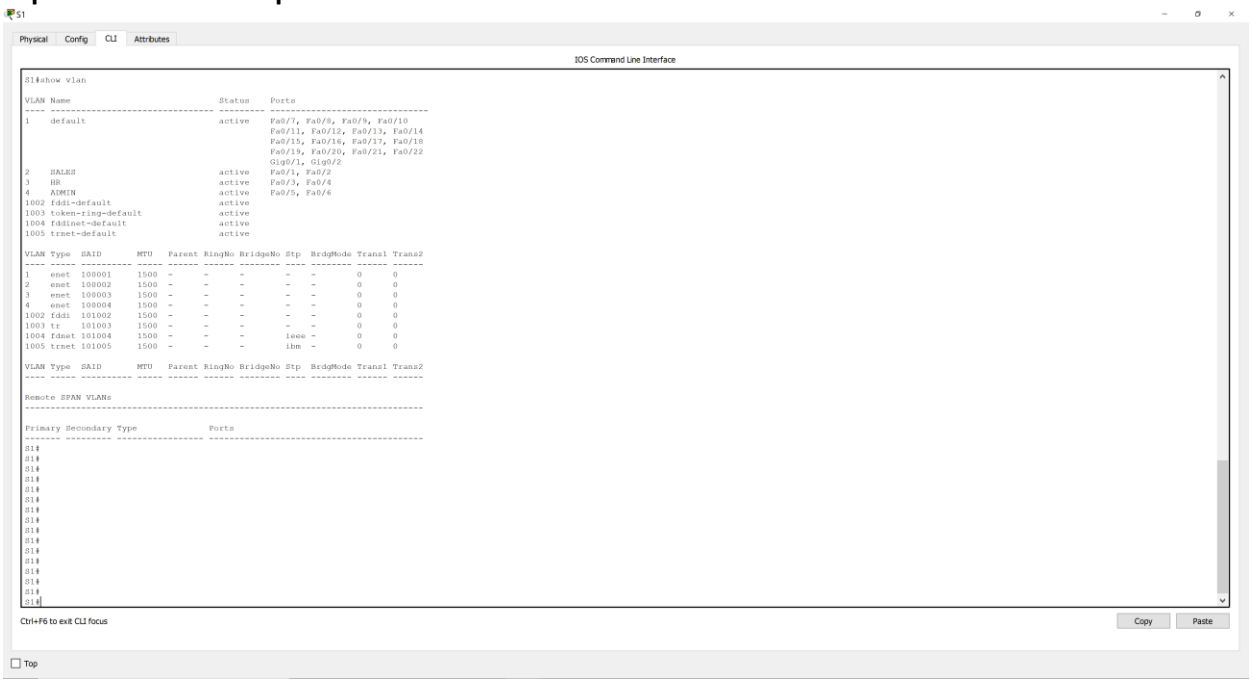
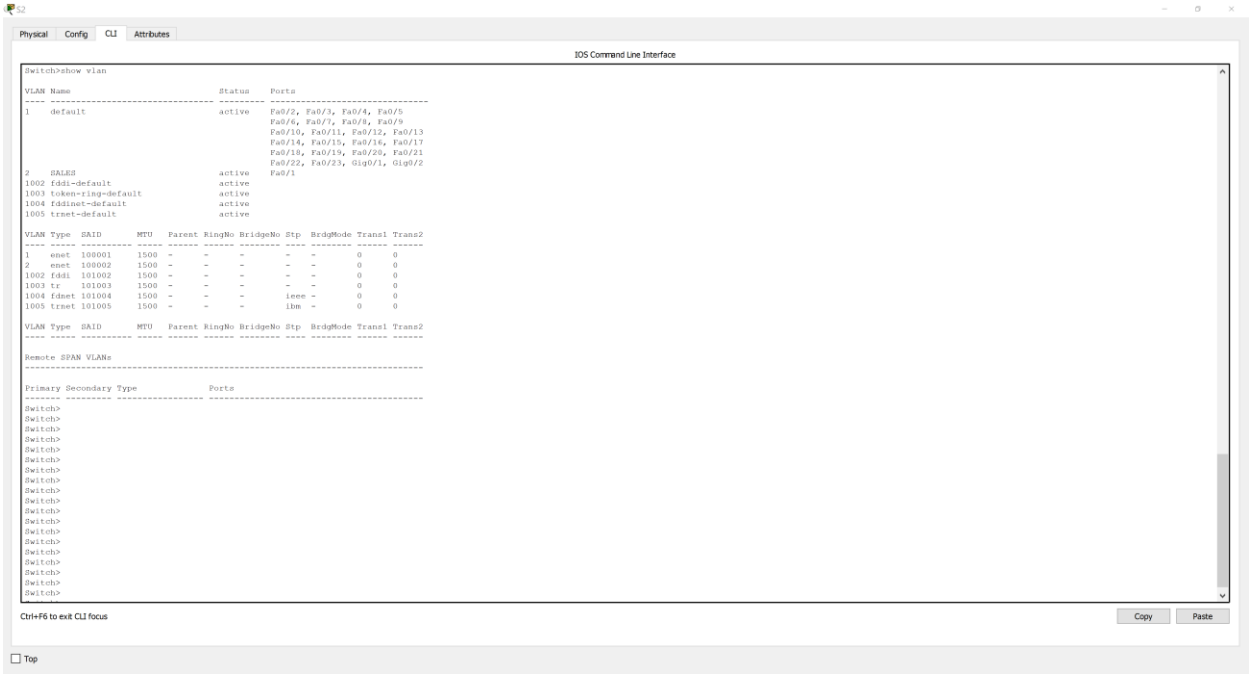
1. Execute the ‘show vlan’ command in switch 1 (S1) and switch 2(S2). Add screenshots and a brief explanation of the output.

