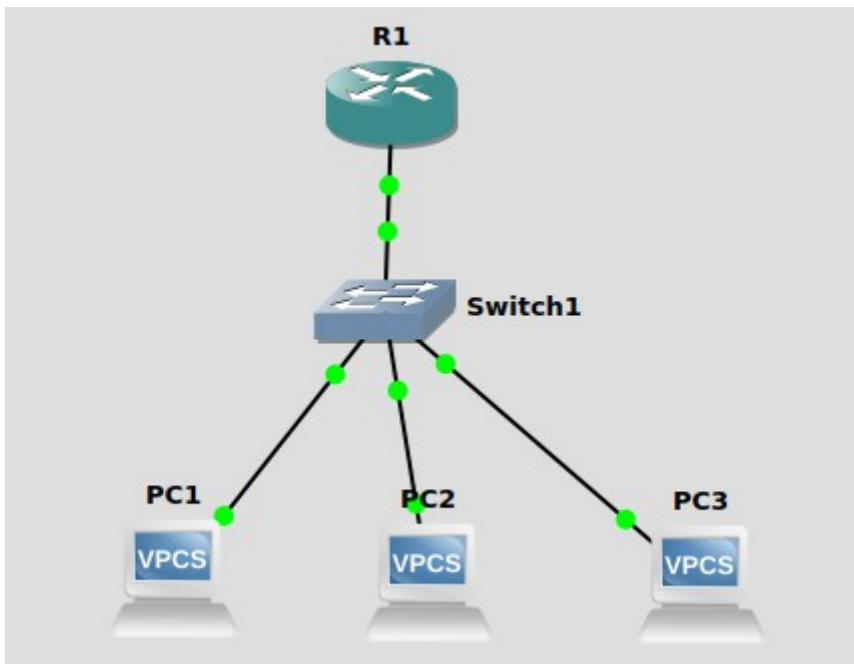


NAME: PRERNA MITTAL
SECTION: CSE-D

QUESTION-1
GNS3 DIAGRAM



```
R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#inter f0/1
R1(config-if)#ip address 192.168.10.1 255.255.255.240
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
*Mar  1 00:02:54.167: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar  1 00:02:55.167: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

```
R1(config)#interface f0/0.2
R1(config-subif)#encapsulation dot1q 2
R1(config-subif)#ip address 192.168.1.65 255.255.255.192
```

```
R1(config-subif)#no shutdown
R1(config-subif)#int f0/0.3
R1(config-subif)#encapsulation dot1q 3
R1(config-subif)#ip address 192.168.1.129. 255.255.255.240
```

PC1:

```
PC2> ip 192.168.1.67/26 192.168.1.65
Checking for duplicate address...
PC2 : 192.168.1.67 255.255.255.192 gateway 192.168.1.65
```

PC2:

```
PC2> ip 192.168.1.67/26 192.168.1.65
Checking for duplicate address...
PC2 : 192.168.1.67 255.255.255.192 gateway 192.168.1.65
```

PC3:

```
PC3> ip 192.168.1.67/26 192.168.1.65
Checking for duplicate address...
PC3 : 192.168.1.67 255.255.255.192 gateway 192.168.1.65
```

