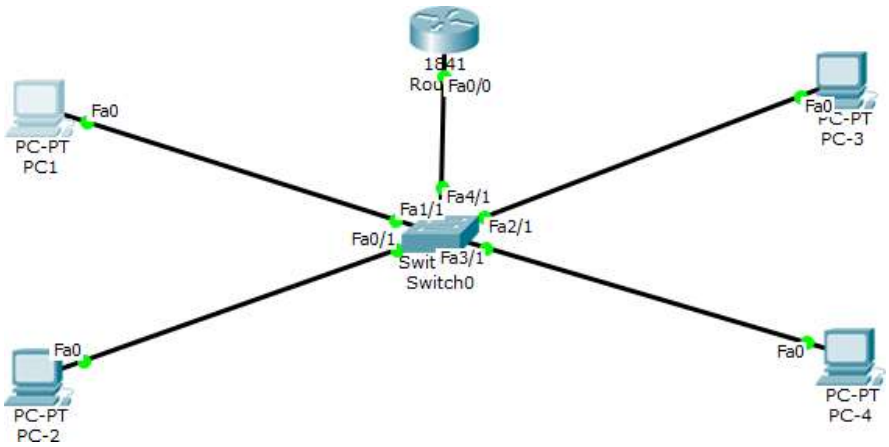
# CN LAB-11 (18/08/2023)

