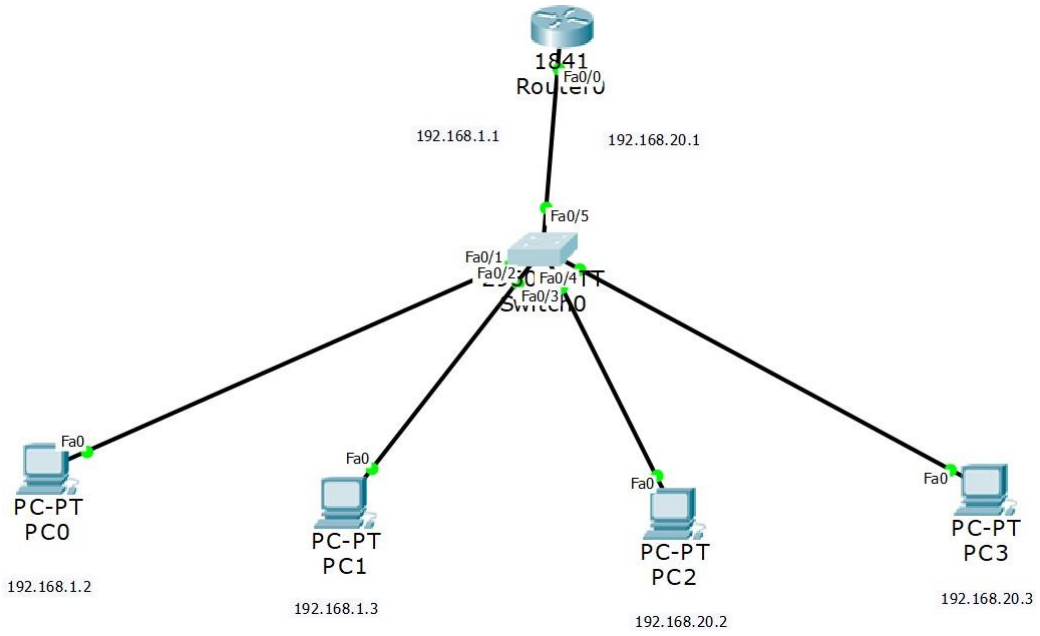
LAB 9:

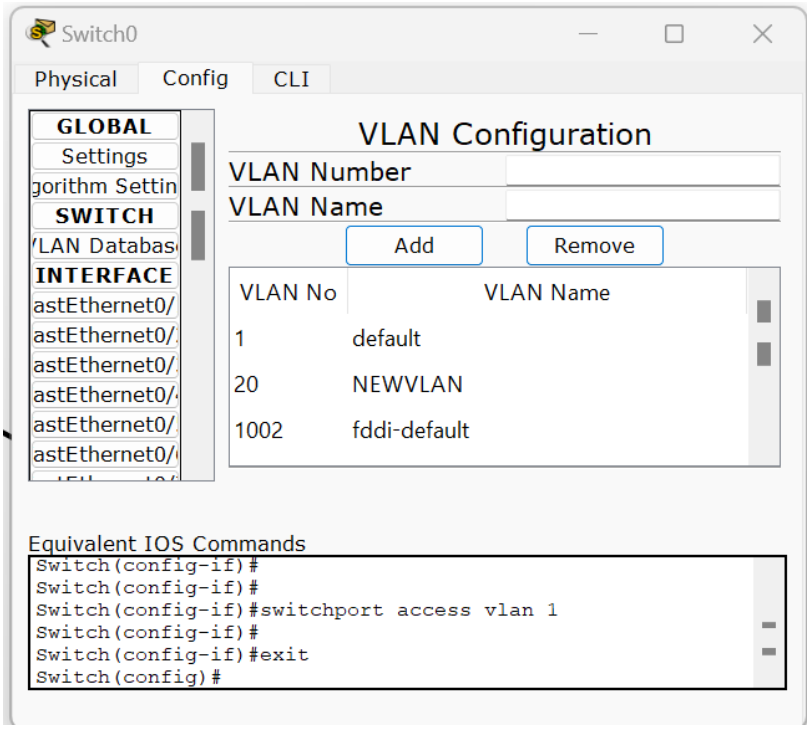
Aim : To construct a VLAN and make the PC's communicate among a VLAN