```
PC3> ip 192.168.1.130/27 192.168.1.129
Checking for duplicate address...
PC3 : 192.168.1.130 255.255.255.224 gateway 192.168.1.129
```

WIRESHARK OBSERVATION

Wireshark interface showing a packet capture on interface 0. The capture is titled "Capturing from Standard Input [PC3 Ethernet0 to Switch1 Ethernet3]". The display filter is "Apply a display filter ... <Ctrl-/>". The packet list shows 12 packets, with the first 11 packets being ICMP Echo (ping) requests and replies. The first packet is an ICMP Echo (ping) request from 192.168.1.130 to 192.168.1.66, with ID 0x0774, seq=1/256, ttl=63. The second packet is an ARP request from 192.168.1.130 to 192.168.1.130, asking for the MAC address of 192.168.1.129. The third packet is an ARP response from 192.168.1.130 to 192.168.1.130, indicating that 192.168.1.129 is at ca:01:13:cb:00:00. The remaining packets are ICMP Echo (ping) replies from 192.168.1.66 to 192.168.1.130, with IDs 0x0774, 0x0874, 0x0874, 0x0874, 0x0874, 0x0874, 0x0874, 0x0874, 0x0874, 0x0874, and 0x0874, and sequence numbers 1/256, 2/512, 2/512, 3/768, 3/768, 4/1024, 4/1024, 5/1280, 5/1280, and 5/1280. The packet details pane shows the first packet's details: Frame 1: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface 0. Ethernet II, Src: ca:01:13:cb:00:00 (ca:01:13:cb:00:00), Dst: Private_66:68:02 (00:50:79:66:68:02). Internet Protocol Version 4, Src: 192.168.1.66, Dst: 192.168.1.130. Internet Control Message Protocol.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	192.168.1.66	192.168.1.130	ICMP	98	Echo (ping) request id=0x0774, seq=1/256, ttl=63 (reply in 4)
2	0.000578	Private_66:68:02	Broadcast	ARP	64	Who has 192.168.1.129? Tell 192.168.1.130 [ETHERNET FRAME CHECK SEQUENCE INCORRECT]
3	0.010204	ca:01:13:cb:00:00	Private_66:68:02	ARP	60	192.168.1.129 is at ca:01:13:cb:00:00
4	0.010493	192.168.1.130	192.168.1.66	ICMP	98	Echo (ping) reply id=0x0774, seq=1/256, ttl=64 (request in 1)
5	1.030859	192.168.1.66	192.168.1.130	ICMP	98	Echo (ping) request id=0x0874, seq=2/512, ttl=63 (reply in 6)
6	1.031212	192.168.1.130	192.168.1.66	ICMP	98	Echo (ping) reply id=0x0874, seq=2/512, ttl=64 (request in 5)
7	2.051658	192.168.1.66	192.168.1.130	ICMP	98	Echo (ping) request id=0x0974, seq=3/768, ttl=63 (reply in 8)
8	2.051926	192.168.1.130	192.168.1.66	ICMP	98	Echo (ping) reply id=0x0974, seq=3/768, ttl=64 (request in 7)
9	3.072778	192.168.1.66	192.168.1.130	ICMP	98	Echo (ping) request id=0x0b74, seq=4/1024, ttl=63 (reply in 10)
10	3.073169	192.168.1.130	192.168.1.66	ICMP	98	Echo (ping) reply id=0x0b74, seq=4/1024, ttl=64 (request in 9)
11	4.093545	192.168.1.66	192.168.1.130	ICMP	98	Echo (ping) request id=0x0c74, seq=5/1280, ttl=63 (reply in 12)
12	4.093944	192.168.1.130	192.168.1.66	ICMP	98	Echo (ping) reply id=0x0c74, seq=5/1280, ttl=64 (request in 11)

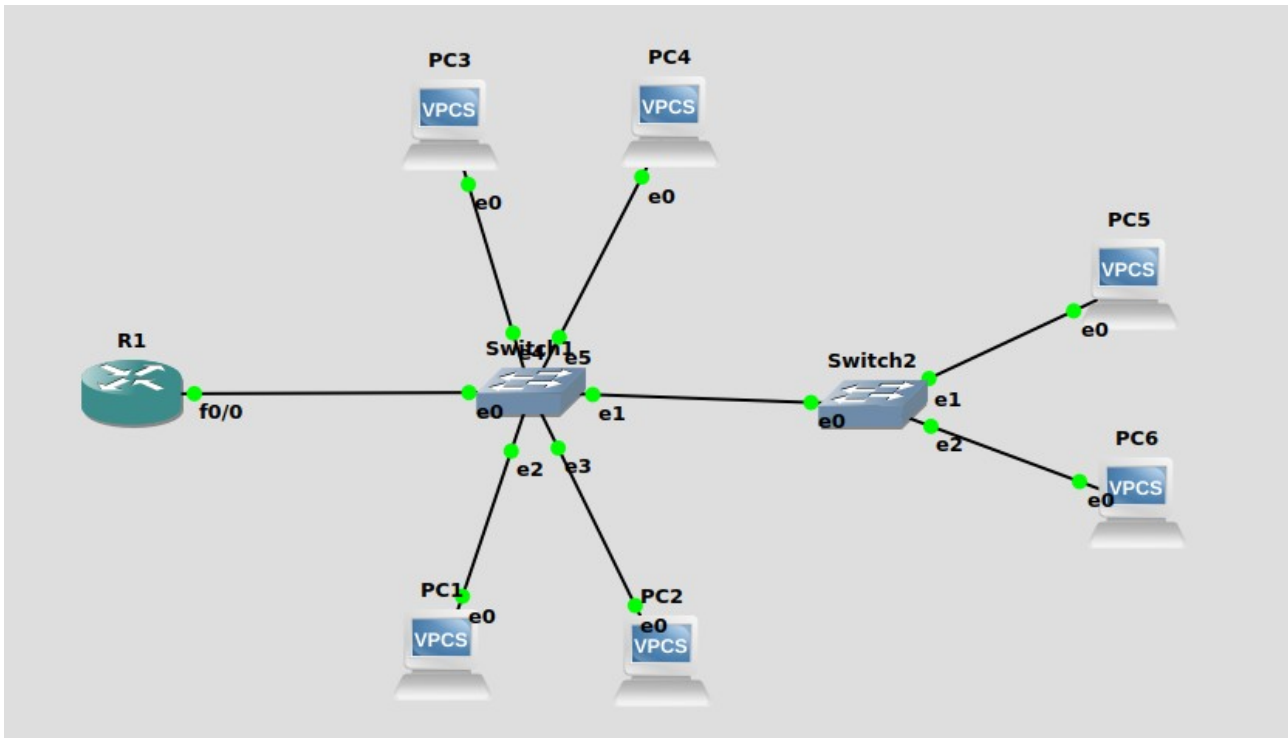
Ready to load or capture

Packets: 12 - Displayed: 12 (100.0%)

Profile: Default

QUESTION-2

GNS3 DIAGRAM



SWITCHES CONFIG

Switch 1:

Node properties

Switch1 configuration

General

Name: Switch1

Console type: none

Settings

Port: 6

VLAN: 1

Type: access

QinQ EtherType: 0x8100

Ports

Port	VLAN	Type	EtherT
0	1	dot1q	
1	1	dot1q	
2	2	access	
3	2	access	
4	3	access	
5	3	access	

Add Delete

Reset Apply Cancel OK

Switch 2:

Node properties

Switch2 configuration

General

Name: Switch2

Console type: none

Settings

Port: 3

VLAN: 1

Type: access

QinQ EtherType: 0x8100

AddDelete

Ports

Port	VLAN	Type	EtherT
0	1	dot1q	
1	4	access	
2	4	access	

Reset

Apply

Cancel

OK