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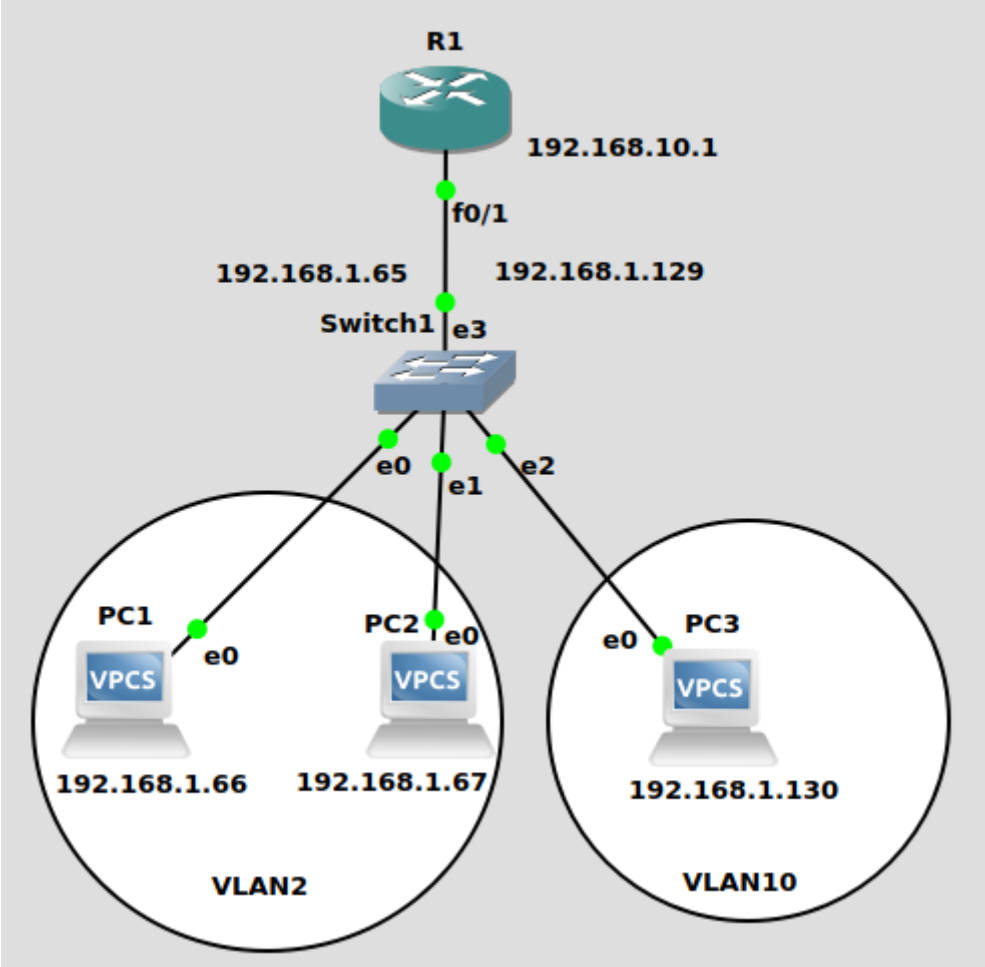
CSE B

CN LAB9
DESIGN OF VLANs USING GNS3

1.




```
R1#conf 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 shut
R1(config-if)#inter f
*Mar  1 00:00:52.947: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
*Mar  1 00:00:53.947: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R1(config-if)#inter f0/1.2
R1(config-subif)#encapsulation dot1q 2
R1(config-subif)#ip address
*Mar  1 00:01:17.211: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
R1(config-subif)#ip address 192.168.1.65 255.255.255.192
R1(config-subif)#no shut
R1(config-subif)#inter f0/1.10
R1(config-subif)#encapsulation dot1q 10
R1(config-subif)#1p address 192.168.1.129 255.255.255.224
                ^
% Invalid input detected at '^' marker.

R1(config-subif)#ip address 192.168.1.129 255.255.255.224
R1(config-subif)#no shut
```