Topology:

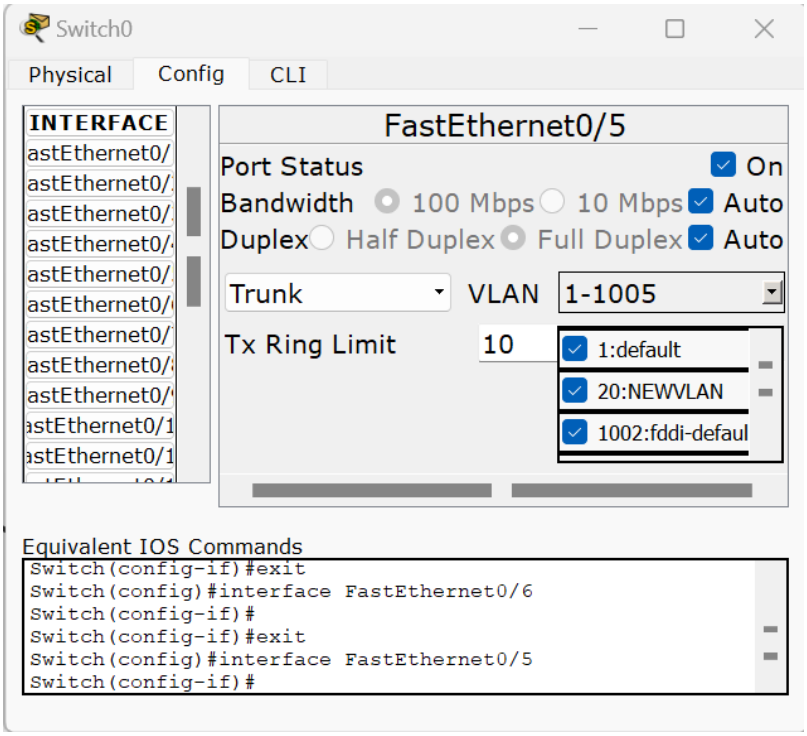


Configurations:

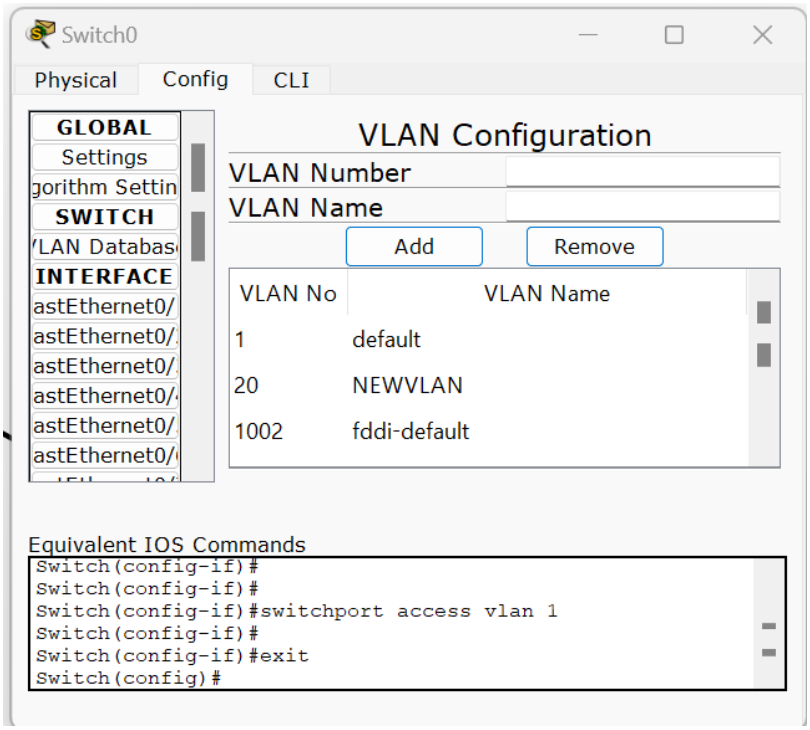
Switch VLAN Database:



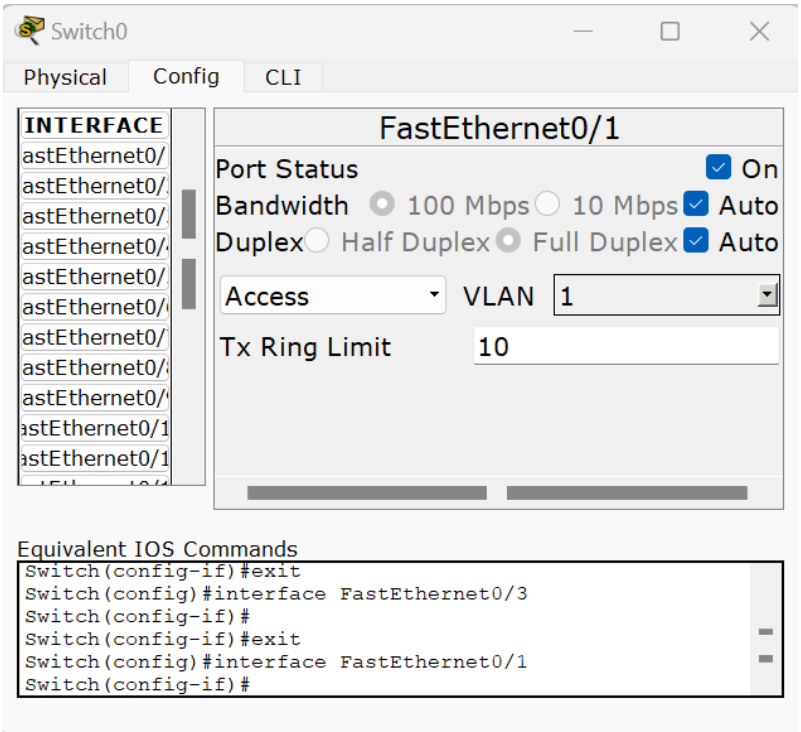
Switch FastEthernet0/5



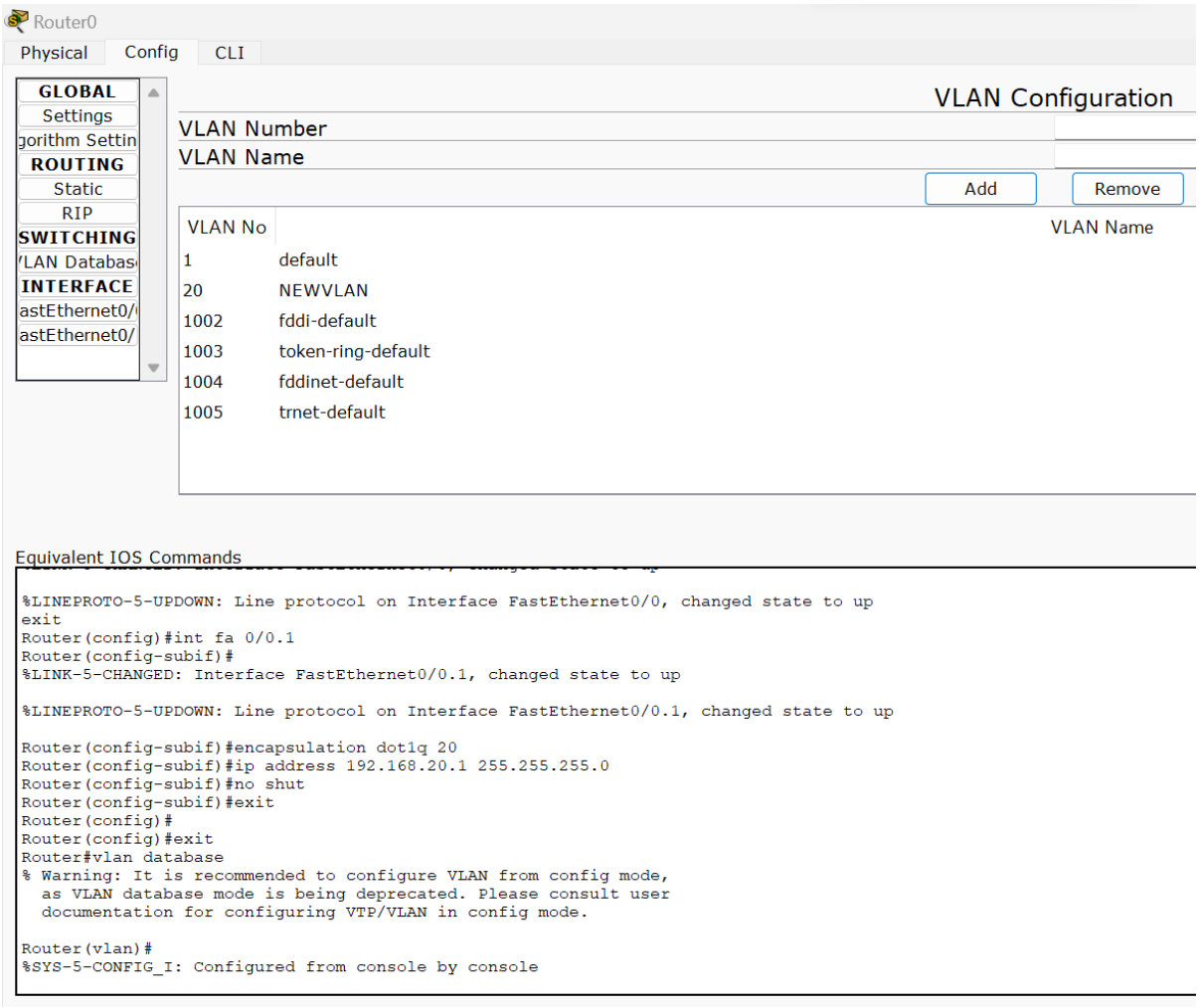
Switch FastEthernet0/3 and FastEthernet0/4