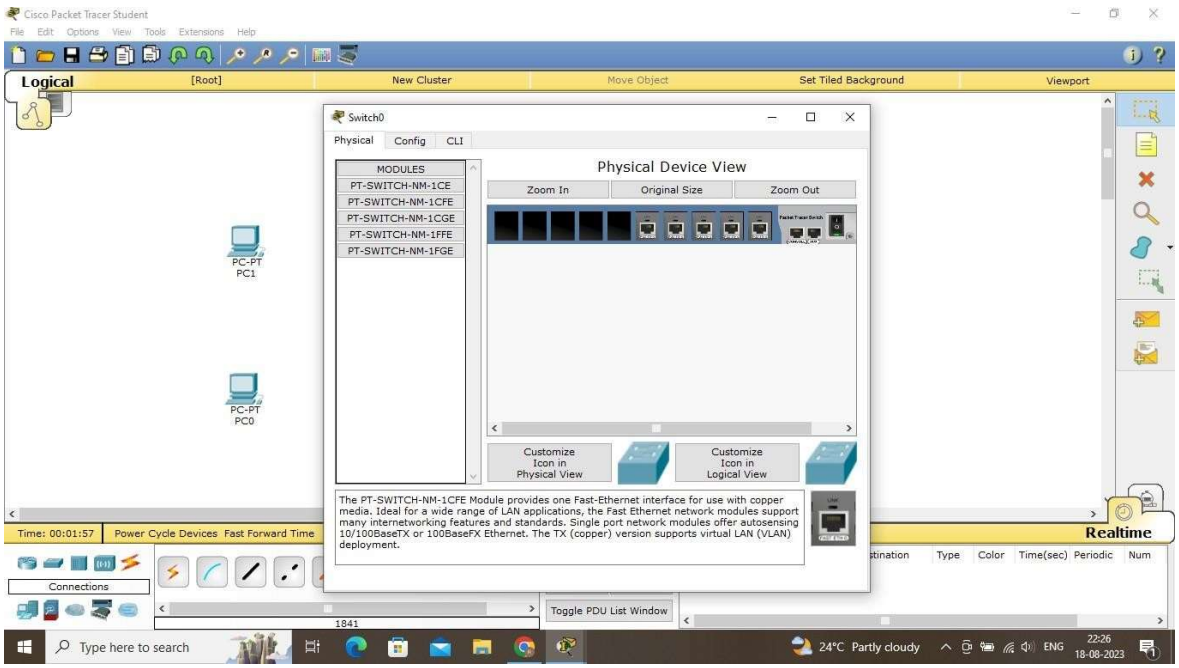
## USN: 1BM21CS271

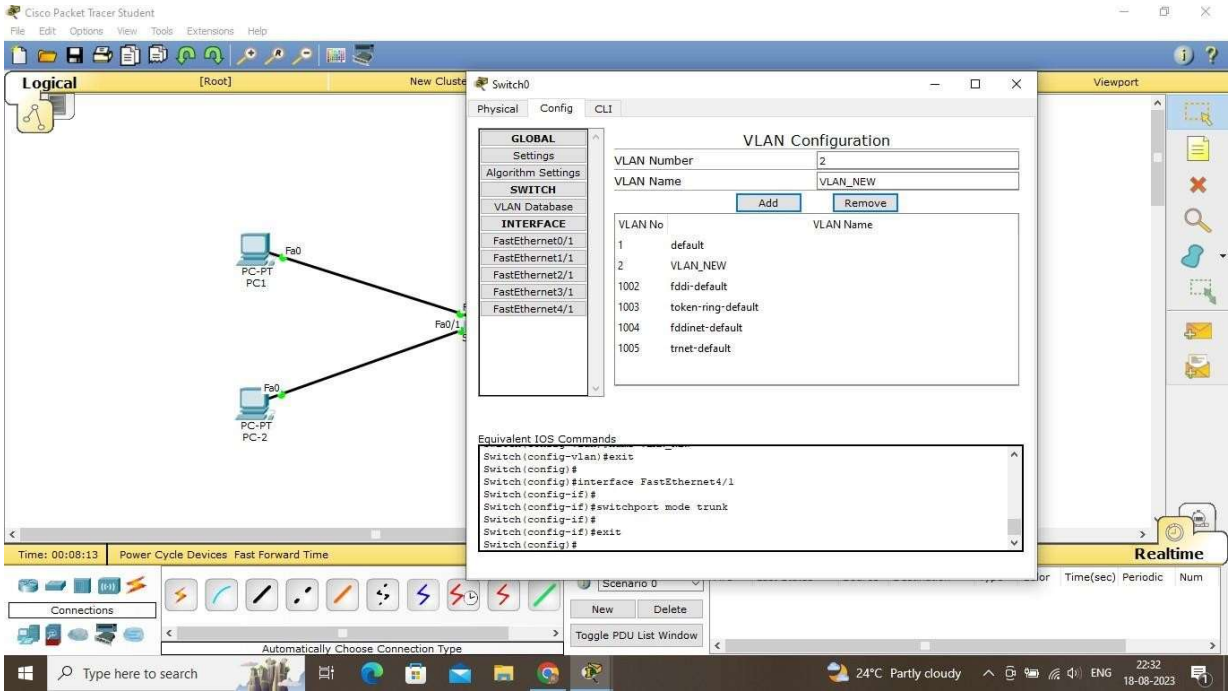
