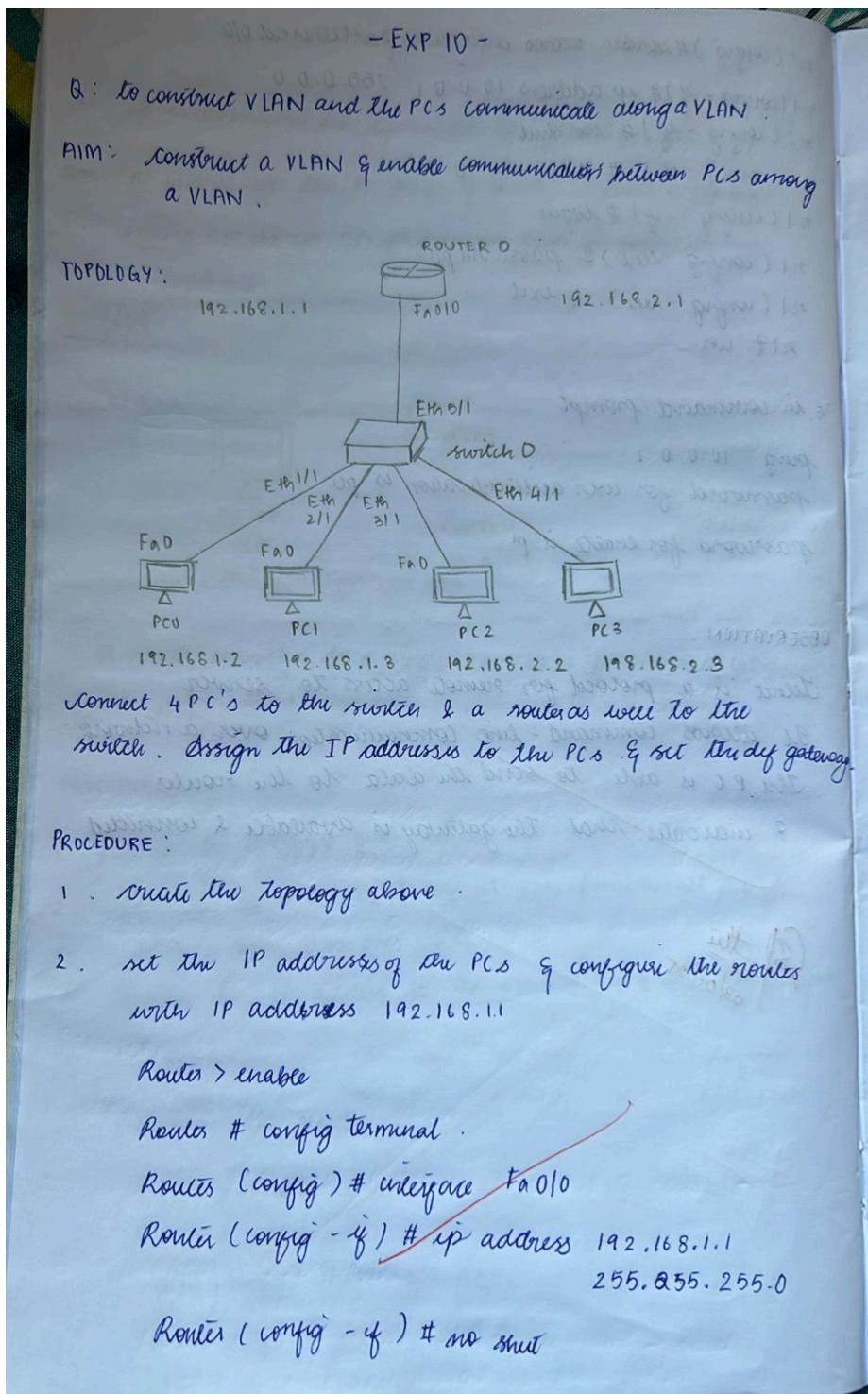


EXP-10

OBSERVATION



3. in the switch, go to config tab & select VLAN database

4. set the VLAN number & VLAN name.

Select the interface i.e fastethernet 5/1 & make it the trunk

VLAN tracking allows switches to forward frame from different VLAN over a single link called trunk.

5. this is done by adding additional header information called tag to the ethernet frame

6. look into the interfaces of the switches with 2 NEW VLAN system

config tab of the router select VLAN DATABASE

enter number & name of VLAN created

Router (vlan)# exit

Router # config terminal

Router (config) # interface fastethernet 0/0.1

Router (config - subif) # encapsulation dot1q 2

Router (config - subif) # ip address 192.168.2.1 255.255.255

Router (config - subif) # no shut

Router (config - subif) # exit

Router (config) # exit

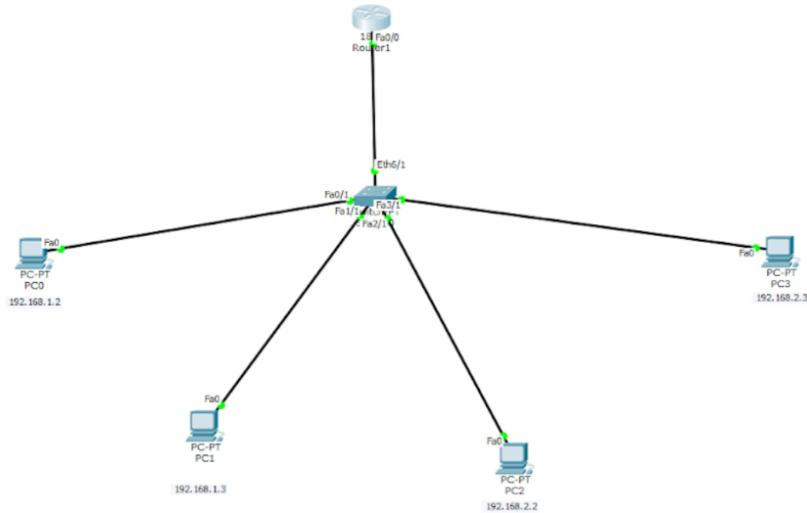
OBSERVATION

A VLAN segments a network into vertical groups

It enhances security & reduces broadcast traffic. On pingng over the VLAN the PCs are able to communicate

