6. Change the native VLAN on a trunk port. Test for VLAN mismatches and troubleshoot.

Network Topology :

Pc0 and pc1 : vlan 10

Pc2 and pc3: vlan 20

Making two switches connected via a trunk link :

Switch 1 with : configuring with VLAN 99

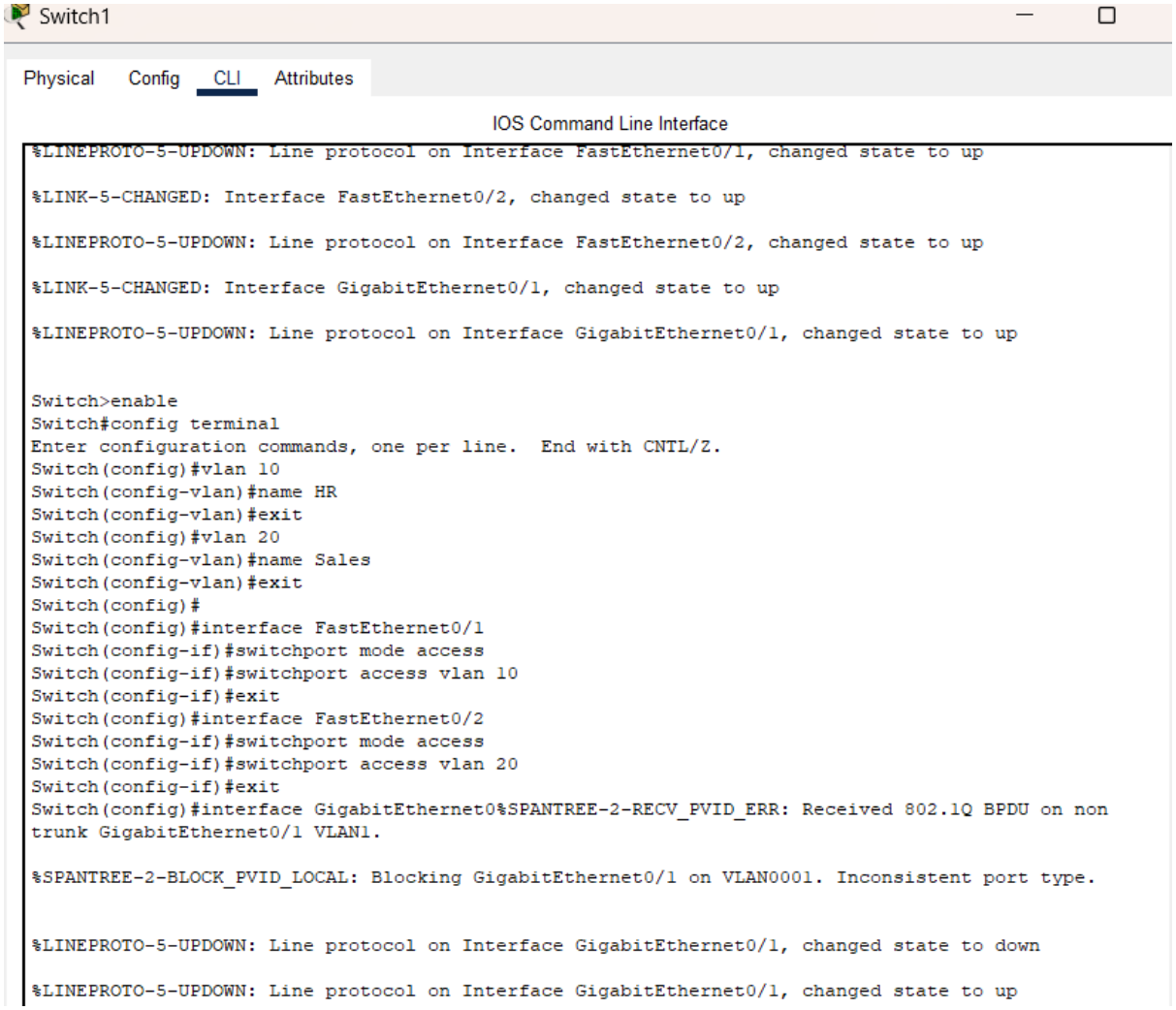
Switch 2 with : Default native vlan

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name HR
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name Sales
Switch(config-vlan)#exit
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/3
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk native vlan 99
Switch(config-if)#exit
Switch(config)#interface GigabitEthernet0/1
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Switch(config-if)#switchport trunk native vlan 99
Switch(config-if)#exit
```



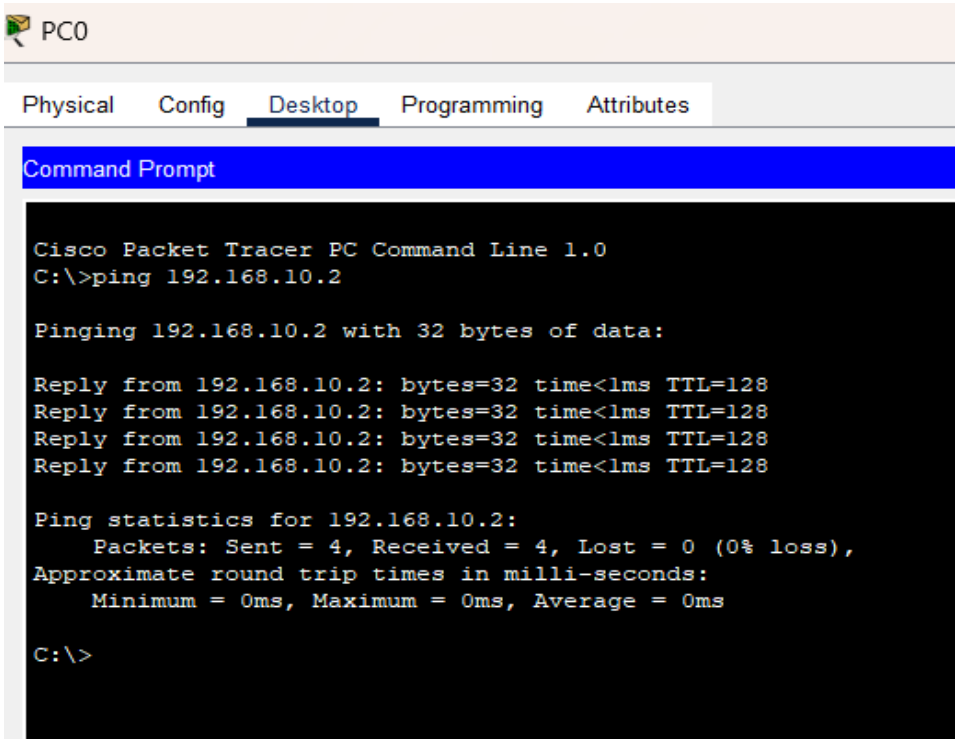
Erros because vlan mismatch :

```
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99), with
Switch GigabitEthernet0/1 (1).

%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99), with
Switch GigabitEthernet0/1 (1).

%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99), with
Switch GigabitEthernet0/1 (1).
```

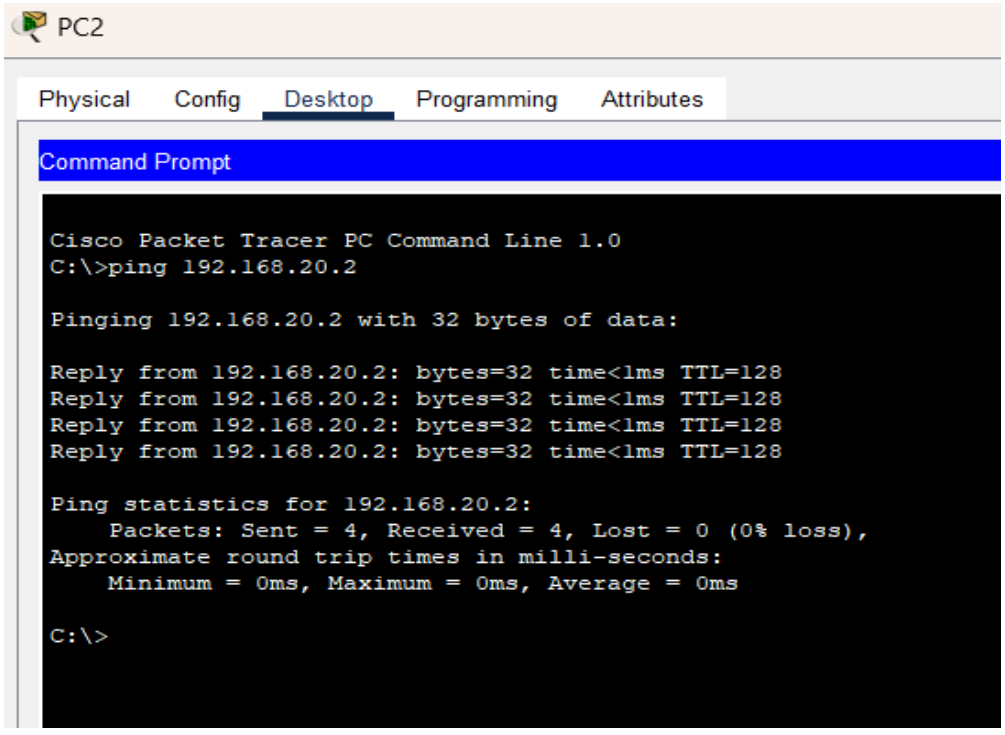
Now troubleshooting the vlans in the switch 2 to VLAN 99 :

```
Switch(config)#interface GigabitEthernet0/1
Switch(config-if)#switchport trunk native vlan 99
Switch(config-if)#exit
```

PINGING FROM pc0 to pc1 of vlan 10 :



Pinging from pc 2 to pc3 of vlan 20 :



Final learnings :

Native VLAN mismatch disrupts trunk links

Ensure both switches use the **same native VLAN** to avoid errors