## Depict VLAN in a topology.

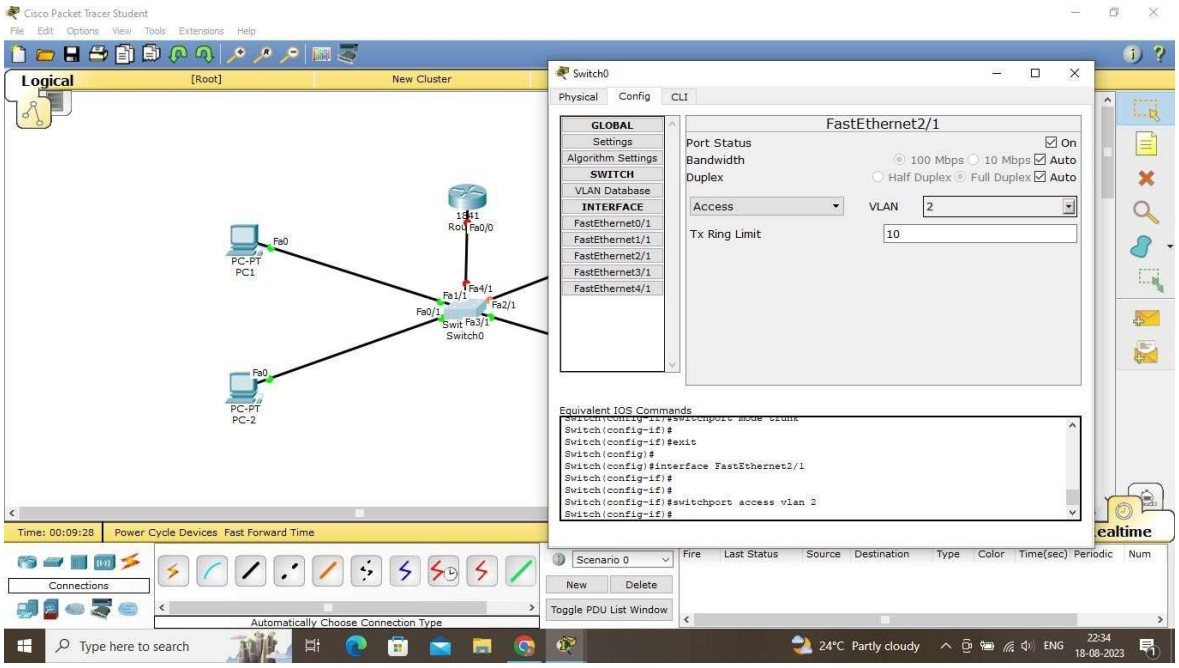
TOPOLOGY:

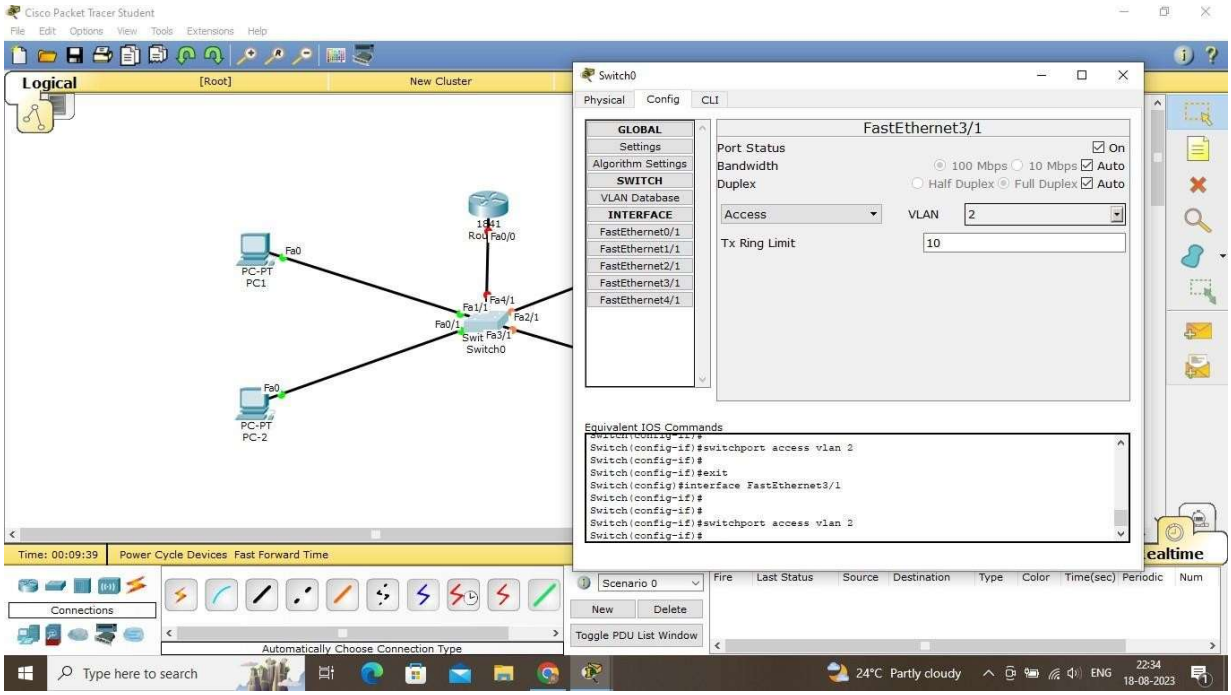


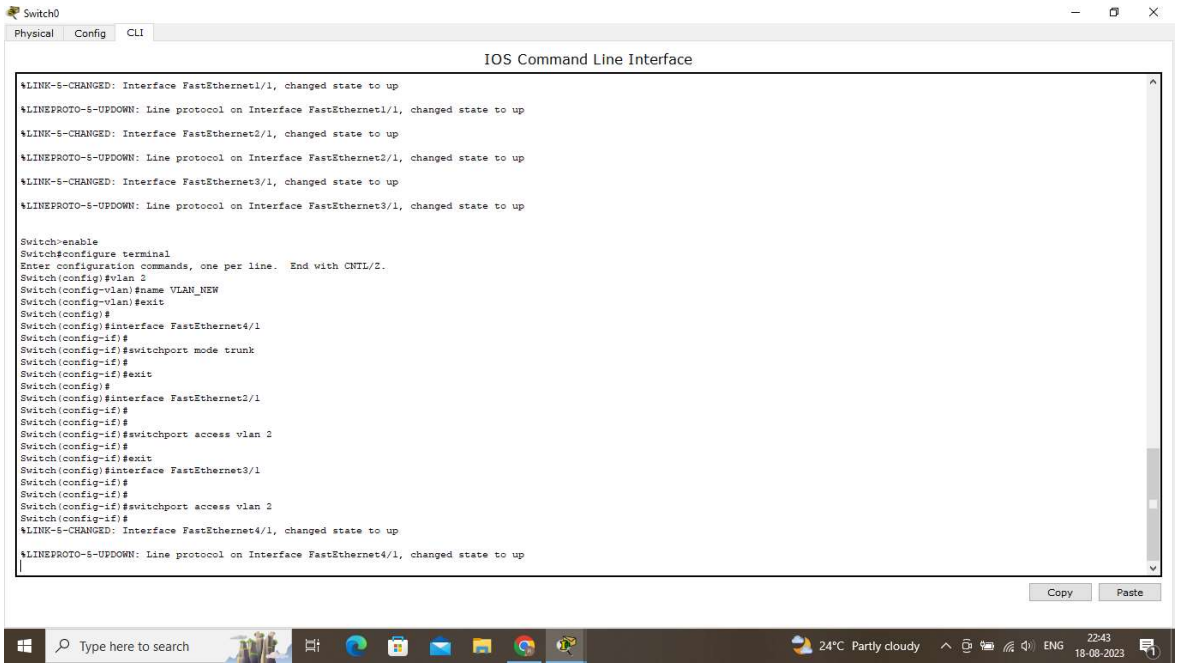

CONFIG SWITCH & VLAN DATABASE:



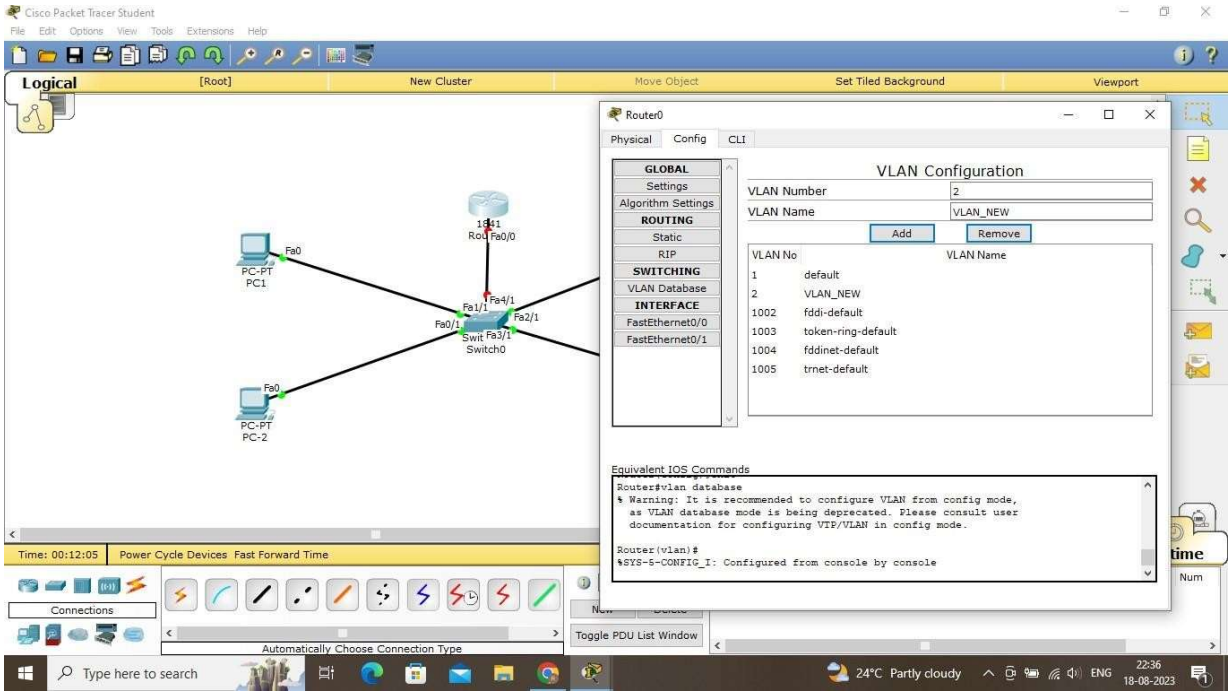

Cisco Packet Tracer Student
Logical
[Root]
Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
VLAN Configuration
VLAN Number
2
VLAN Name
VLAN_NEW
Add
Remove
VLAN No
VLAN Name
1 default
2 VLAN_NEW
1002 fddi-default
1003 token-ring-default
1004 fddinet-default
1005 trnet-default
Equivalent IOS Commands
Switch(config-vlan)#exit
Switch(config)#
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
Switch(config-if)#switchport mode trunk
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
PC-PT PC1
PC-PT PC-2
Fa0
Fa0/1
Time: 00:08:13
Power Cycle Devices Fast Forward Time
Realtime
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
24°C Partly cloudy
ENG
22:32
18-08-2023

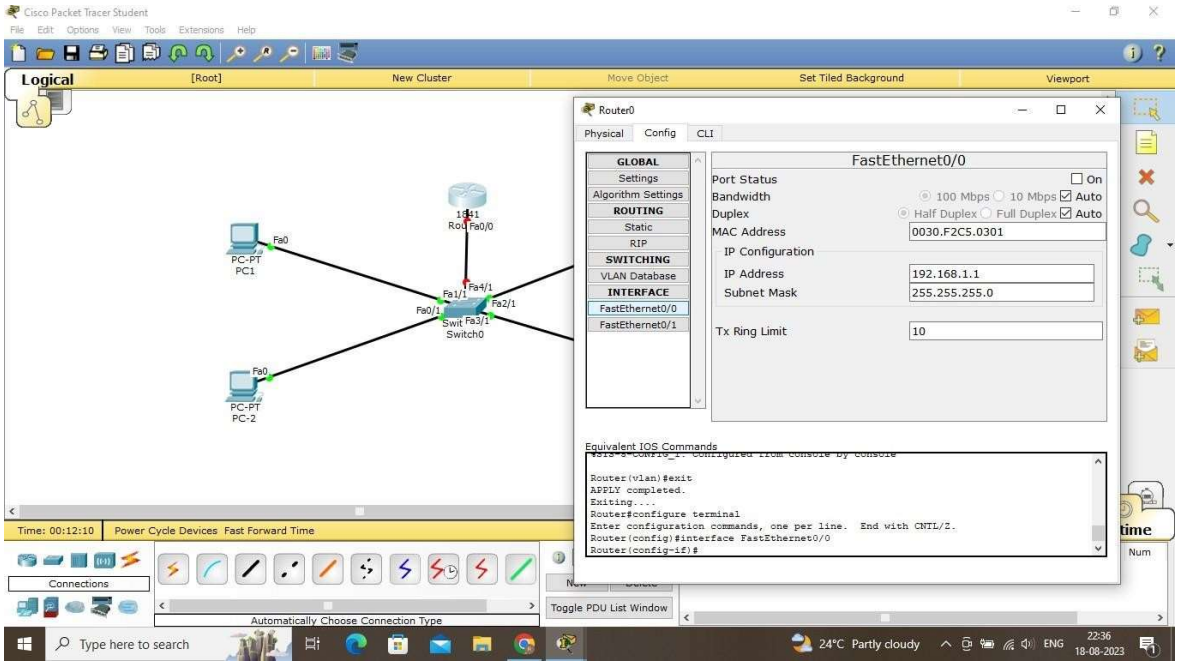

Cisco Packet Tracer Student
Logical
[Root]
New Cluster
Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
FastEthernet2/1
Port Status
On
Bandwidth
100 Mbps 10 Mbps Auto
Duplex
Half Duplex Full Duplex Auto
Access
VLAN
2
Tx Ring Limit
10
Equivalent IOS Commands
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
PC-PT PC1
PC-PT PC-2
Fa0
Fa0/0
Fa0/1
Fa1/1
Fa2/1
Fa3/1
Fa4/1
Time: 00:09:28
Power Cycle Devices Fast Forward Time
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
24°C Partly cloudy
ENG
22:34
18-08-2023