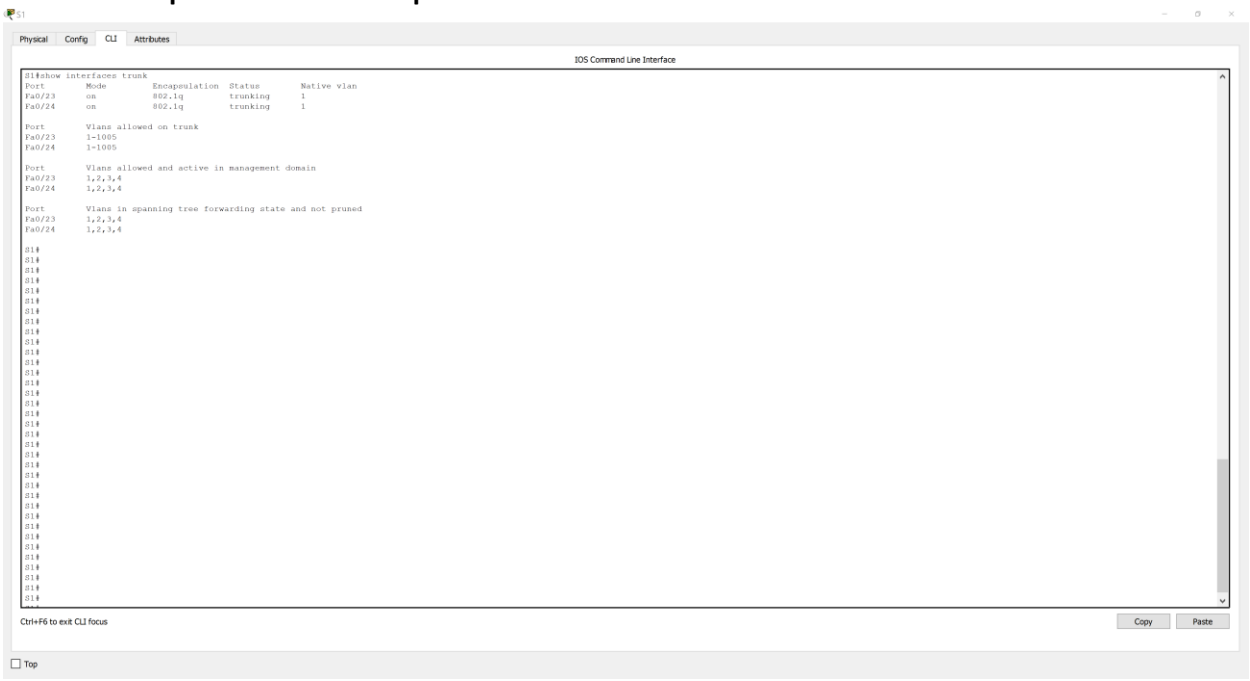


For switch 1,
VLAN 2 Sales contains ports Fa0/1 and Fa0/2
VLAN 3 HR contains ports Fa0/3 and Fa0/4
VLAN 4 Admin contains ports Fa0/5 and Fa0/6