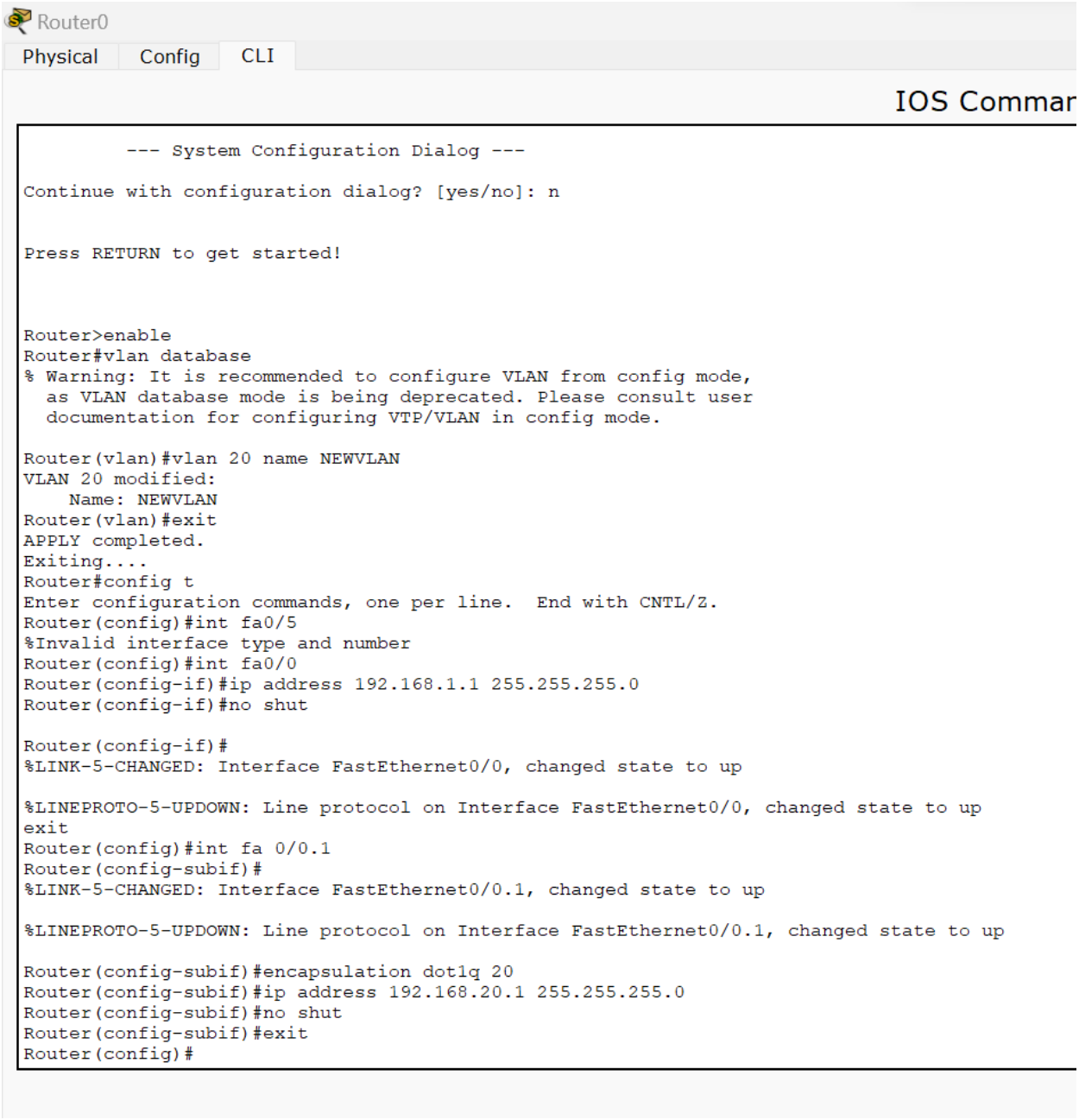
Switch FastEthernet0/1 and FastEthernet0/2