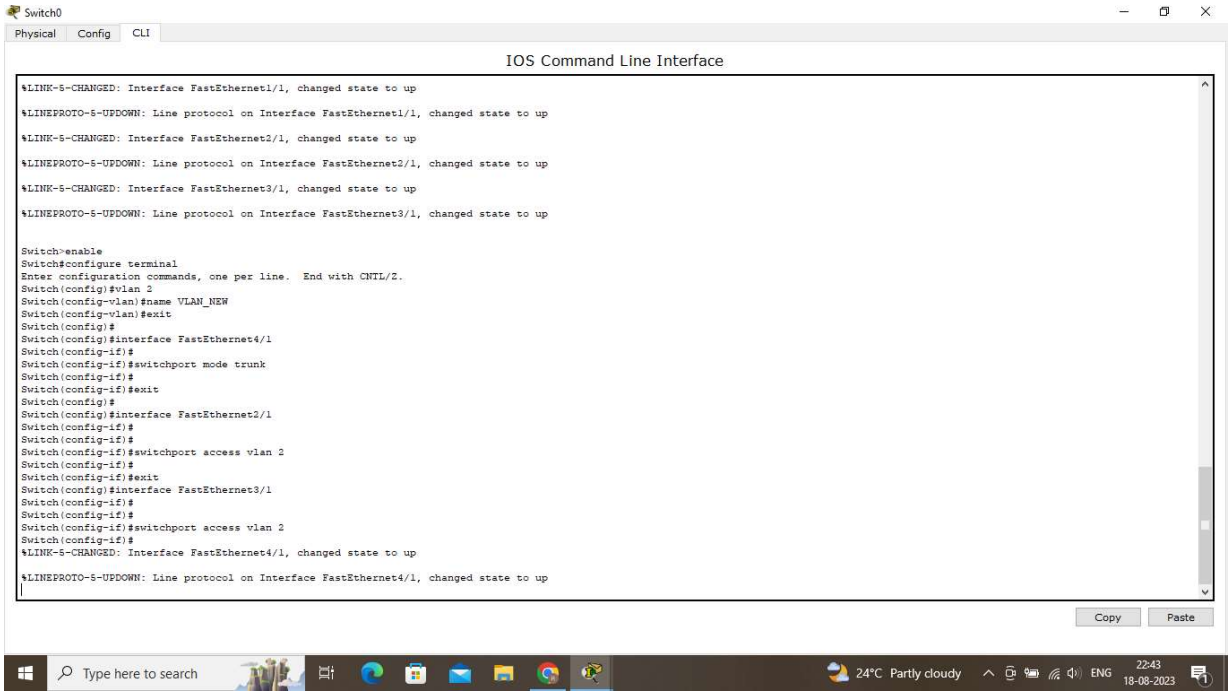

Cisco Packet Tracer Student
File Edit Options View Tools Extensions Help
Logical
[Root]
New Cluster
Switch0
Physical
Config
CLI
GLOBAL
Settings
Algorithm Settings
SWITCH
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet4/1
FastEthernet3/1
Port Status
On
Bandwidth
100 Mbps 10 Mbps Auto
Duplex
Half Duplex Full Duplex Auto
Access
VLAN
2
Tx Ring Limit
10
Equivalent IOS Commands
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
PC-PT PC1
PC-PT PC-2
Switch0
Fa0
Fa0/0
Fa0/1
Fa1/1
Fa2/1
Fa3/1
Fa4/1
Time: 00:09:39
Power Cycle Devices Fast Forward Time
Connections
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Type here to search
24°C Partly cloudy
ENG
22:34
18-08-2023