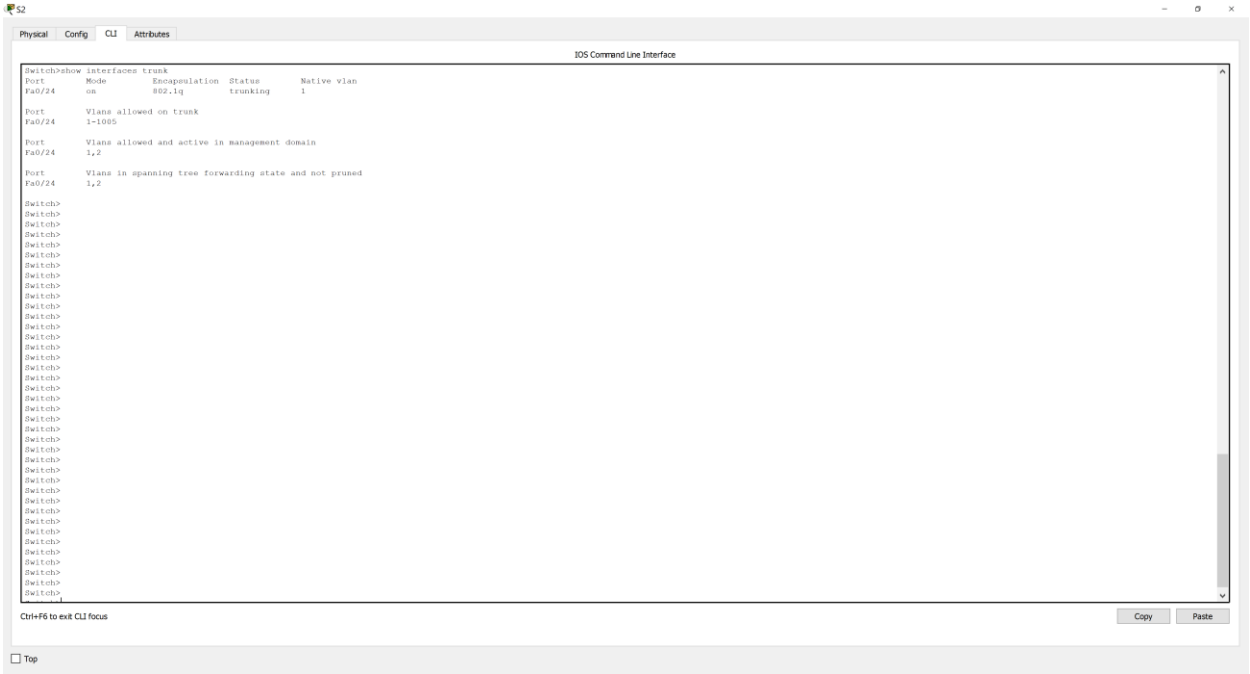


For switch 2, VLAN 2 Sales contains port Fa0/1

2. Execute the ‘show interfaces trunk’ command in switch 1 (S1) and switch 2(S2). Add screenshots and a brief explanation of the output.

