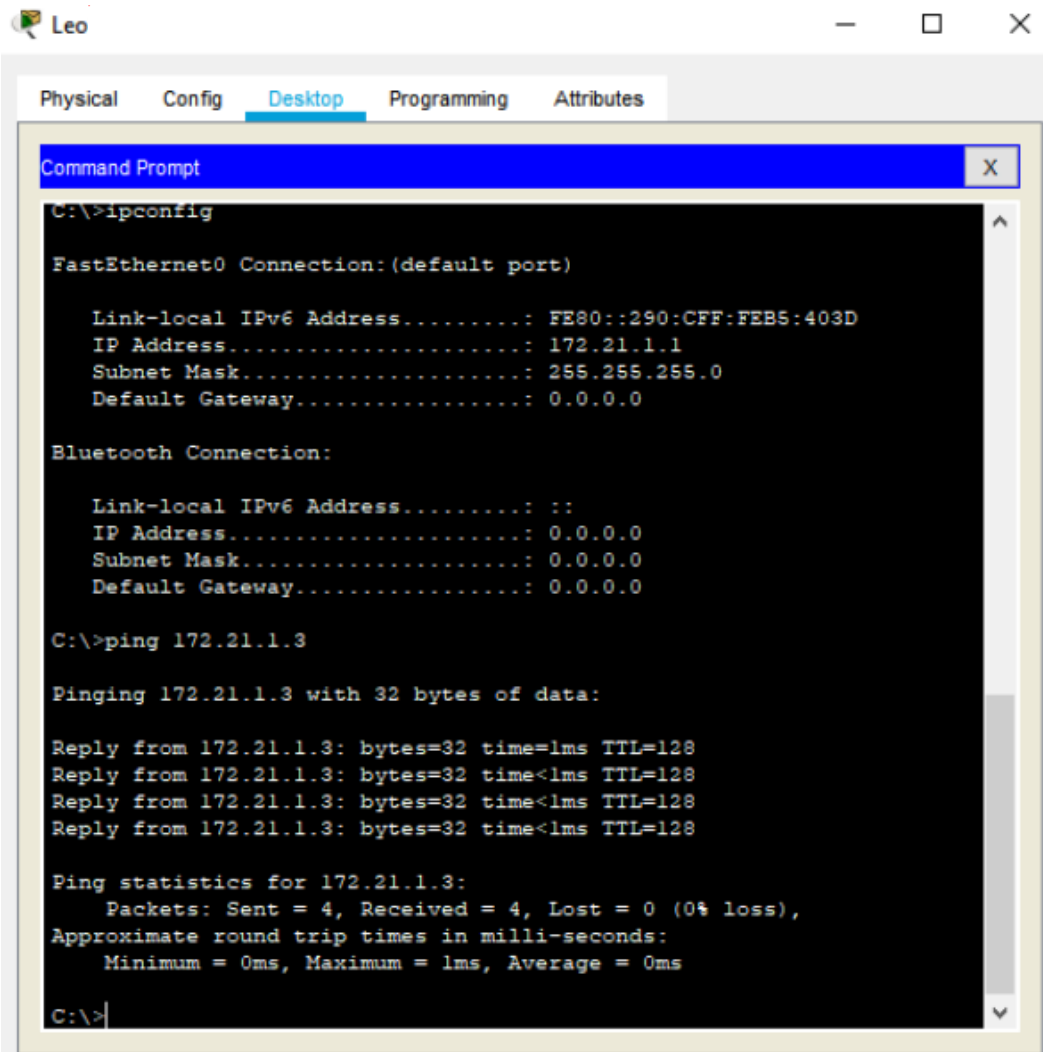| No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0060.3EA1.7E03
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

4C =

- Root Bridge : SW2
- Designated Bridge : SW1, SW3
- Root Port : SW1 FastEthernet0/2 , SW3 (FastEthernet0/2)
- Designated Port : SW1 = Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/3

4D =

- Forwarding : SW1 = Fa0/1,Fa0/3 , SW2 = Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/1,Fa0/2,Fa0/3
- Blocking : Has no blocking port

5A =