By this
we can

TOPOLOGY



OUTPUT

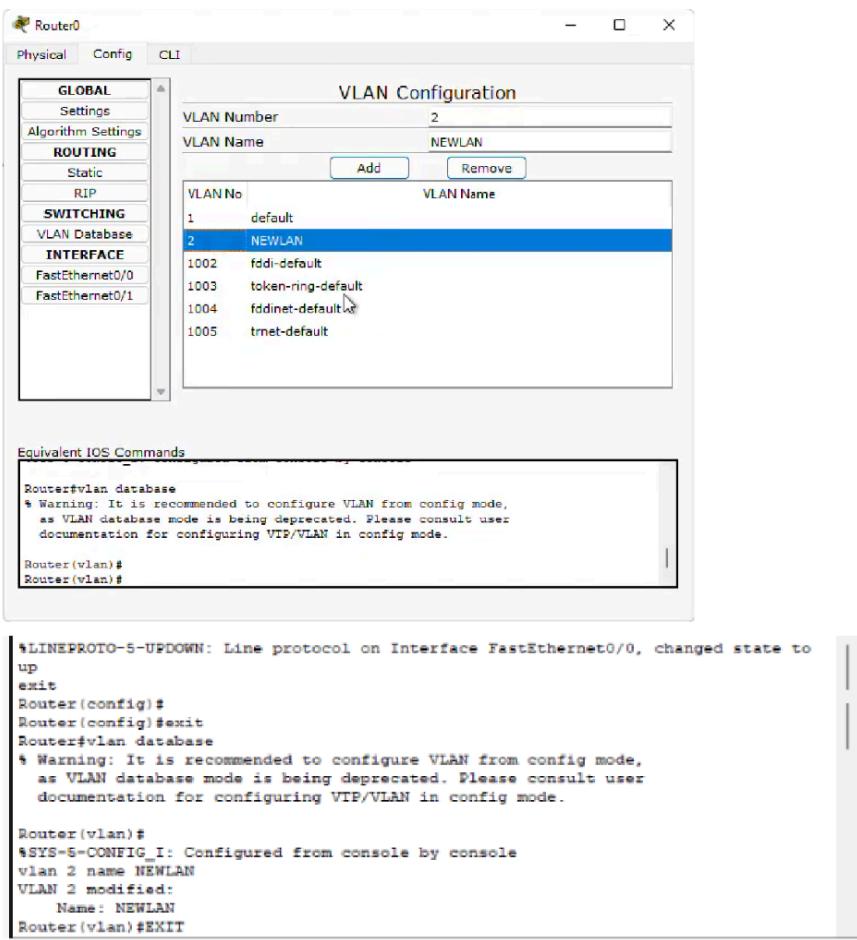
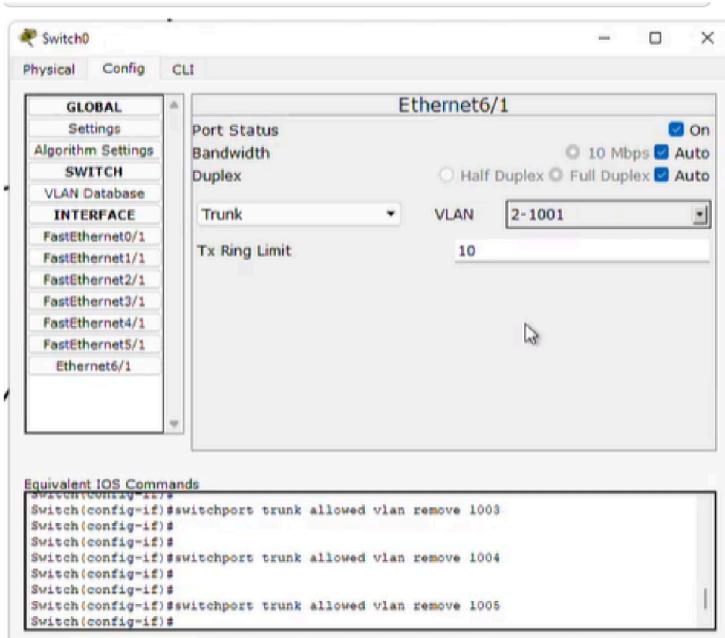
```
Router# Router1
Physical Config CLI
IOS Command Line Interface
documentation for configuring VTP/VLAN in config mode.

Router(vlan)#
%SYS-5-CONFIG_I: Configured from console by console
vlan 2 name NEWLAN
VLAN 2 modified:
Name: NEWLAN
Router(vlan)#exit
APPLY completed.
Exiting...
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastethernet 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 2
Router(config-subif)#ip address 192.168.2.1 255.255.255.0
Router(config-subif)#no shut
Router(config-subif)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Copy Paste
```



Router(vlan)#EXIT

PC0

Physical Config Desktop Custom Interface

Command Prompt X

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=0ms TTL=128
Reply from 192.168.1.3: bytes=32 time=0ms TTL=128
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128
Reply from 192.168.1.3: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 0ms

PC>
```