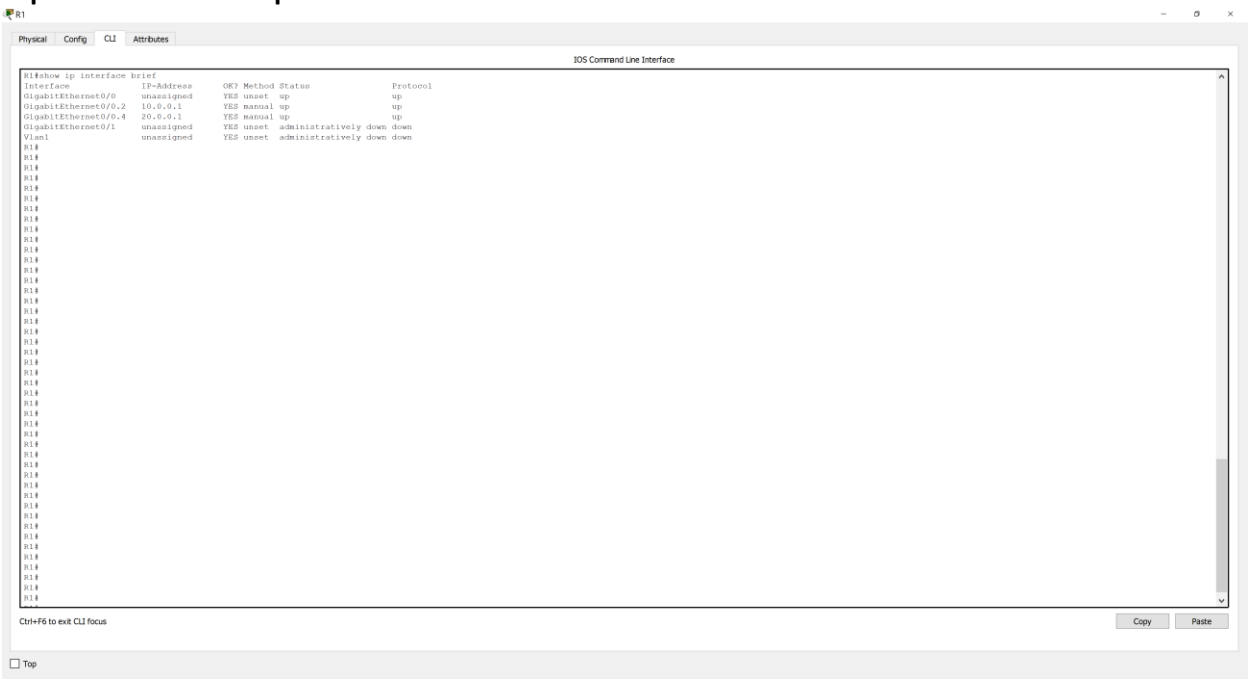


For switch 1, Fa0/23 and Fa0/24 are configured as trunk ports



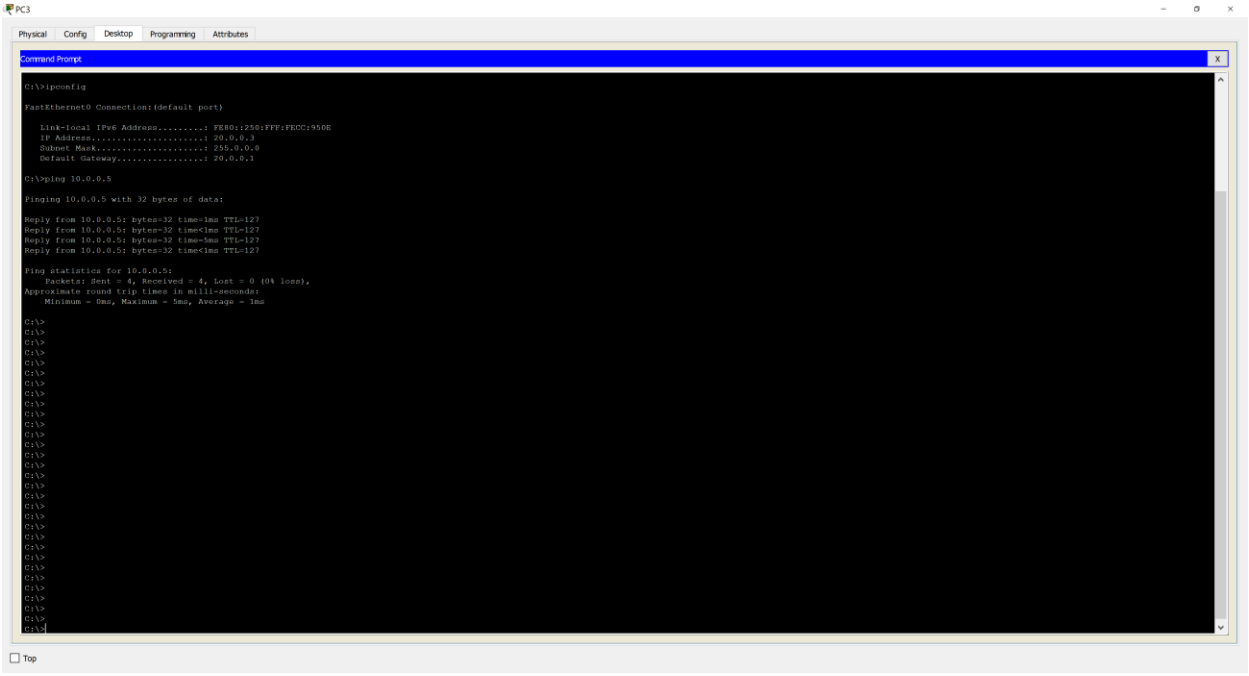
For switch 2, Fa0/24 is configured as a trunk port

3. Execute the ‘show ip interface brief’ command in router 1 (R1). Add screenshot and a brief explanation of the output.



GigabitEthernet0/0.2 is assigned IP address 10.0.0.1
GigabitEthernet0/0.4 is assigned IP address 20.0.0.1

4. Send packets from PC3 (VLAN 3) to PC7 (VLAN 2) successfully. Add a screenshot.



5. In which cases would you recommend using VLANs?

You would use a VLAN to separate departments, so their workstations may only be able to communicate with one another.

6. In which cases would you recommend using Inter VLANs routing?

You would use VLANs routing to allow workstations in one VLAN to be able to communicate with workstations in another VLAN.