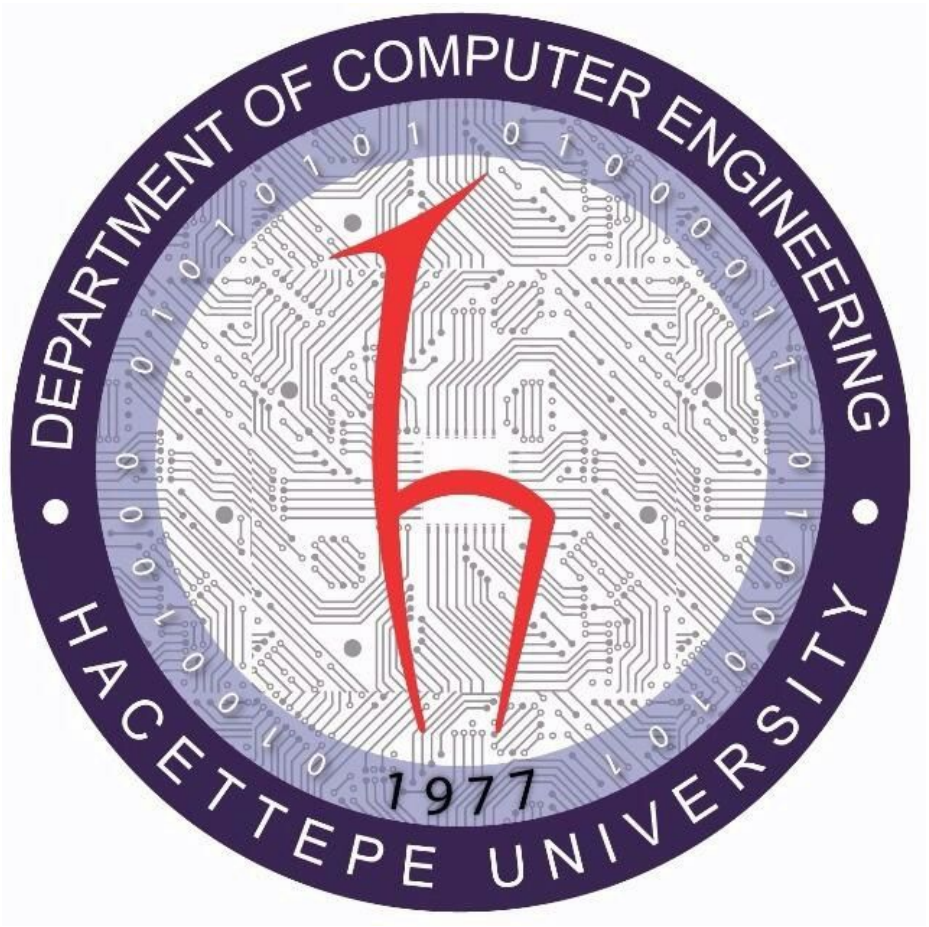

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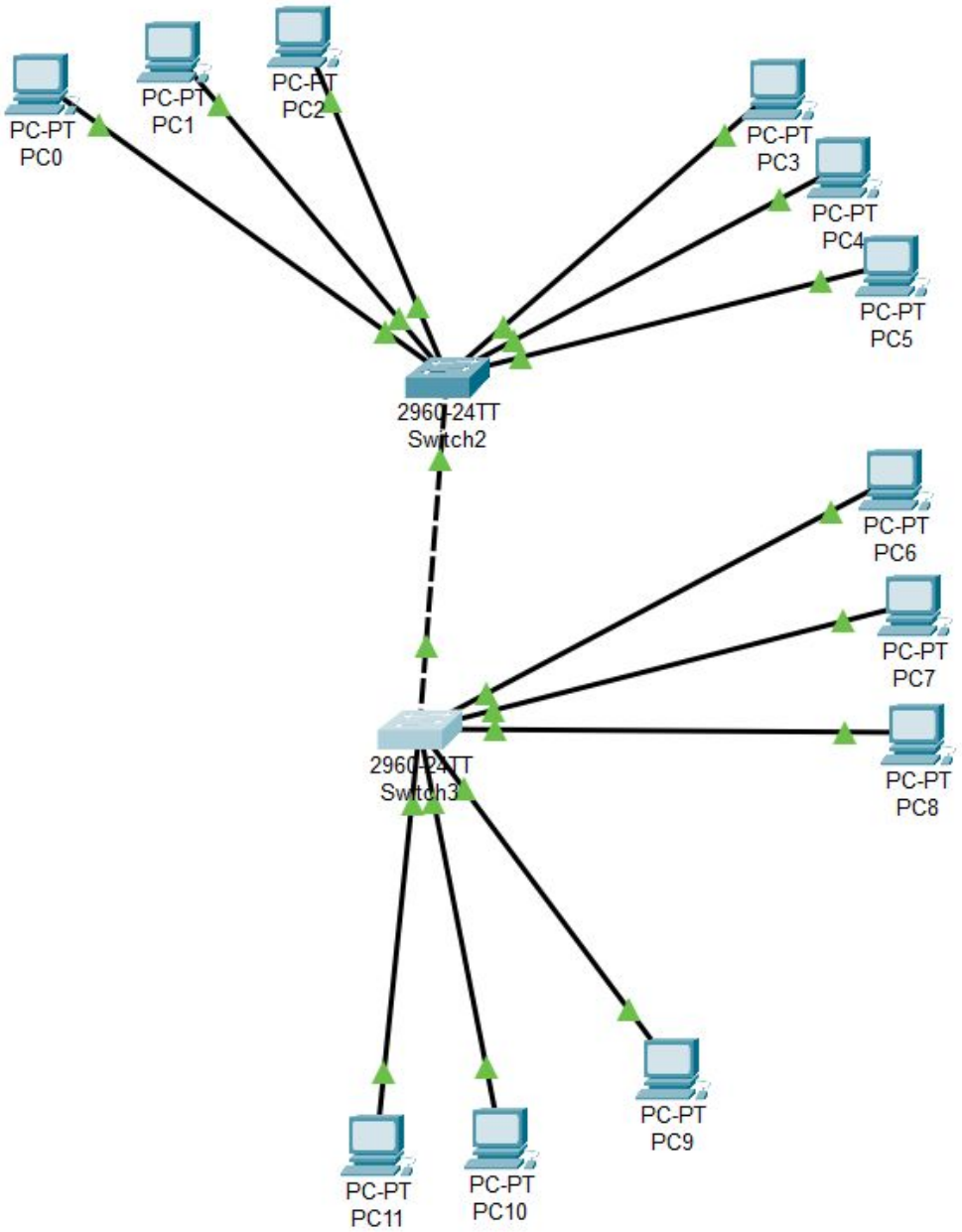
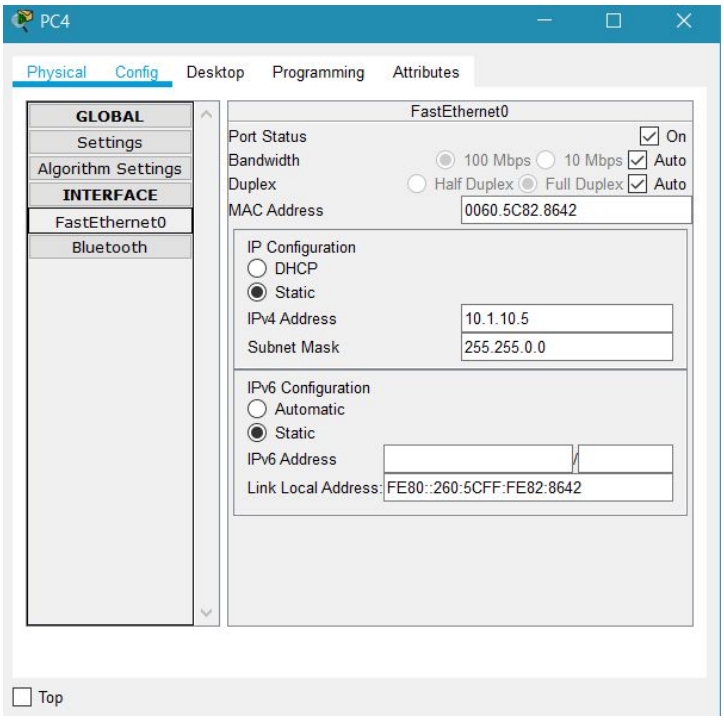
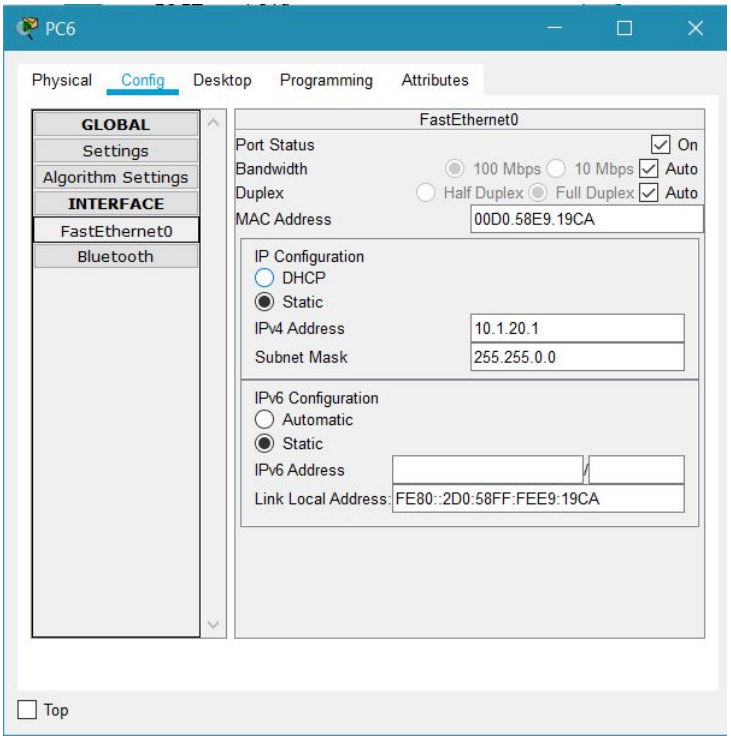
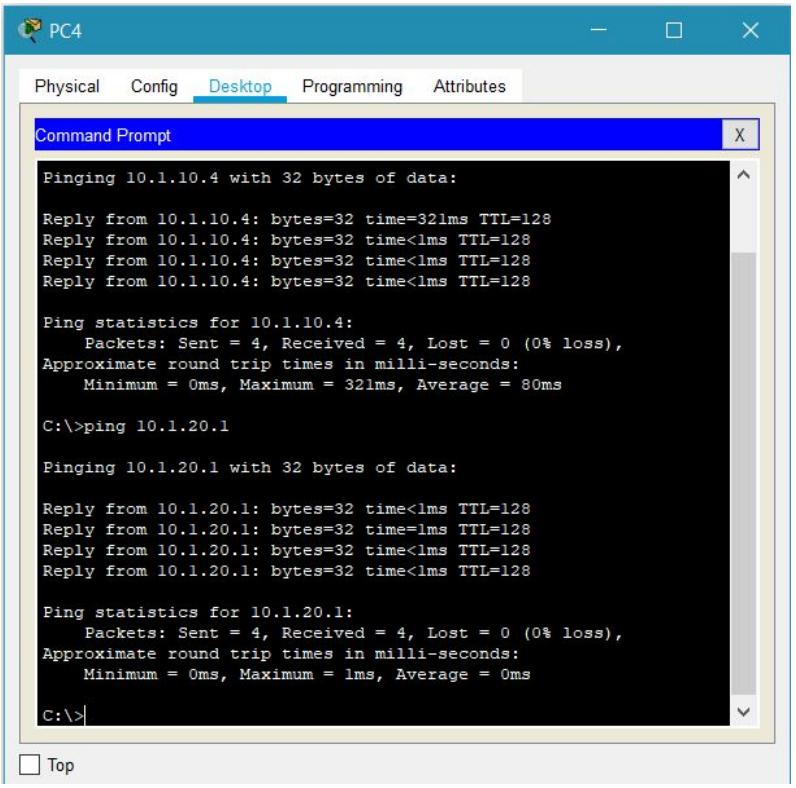
Burak Yılmaz - 21627868
BBM 453 Computer Networks Lab
VLAN Lab Assignment
Group ID: 1
IP Address: 10.1.xx.x

This is the topology we used. PC0 to PC2 belongs to VLAN1, PC3 to PC8 belongs to VLAN2 and PC9 to PC11 belongs to VLAN3. Those two switches connected to each other, we understand that by looking at the green arrows on the cable. We used copper-crossover cable for connecting the switches and we used copper straight-through wires to connect each device to switch.

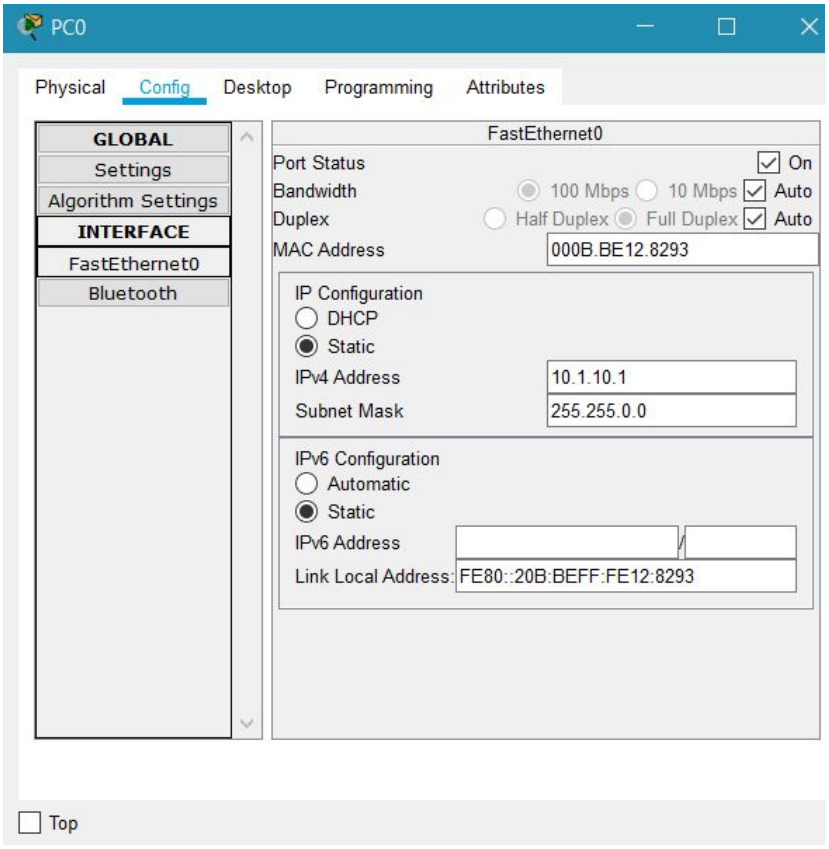


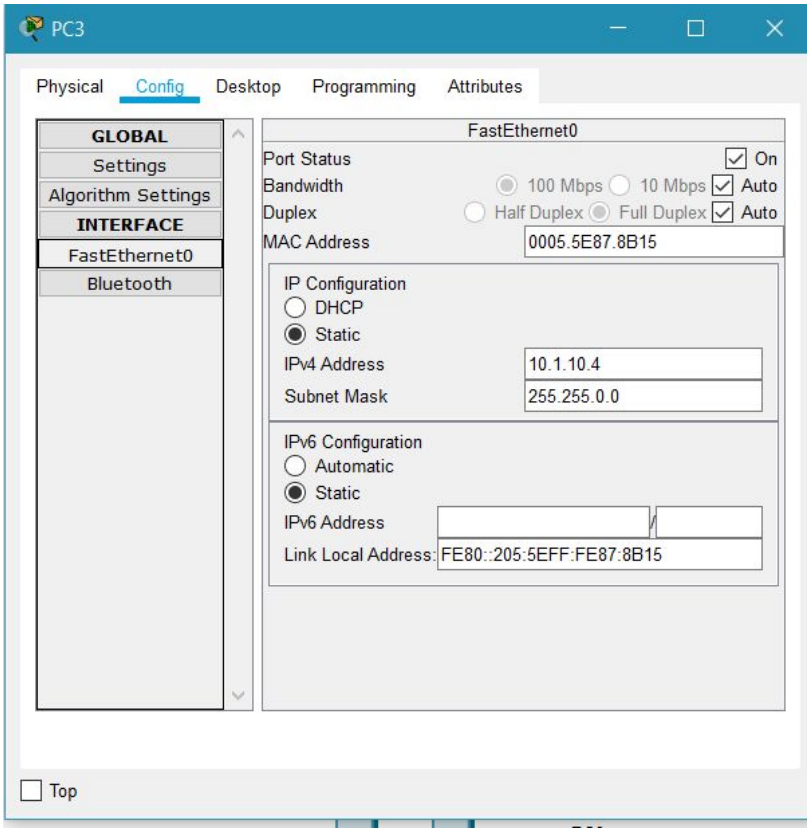

PC4
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.5C82.8642
IP Configuration
DHCP
Static
IPv4 Address
10.1.10.5
Subnet Mask
255.255.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::260:5CFF:FE82:8642
Top

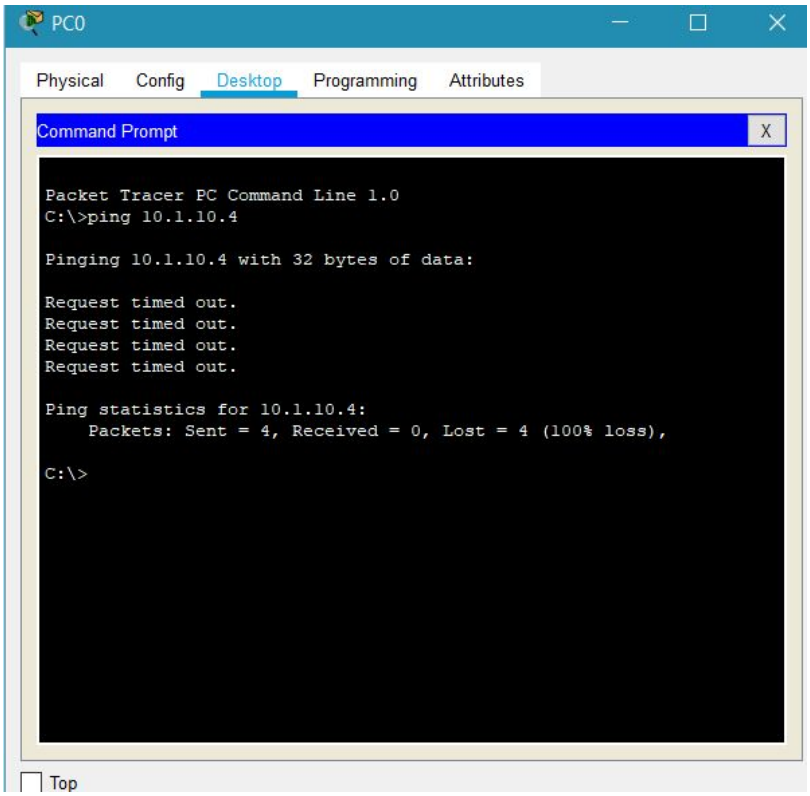

PC6
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.58E9.19CA
IP Configuration
DHCP
Static
IPv4 Address
10.1.20.1
Subnet Mask
255.255.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::2D0:58FF:FEE9:19CA
Top



We pinged from **PC4(10.1.10.5)** to **PC6(10.1.20.1)**. The ping result is successful. By looking at the result we can say even if they are connected to different switches they can ping each other because they belong to the same VLAN which is VLAN2 in our case.

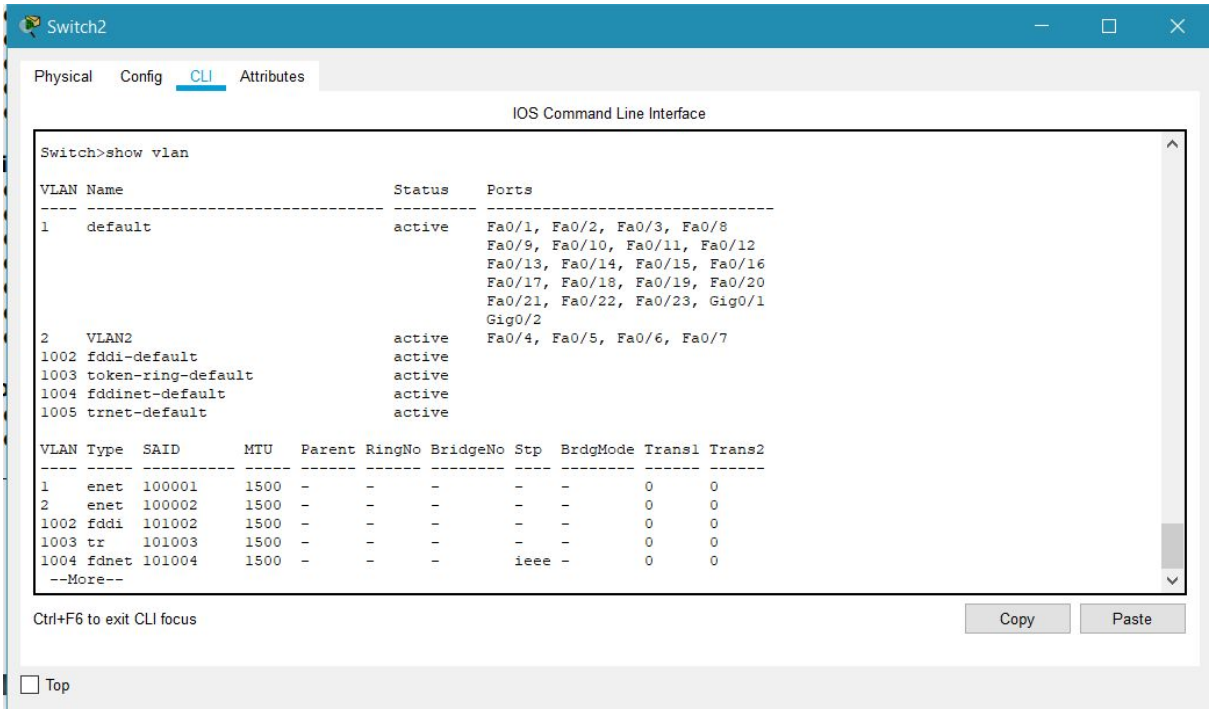

PC0
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
000B.BE12.8293
IP Configuration
DHCP
Static
IPv4 Address
10.1.10.1
Subnet Mask
255.255.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::20B:BEFF:FE12:8293
Top


PC3
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0005.5E87.8B15
IP Configuration
DHCP
Static
IPv4 Address
10.1.10.4
Subnet Mask
255.255.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::205:5EFF:FE87:8B15
Top

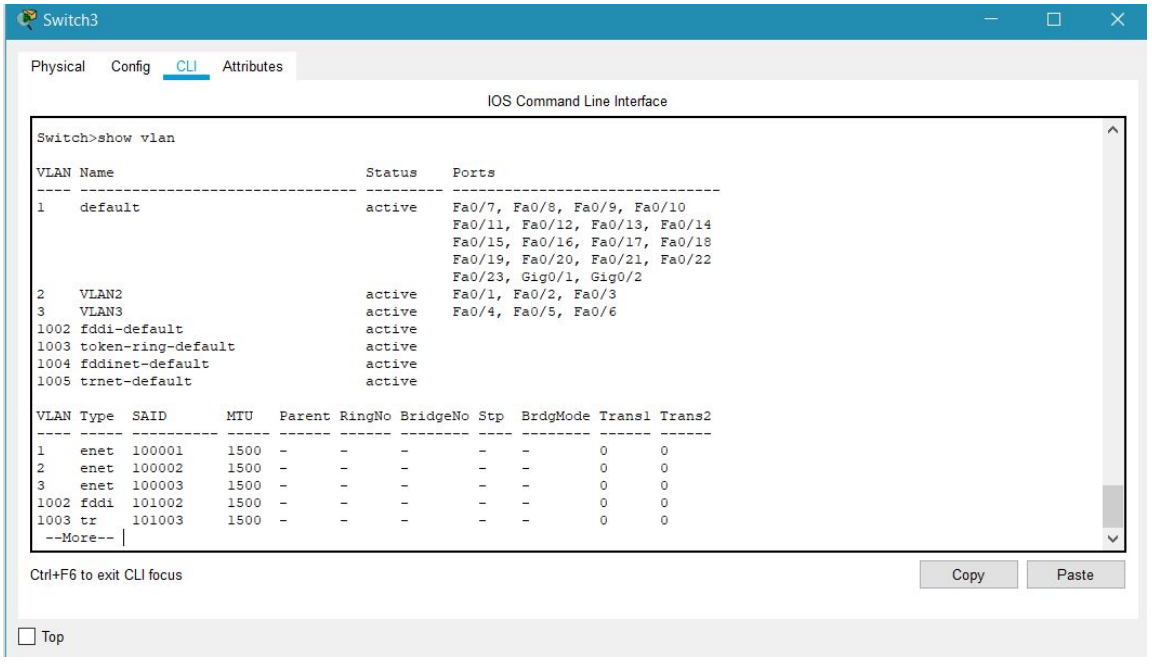


We pinged from **PC0(10.1.10.1)** to **PC3(10.1.10.4)**. The result of the ping command is unsuccessful, because, although they are connected to the same switch, they are in different VLAN. That's why they cannot communicate with each other.

We use the `show vlan` command in the above pictures to see our VLAN topology. Our vlan names are default which is VLAN1 and VLAN2 which is VLAN2 in our case. Their ids are 1 and 2.This command is for Switch 2.



We use the `show vlan` command in the above pictures to see our VLAN topology. Our vlan names are VLAN2 which is VLAN2 and VLAN3 which is VLAN3 in our case. Their ids are 2 and 3.This command is for Switch 3.



NOTE: We did not use the CLI tab while executing the commands due to getting **`% Invalid input detected at '^' marker.`** error. That's why we used the Config part. In fact, they both do the same configuration so that we manage to achieve our goals in this experiment.