LAB-8

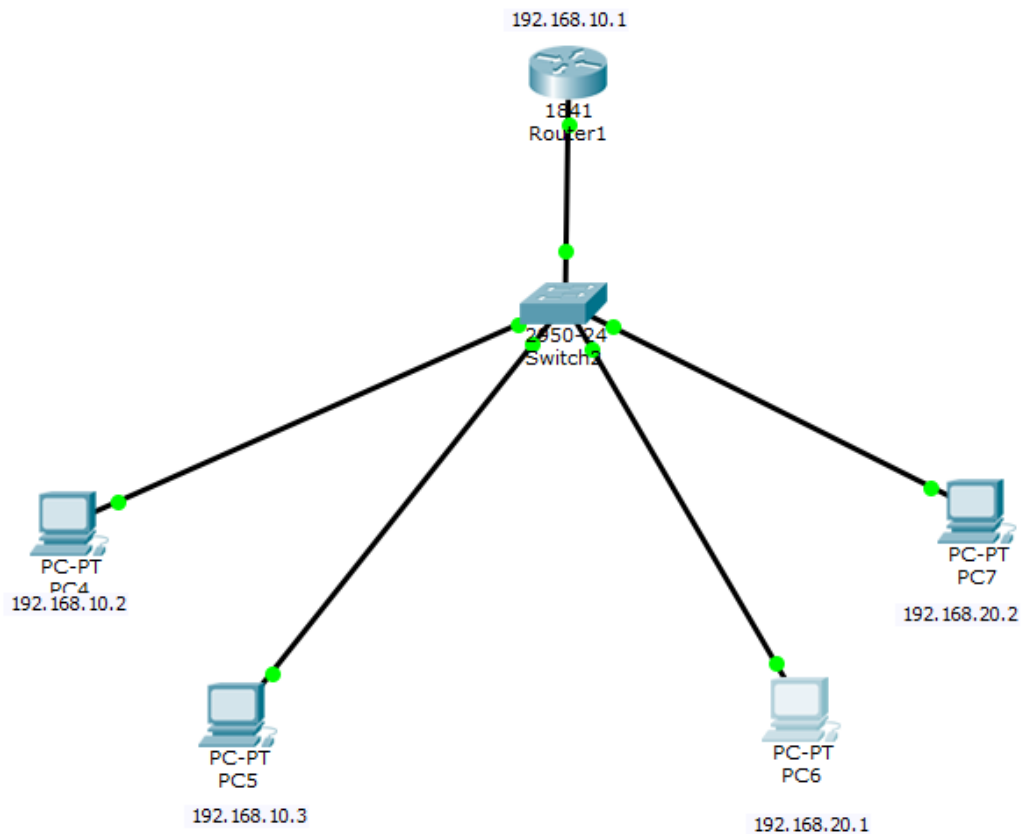**8)a)To Create virtual on top of the virtual LAN and enable communications between physical LAN and virtual LAN**

Daigram:=

Adding LNA Values:=

VLAN Number	
VLAN Name	

Add   Remove

VLAN No	VLAN Name
1	default
20	VLAN1
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default

OUTPUT:=

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.10.1

Pinging 192.168.10.1 with 32 bytes of data:

Reply from 192.168.10.1: bytes=32 time=0ms TTL=255
Reply from 192.168.10.1: bytes=32 time=0ms TTL=255
Reply from 192.168.10.1: bytes=32 time=0ms TTL=255
Reply from 192.168.10.1: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=0ms TTL=127
Reply from 192.168.10.2: bytes=32 time=0ms TTL=127
Reply from 192.168.10.2: bytes=32 time=0ms TTL=127
Reply from 192.168.10.2: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.20.1

Pinging 192.168.20.1 with 32 bytes of data:

Reply from 192.168.20.1: bytes=32 time=0ms TTL=127
Reply from 192.168.20.1: bytes=32 time=0ms TTL=127
Reply from 192.168.20.1: bytes=32 time=0ms TTL=127
Reply from 192.168.20.1: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:

Reply from 192.168.20.3: bytes=32 time=0ms TTL=255
Reply from 192.168.20.3: bytes=32 time=0ms TTL=255
Reply from 192.168.20.3: bytes=32 time=0ms TTL=255
Reply from 192.168.20.3: bytes=32 time=0ms TTL=255

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```
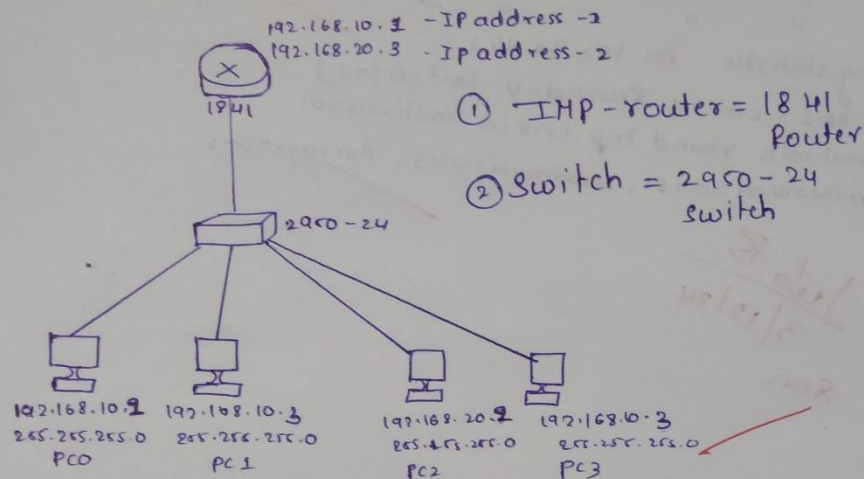
Observation:=

8)a) to create virtual lan on top of the virtual lan and enable communications b/w physical lans and virtual lan

* logical n/w and top of the physical n/w - it called as Trunk interface

CRC-8 = $x^8 + x^3 + x^1 + 2$ data word append binary division steat remainder appendto the dataword.

192.168.10.1 - IP address - 1
192.168.20.3 - Ip address - 2

1841

① IHP - router = 1841 Router

② Switch = 2950 - 24 switch

2950 - 24

192.168.10.1　192.168.10.3　　　192.168.20.1　192.168.10.3
255.255.255.0　255.256.255.0　　255.453.255.0　255.255.255.0
PC0　　　　　　PC1　　　　　　　PC2　　　　　　PC3

③ give ip address for Pc0, Pc3 as given in daigram

④ give IP address for router where in given router add the ip address 1

for ① enable
　　② configt
　　③ interfac fastEthernet 0|0
　　④ ip address　192.168.10.1 255.255.255.0
　　⑤ no sutdown
　　⑥ exit

⑤ click on switch in VLN Database give vlan no as 20 vlan nam as VLAN 1 and add the Value.

⑥ For switch only fast Ethernet 0|3 as - Acess give vLAN as 20 similar for fast Ethernet 0|0 and for fast Ethernet 0|5 Make Trunk

⑦ for fasl Ethernet 0|5 Make Trunk.

⑧ give ip address for PC2, PC3 as give in above

⑨ in router in vlan database add no as 20 and VLAN Name as VLAN 1.

⑩ Router command executed are
　1) config t
　2) interface fasl Ethernet 0|0.1
　3) ip address 192.168.20.3 255.255.255.0
　4) no shutdown
　5) exit

2024.12.03

Observation - pinging from Pc9 to Pc0

Ping 192.168.10.1 with 32 bytes of Data:

Reply from 192.168.0.1 : bytes=32 time=0ms TTL=228
" " " " "
" " " " "
" " " " "

ping statistic for 192.168.10.1
packets : sent=4 Recived=4 lost=0 (0%)
Approximate round trip time in milliseconds
minimum=0MS , Maximum=0MS , Average=0MS

Leela.B
3/12/24

Seen