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CSCI 351
HW 5

Task 1:

	LAN A	LAN B	LAN C
Subnet Mask	/26	/25	/27
Network Address	20.10.172.0	20.10.172.64	20.10.172.192
Smallest IP	20.10.172.1	20.10.172.65	20.10.172.193
Highest IP	20.10.172.62	20.10.172.190	20.10.172.222

Task 2:

```
*** Configuring hosts
hA1 hA2 hB1 hB2 hC1 hC2
*** Starting controller
c0
*** Starting 3 switches
sA sB sC ...

Running pingAll
*** Ping: testing ping reachability
hA1 -> hA2 X X X X
hA2 -> hA1 X X X X
hB1 -> X X hB2 X X
hB2 -> X X hB1 X X
hC1 -> X X X X hC2
hC2 -> X X X X hC1
*** Results: 80% dropped (6/30 received)

Detailed LAN testing:
LAN A
hA1 to hA2: OK
hA2 to hA1: OK
LAN B
hB1 to hB2: OK
hB2 to hB1: OK
LAN C
hC1 to hC2: OK
hC2 to hC1: OK
*** Stopping 1 controllers
c0
*** Stopping 6 links
......
*** Stopping 3 switches
sA sB sC
*** Stopping 6 hosts
hA1 hA2 hB1 hB2 hC1 hC2
*** Done
mininet@mininet-vm:/mnt/usb$
```

Task 3:

The routers would not connect to each other correctly and I could not figure out why. The commands I was running were correct as far as I could figure out, but if the routers are not connected then the hots can't be. I tried debugging this for errors but it didn't work.

```
Testing ping from hB1 to hA1
PING 20.10.172.2 (20.10.172.2) 56(84) bytes of data.
From 20.10.172.65: icmp_seq=1 Redirect Host(New nexthop: 20.10.172.2)
From 20.10.172.65: icmp_seq=2 Redirect Host(New nexthop: 20.10.172.2)
From 20.10.172.65: icmp_seq=3 Redirect Host(New nexthop: 20.10.172.2)
From 20.10.172.65 icmp_seq=1 Destination Host Unreachable

--- 20.10.172.2 ping statistics ---
3 packets transmitted, 0 received, +1 errors, 100% packet loss, time 2013ms
pipe 3

Testing traceroute from hB1 to hA1
traceroute to 20.10.172.2 (20.10.172.2), 30 hops max, 60 byte packets
 1  20.10.172.65 (20.10.172.65)  3.889 ms  4.415 ms  4.583 ms
 2  20.10.172.65 (20.10.172.65)  3049.082 ms !H  3049.352 ms !H  3049.411 ms !H
```