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

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

ping from PC1 to PC3

```
PC1> ping 192.168.1.130

84 bytes from 192.168.1.130 icmp_seq=1 ttl=63 time=17.888 ms
84 bytes from 192.168.1.130 icmp_seq=2 ttl=63 time=19.279 ms
84 bytes from 192.168.1.130 icmp_seq=3 ttl=63 time=19.448 ms
84 bytes from 192.168.1.130 icmp_seq=4 ttl=63 time=19.174 ms
84 bytes from 192.168.1.130 icmp_seq=5 ttl=63 time=19.009 ms
```

ping from PC2 to PC3

```
PC2> ping 192.168.1.130

84 bytes from 192.168.1.130 icmp_seq=1 ttl=63 time=16.794 ms
84 bytes from 192.168.1.130 icmp_seq=2 ttl=63 time=19.605 ms
84 bytes from 192.168.1.130 icmp_seq=3 ttl=63 time=18.971 ms
84 bytes from 192.168.1.130 icmp_seq=4 ttl=63 time=19.369 ms
84 bytes from 192.168.1.130 icmp_seq=5 ttl=63 time=19.361 ms
```

ping from PC3 to PC1 and PC2

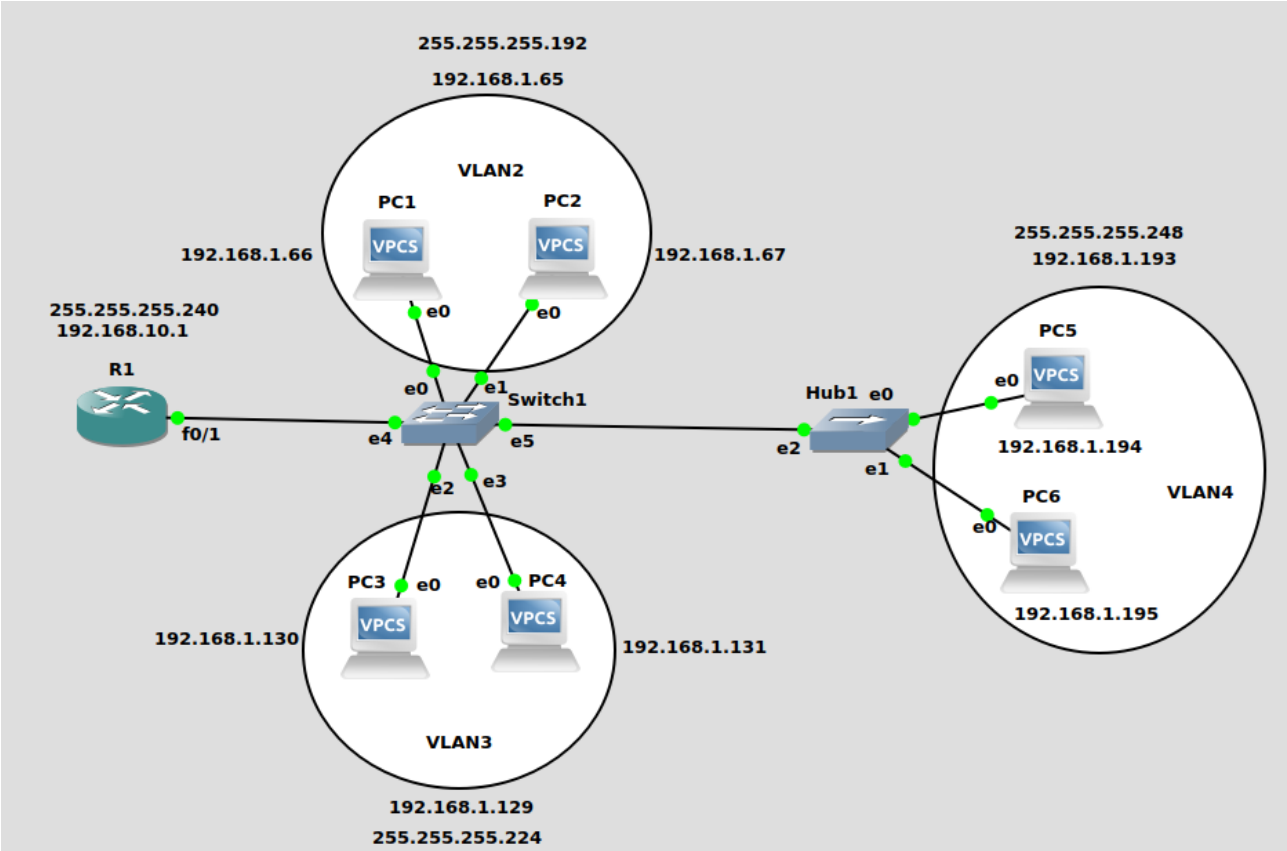
```
PC3> ping 192.168.1.66

84 bytes from 192.168.1.66 icmp_seq=1 ttl=63 time=14.341 ms
84 bytes from 192.168.1.66 icmp_seq=2 ttl=63 time=19.163 ms
84 bytes from 192.168.1.66 icmp_seq=3 ttl=63 time=19.669 ms
84 bytes from 192.168.1.66 icmp_seq=4 ttl=63 time=19.680 ms
84 bytes from 192.168.1.66 icmp_seq=5 ttl=63 time=19.032 ms

PC3> ping 192.168.1.67

84 bytes from 192.168.1.67 icmp_seq=1 ttl=63 time=20.171 ms
84 bytes from 192.168.1.67 icmp_seq=2 ttl=63 time=19.016 ms
84 bytes from 192.168.1.67 icmp_seq=3 ttl=63 time=19.262 ms
84 bytes from 192.168.1.67 icmp_seq=4 ttl=63 time=19.326 ms
84 bytes from 192.168.1.67 icmp_seq=5 ttl=63 time=19.593 ms
```

2.




```
R1#
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#Interface fastEthernet 0/1
R1(config-if)#ip address 192.168.10.1 255.255.255.240
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#Interface fastEthernet 0/1.2
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)#exit
R1(config)#Interface fastEthernet 0/1.3
R1(config-subif)#encapsulation dot1q 3
R1(config-subif)#ip address 192.168.1.129 255.255.255.224
R1(config-subif)#no shutdown
R1(config-subif)#exit
R1(config)#Interface fastEthernet 0/1.4
R1(config-subif)#encapsulation dot1q 4
R1(config-subif)#ip address  192.168.1.193 255.255.255.248
R1(config-subif)#no shutdown
R1(config-subif)#exit
```

```
PC1> ip 192.168.1.66 255.255.255.192 192.168.1.65
Checking for duplicate address...
PC1 : 192.168.1.66 255.255.255.192 gateway 192.168.1.65
```

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

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

```
PC4> ip 192.168.1.131 255.255.255.224 192.168.1.129
Checking for duplicate address...
PC4 : 192.168.1.131 255.255.255.224 gateway 192.168.1.129
```

```
PC5> ip 192.168.1.194 255.255.255.248 192.168.1.193
Checking for duplicate address...
PC5 : 192.168.1.194 255.255.255.248 gateway 192.168.1.193
```

```
PC6> ip 192.168.1.195 255.255.255.248 192.168.1.193
Checking for duplicate address...
PC6 : 192.168.1.195 255.255.255.248 gateway 192.168.1.193
```

ping PC1 to PC2

```
PC1> ping 192.168.1.67

84 bytes from 192.168.1.67 icmp_seq=1 ttl=64 time=0.573 ms
84 bytes from 192.168.1.67 icmp_seq=2 ttl=64 time=0.559 ms
84 bytes from 192.168.1.67 icmp_seq=3 ttl=64 time=0.596 ms
84 bytes from 192.168.1.67 icmp_seq=4 ttl=64 time=0.446 ms
84 bytes from 192.168.1.67 icmp_seq=5 ttl=64 time=0.541 ms
```

ping PC1 to PC3

```
PC1> ping 192.168.1.130

84 bytes from 192.168.1.130 icmp_seq=1 ttl=63 time=11.937 ms
84 bytes from 192.168.1.130 icmp_seq=2 ttl=63 time=19.517 ms
84 bytes from 192.168.1.130 icmp_seq=3 ttl=63 time=20.367 ms
84 bytes from 192.168.1.130 icmp_seq=4 ttl=63 time=19.901 ms
84 bytes from 192.168.1.130 icmp_seq=5 ttl=63 time=19.645 ms
```

ping PC1 to PC5

```
PC1> ping 192.168.1.194

84 bytes from 192.168.1.194 icmp_seq=1 ttl=63 time=15.020 ms
84 bytes from 192.168.1.194 icmp_seq=2 ttl=63 time=19.064 ms
84 bytes from 192.168.1.194 icmp_seq=3 ttl=63 time=19.333 ms
84 bytes from 192.168.1.194 icmp_seq=4 ttl=63 time=19.278 ms
84 bytes from 192.168.1.194 icmp_seq=5 ttl=63 time=19.344 ms
```