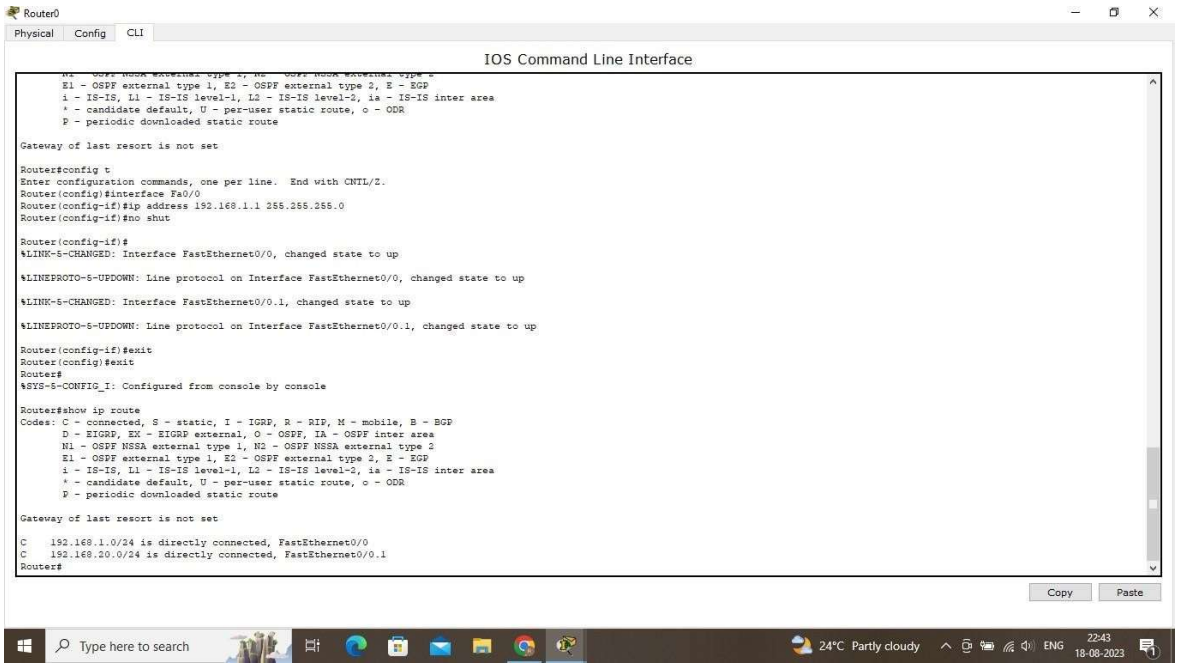
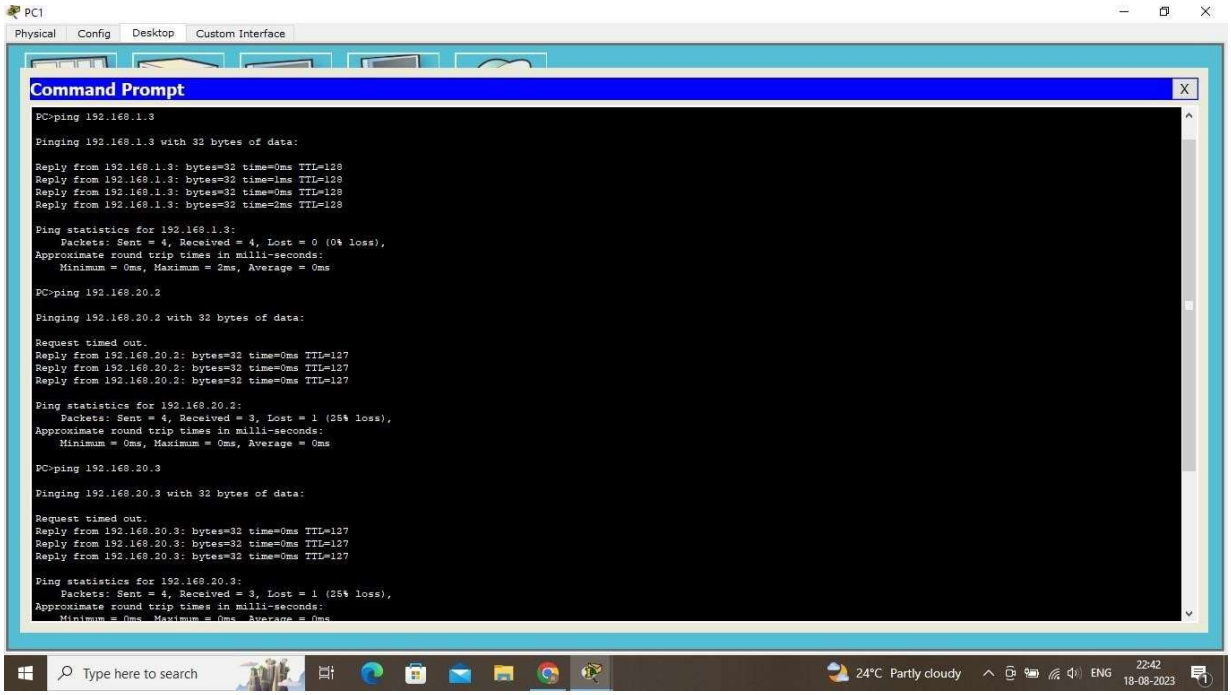
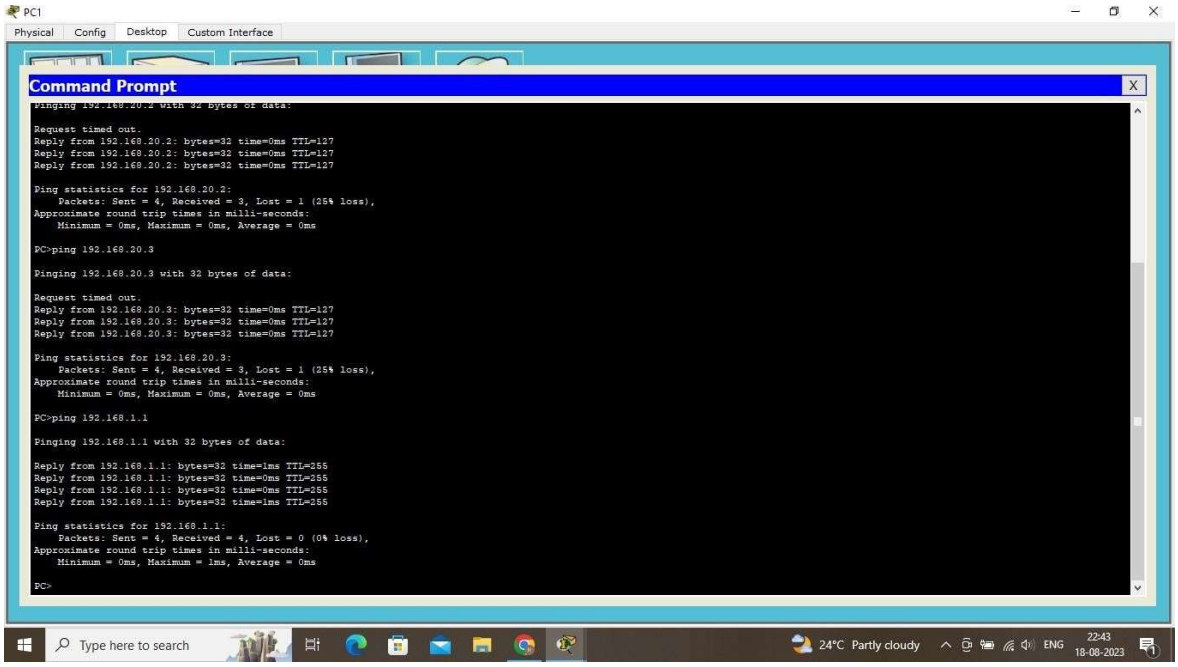