Router 0 :
VLAN DataBase:



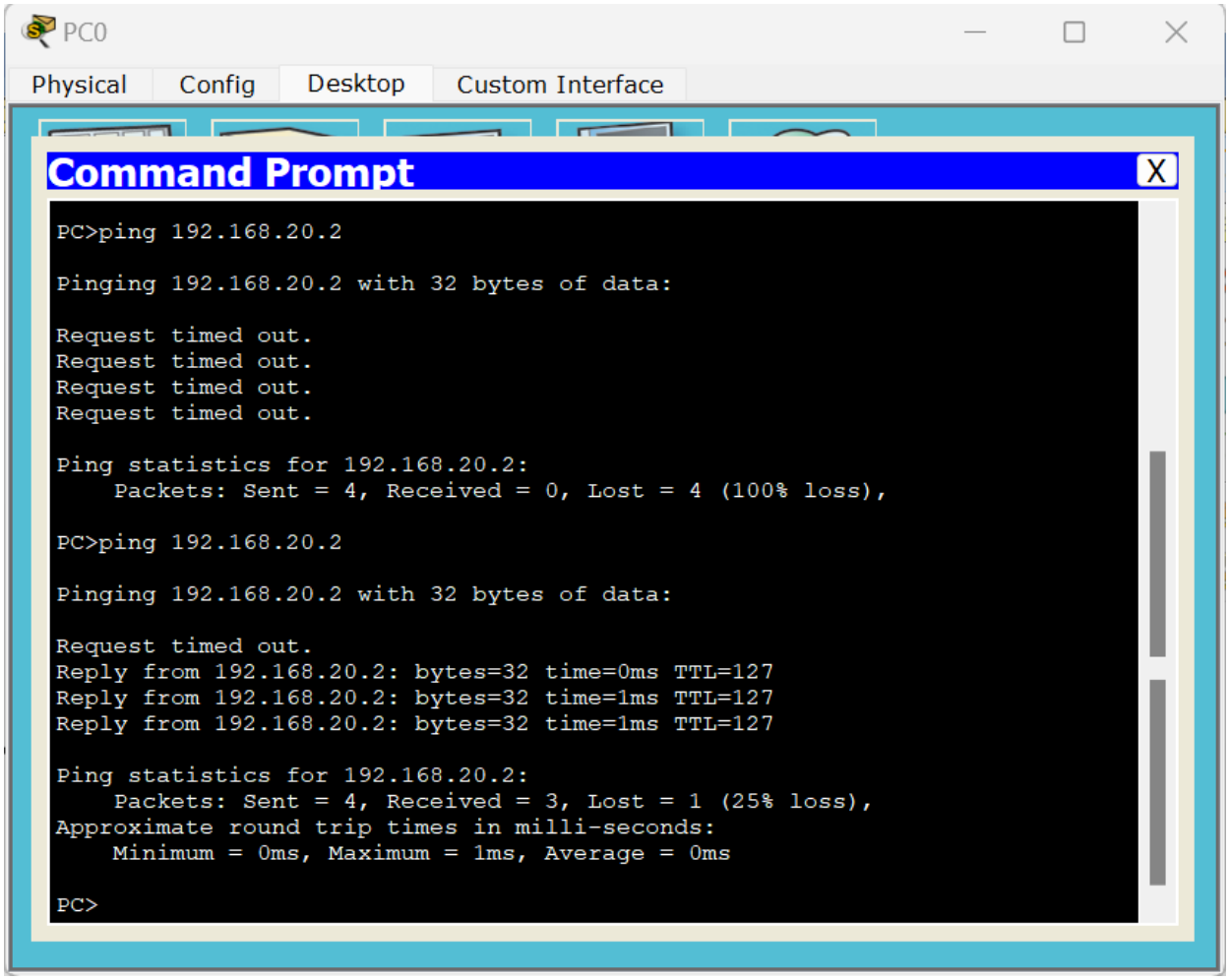
Router 0 :
CLI:


Router0
Physical
Config
CLI
IOS Commar
--- System Configuration Dialog ---
Continue with configuration dialog? [yes/no]: n
Press RETURN to get started!
Router>enable
Router#vlan database
% Warning: It is recommended to configure VLAN from config mode,
as VLAN database mode is being deprecated. Please consult user
documentation for configuring VTP/VLAN in config mode.
Router(vlan)#vlan 20 name NEWVLAN
VLAN 20 modified:
Name: NEWVLAN
Router(vlan)#exit
APPLY completed.
Exiting....
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/5
%Invalid interface type and number
Router(config)#int 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
exit
Router(config)#int fa 0/0.1
Router(config-subif)#
%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-subif)#encapsulation dot1q 20
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
Router(config-subif)#no shut
Router(config-subif)#exit
Router(config)#

Command Prompt:

P0:

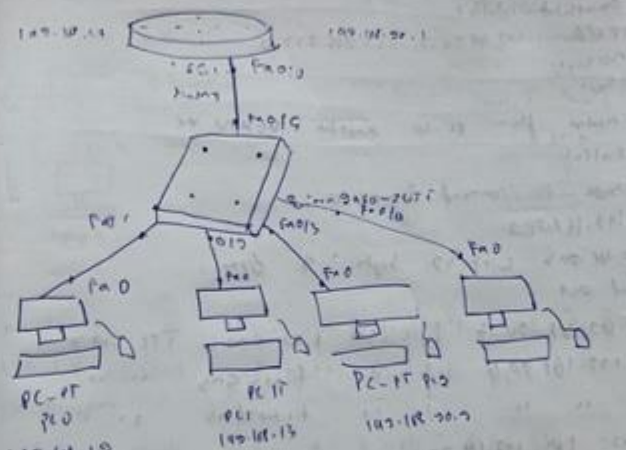
Before and after VLAN configuration was successful.



Lab - 9

Aim
To construct a VLAN and make a PC communicate among VLAN

Topology



Procedure
•) Create a topology as shown above, using 1841 router and 2960-24TT switch here
•) Set the IP address of the router and 4 PC's respectively, we use class C type address also set gateways
•) In switch go to config tab and select VLAN Database, give any VLAN no like 2 and name as VLAN
•) Select the interface fastethernet 0/1 and make it trunk
•) Now select the switch's other interface which has interface 0/3 and 0/4 on each of them and set VLAN number 2
•) Go to router → config tab and select VLAN Database and enter the new VLAN & no 2 created