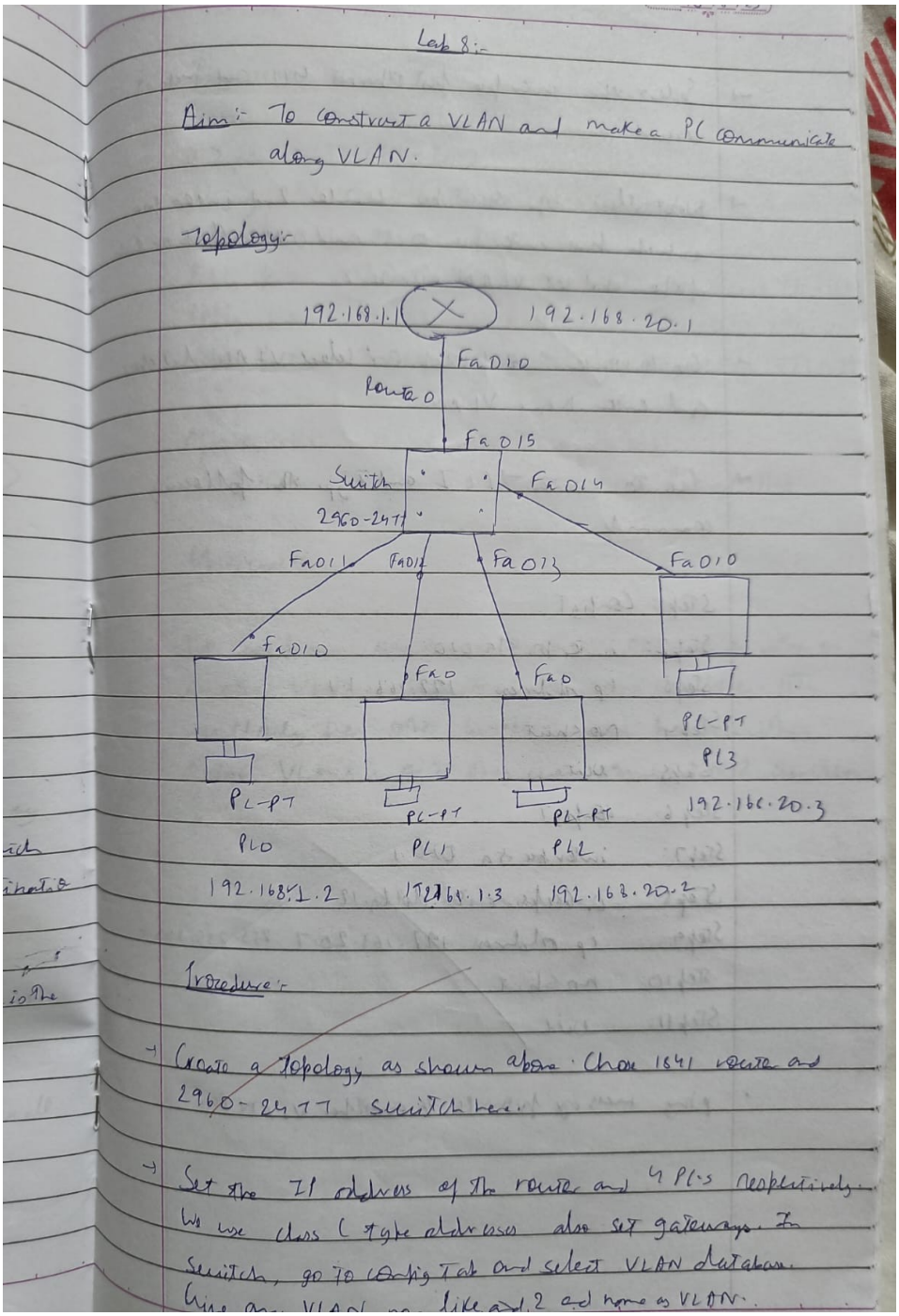
WEEK 9

To construct a VLAN and make a pc communicate among VLAN.

OBSERVATION:



→ Select the interface fast ethernet 4/1 and make it trunk.

→ Next select the switches under 2nd interface which has interface 0/3 and 0/4. Click on both of them and set VLAN number 2.

→ Go to router → config Tab and select VLAN database and enter name VLAN.

→ Go to router → CLI and type the following commands.

Step1: ConfigT
Step2: interface fa 0/0
Step3: ip address 192.168.1.1
Step4: No shut
Step5: exit
Step6: ConfigT
Step7: interface fa 0/0.1
Step8: encapsulation dot1q 12
Step9: ip address 192.168.20.7 255.255.255.0
Step10: no shut
Step11: exit

- ping message from PC to another VLAN PC.

Page:
Date: / /

Ping output:

PC > 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 TTL = 127

Reply from 192.168.20.3: bytes = 32 time = 0ms TTL = 127

Reply from 192.168.20.3: bytes = 32 time = 0ms TTL = 127

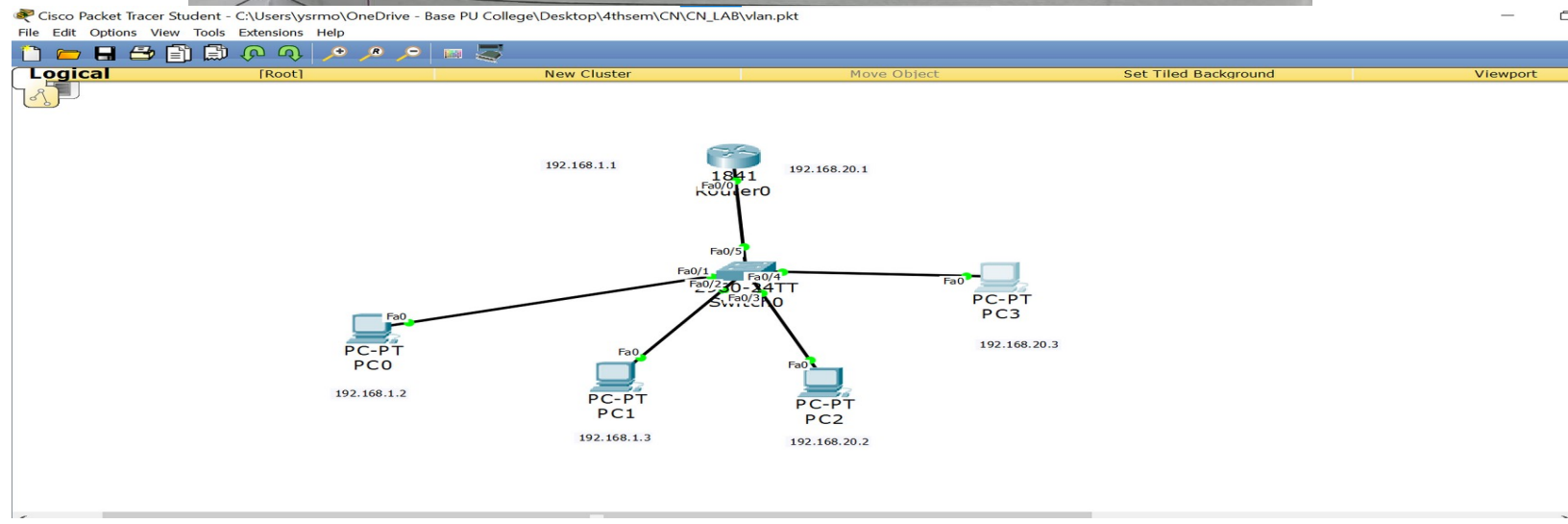
Approximate round Trip times in ms:

Minimum: 0ms, Maximum: 5ms, Average: 1ms

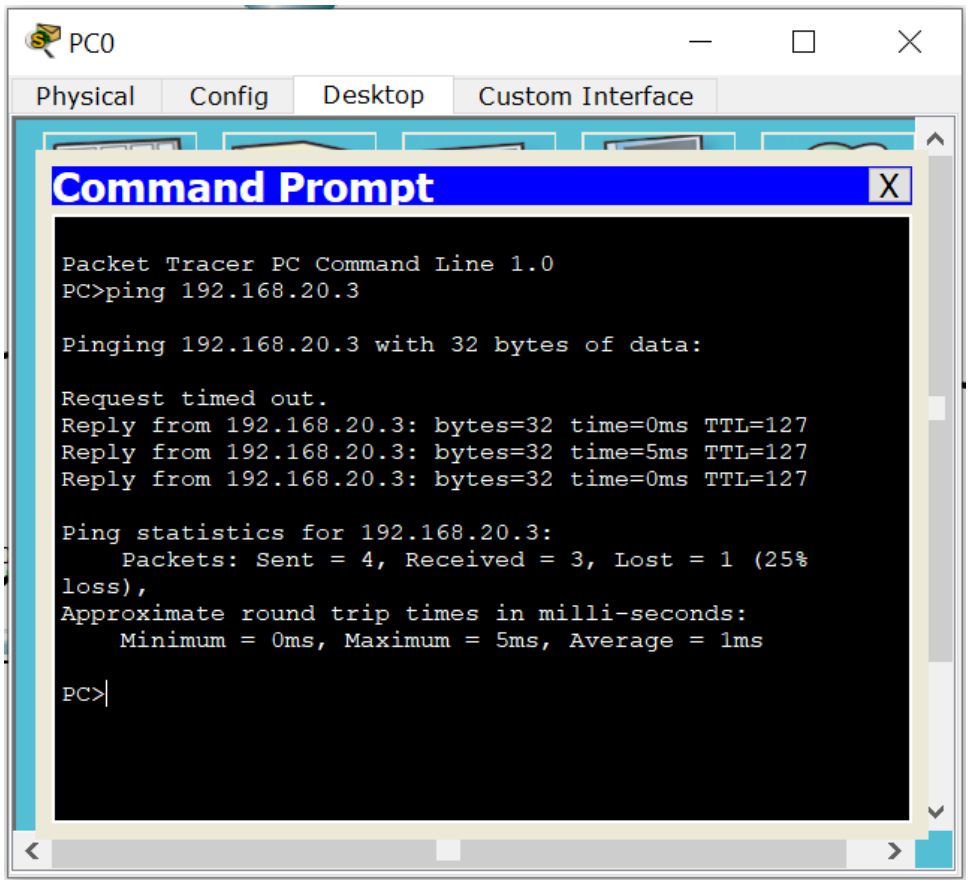
Observation:

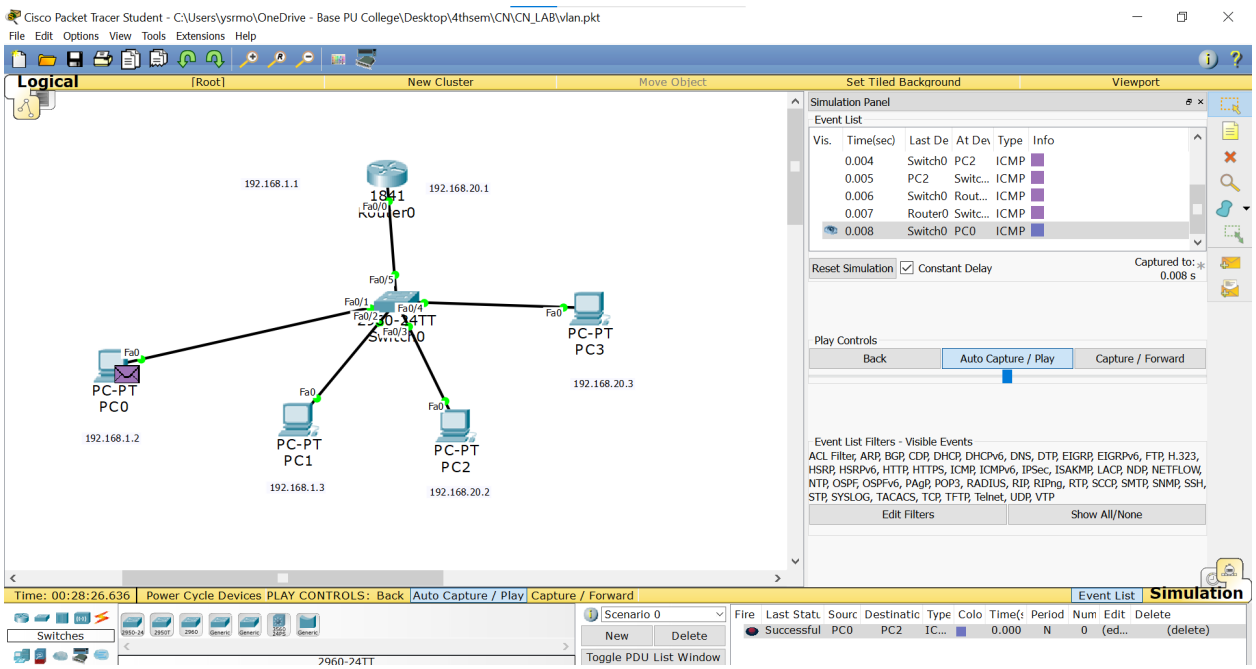
We can have one device on one VLAN and another on another VLAN connected to the same switch. They will only have other broadcast traffic from within their VLANs, as if they were connected to 2 switches.

TOPOLOGY:



OUTPUT:


PC0
Physical
Config
Desktop
Custom Interface
Command Prompt
X
Packet Tracer PC Command Line 1.0
PC>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 TTL=127
Reply from 192.168.20.3: bytes=32 time=5ms TTL=127
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127
Ping statistics for 192.168.20.3:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 5ms, Average = 1ms
PC>


Cisco Packet Tracer Student - C:\Users\ysrmo\OneDrive - Base PU College\Desktop\4thsem\CN\CN_LAB\vlan.pkt
File Edit Options View Tools Extensions Help
Logical
[Root]
New Cluster
Move Object
Set Tiled Background
Viewport
192.168.1.1
192.168.20.1
Router0
Fa0/5
Fa0/1
Fa0/4
Fa0/2
Fa0/3
Fa0
PC-PT PC0
192.168.1.2
PC-PT PC1
192.168.1.3
PC-PT PC2
192.168.20.2
PC-PT PC3
192.168.20.3
Simulation Panel
Event List
Vis. Time(sec) Last De At De Type Info
0.004 Switch0 PC2 ICMP
0.005 PC2 Switc... ICMP
0.006 Switch0 Rout... ICMP
0.007 Router0 Switc... ICMP
0.008 Switch0 PC0 ICMP
Reset Simulation
Constant Delay
Captured to: 0.008 s
Play Controls
Back
Auto Capture / Play
Capture / Forward
Event List Filters - Visible Events
ACL Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, LACP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP
Edit Filters
Show All/None
Time: 00:28:26.636
Power Cycle Devices PLAY CONTROLS: Back
Auto Capture / Play
Capture / Forward
Event List
Simulation
Switches
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Statu Sourc Destinatic Type Colo Time(s Period Num Edit Delete
Successful PC0 PC2 IC... 0.000 N 0 (ed... (delete)