Switch0
Physical
Config
CLI
IOS Command Line Interface
%LINK-5-CHANGED: Interface FastEthernet1/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet2/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet2/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet3/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet3/1, changed state to up
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name VLAN_NEW
Switch(config-vlan)#exit
Switch(config)#
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
Switch(config-if)#switchport mode trunk
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/1, changed state to up
Copy
Paste
Type here to search
24°C Partly cloudy
ENG
22:43
18-08-2023

CONFIG ROUTER:




Switch0
Physical
Config
CLI
IOS Command Line Interface
%LINK-5-CHANGED: Interface FastEthernet1/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet2/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet2/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet3/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet3/1, changed state to up
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name VLAN_NEW
Switch(config-vlan)#exit
Switch(config)#
Switch(config)#interface FastEthernet4/1
Switch(config-if)#
Switch(config-if)#switchport mode trunk
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#interface FastEthernet2/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet3/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 2
Switch(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet4/1, changed state to up
Copy
Paste
Type here to search
24°C Partly cloudy
ENG
22:43
18-08-2023


Router0
Physical
Config
CLI
IOS Command Line Interface
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Fa0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shut
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/0.1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.1, changed state to up
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
C 192.168.1.0/24 is directly connected, FastEthernet0/0
C 192.168.20.0/24 is directly connected, FastEthernet0/0.1
Router#
Copy
Paste
Type here to search
24°C Partly cloudy
ENG
22:43
18-08-2023

# PING COMMANDS: