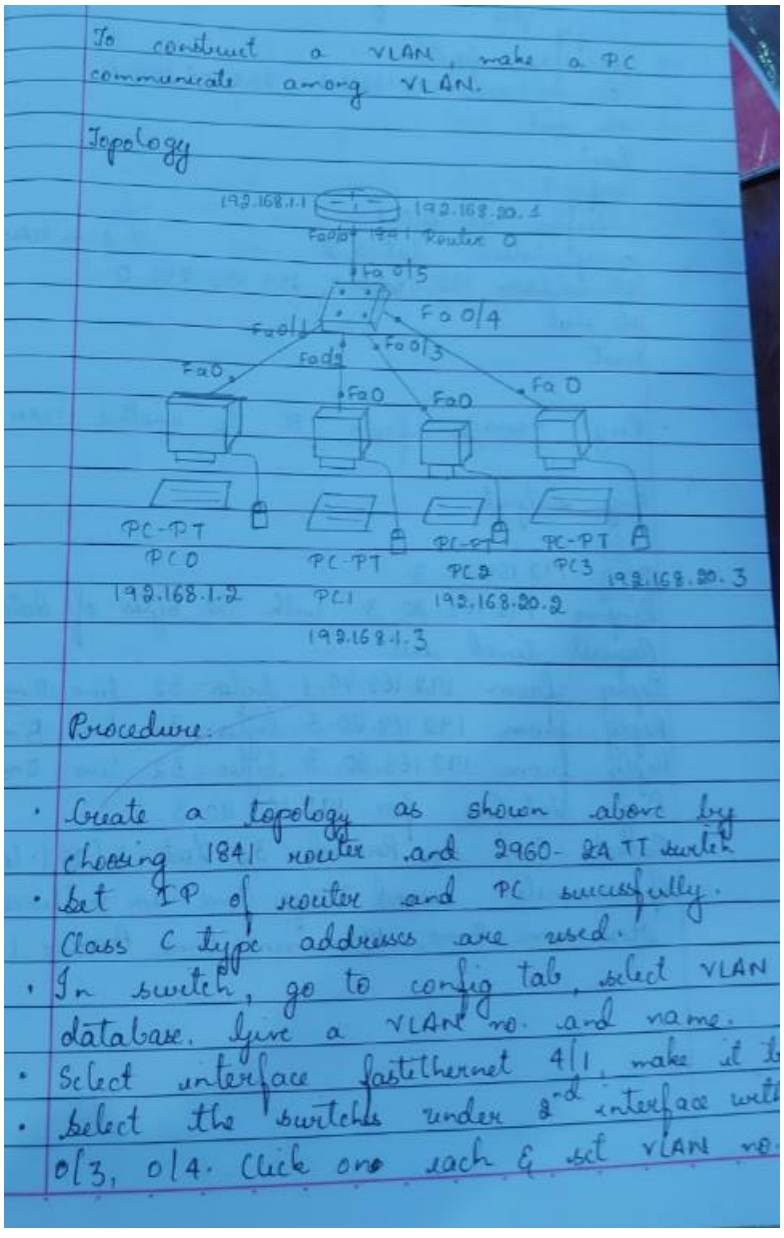
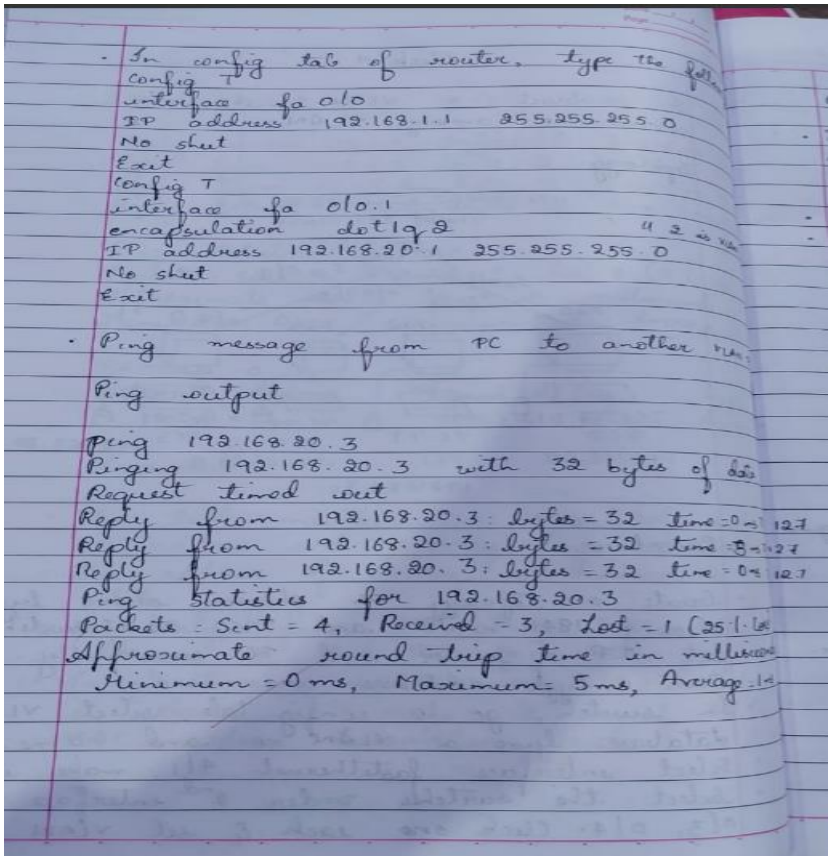
Week 11

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

Observation:



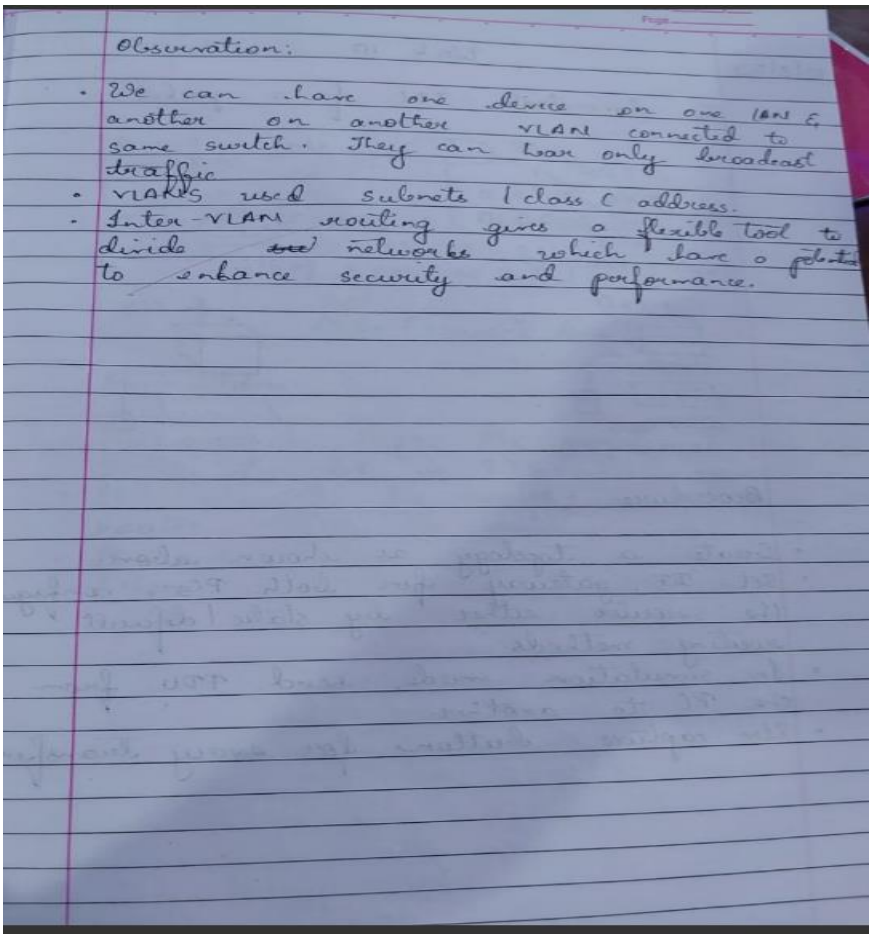


- In config tab of router, type the following
config T
interface fa 0/0
IP address 192.168.1.1 255.255.255.0
No shut
Exit
config T
interface fa 0/0.1
encapsulation dot1q 2
IP address 192.168.20.1 255.255.255.0
No shut
Exit

- Ping message from PC to another VLAN

Ping output

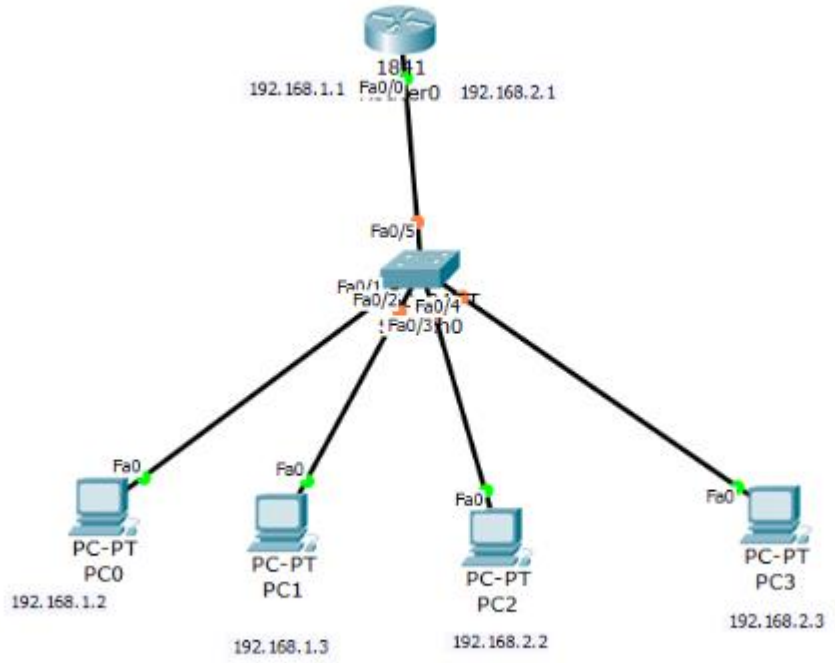
Ping 192.168.20.3
Pinging 192.168.20.3 with 32 bytes of data
Request timed out
Reply from 192.168.20.3: bytes = 32 time = 0ms
Reply from 192.168.20.3: bytes = 32 time = 0ms
Reply from 192.168.20.3: bytes = 32 time = 0ms
Ping statistics for 192.168.20.3
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss)
Approximate round trip time in milliseconds
Minimum = 0ms, Maximum = 5ms, Average = 1ms



Observation:

- We can have one device on one VLAN & another on another VLAN connected to same switch. They can have only broadcast traffic
- VLANs used subnets I class C address.
- Inter-VLAN routing gives a flexible tool to divide ~~the~~ networks which have a potential to enhance security and performance.

Topology :



Output :