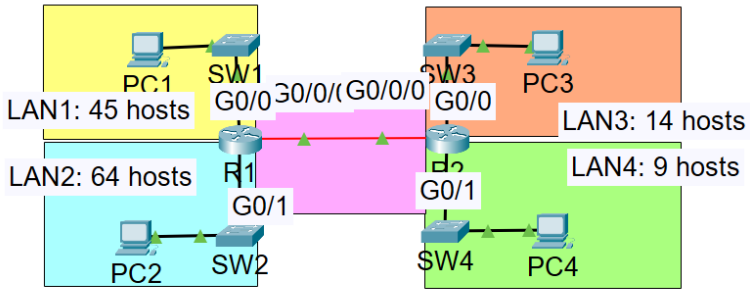
VLSM - This lab tested my knowledge really well. I committed some mistakes, but learnt from them.



Subnet the 192.168.5.0/24 network to provide sufficient addressing for each LAN. (Also, the point-to-point connection between R1 and R2).

Assign the first usable address to the PC in each LAN.

Assign the last usable address to the router's interface in each LAN.

Configure static routes on each router so that all PCs can ping eachother.

R1

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
Press RETURN to get started!


R1>en
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#int g0/0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

R1(config-if)#int g0/1
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

R1(config-if)#int g0/0
R1(config-if)#ip address 192.168.5.190 255.255.255.192
R1(config-if)#int g0/1
R1(config-if)#ip address 192.168.5.126 255.255.255.128
R1(config-if)#do sh ip int br
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0     192.168.5.190   YES manual up                    up
GigabitEthernet0/1     192.168.5.126   YES manual up                    up
GigabitEthernet0/2     unassigned      YES unset  administratively down down
GigabitEthernet0/0/0   unassigned      YES unset  administratively down down
Vlan1                  unassigned      YES unset  administratively down down
R1(config-if)#int g0/0/0
R1(config-if)#ip address 192.168.5.225 255.255.255.252
R1(config-if)#do sh ip int br
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0     192.168.5.190   YES manual up                    up
GigabitEthernet0/1     192.168.5.126   YES manual up                    up
GigabitEthernet0/2     unassigned      YES unset  administratively down down
GigabitEthernet0/0/0   192.168.5.225   YES manual administratively down down
Vlan1                  unassigned      YES unset  administratively down down
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to down
R1(config-if)#do sh ip int br
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0     192.168.5.190   YES manual up                    up
GigabitEthernet0/1     192.168.5.126   YES manual up                    up
GigabitEthernet0/2     unassigned      YES unset  administratively down down
GigabitEthernet0/0/0   192.168.5.225   YES manual down                  down
Vlan1                  unassigned      YES unset  administratively down down
R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up
```

Figure 1 R1 CLI (1)

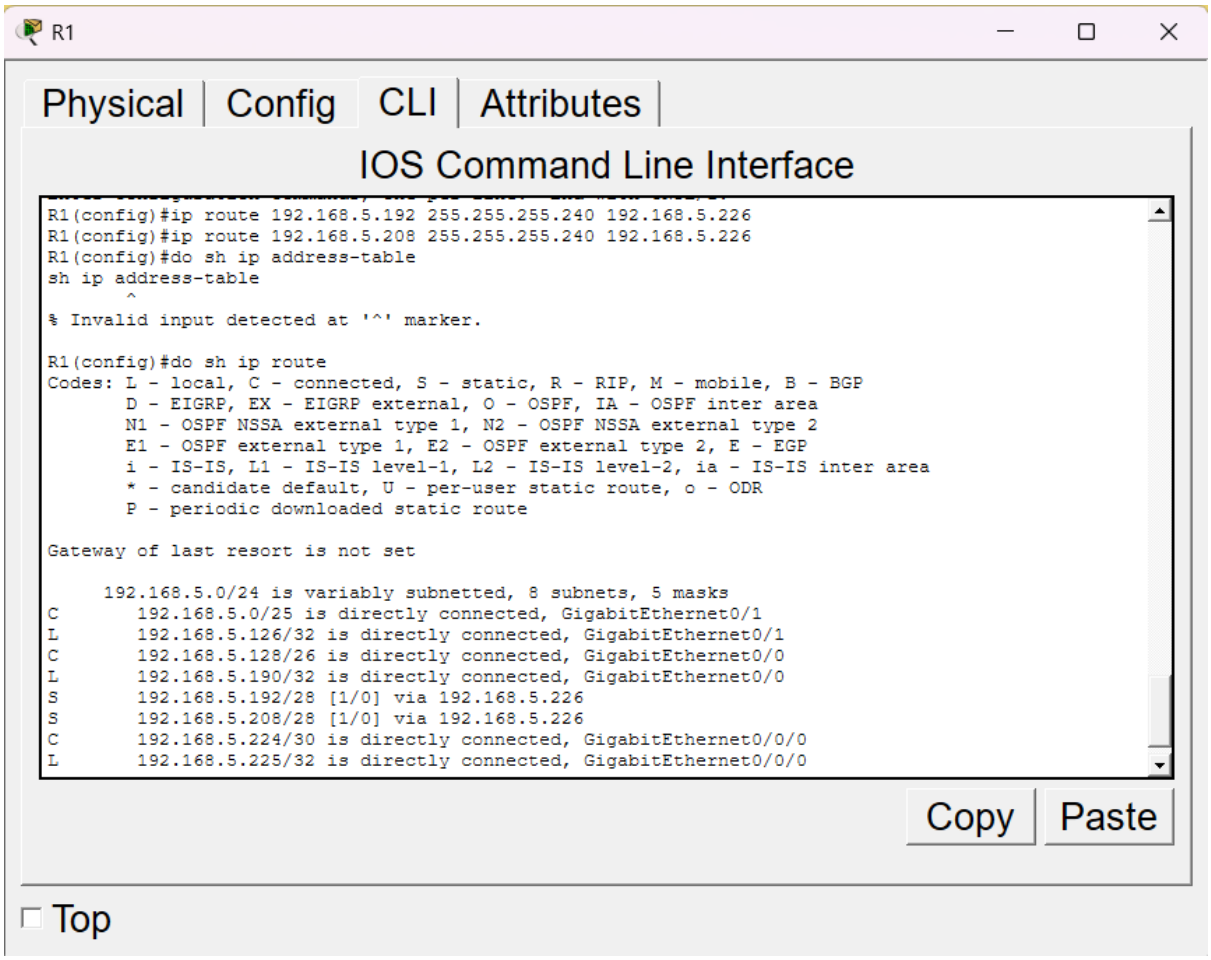


Figure 2 R1 CLI (2)

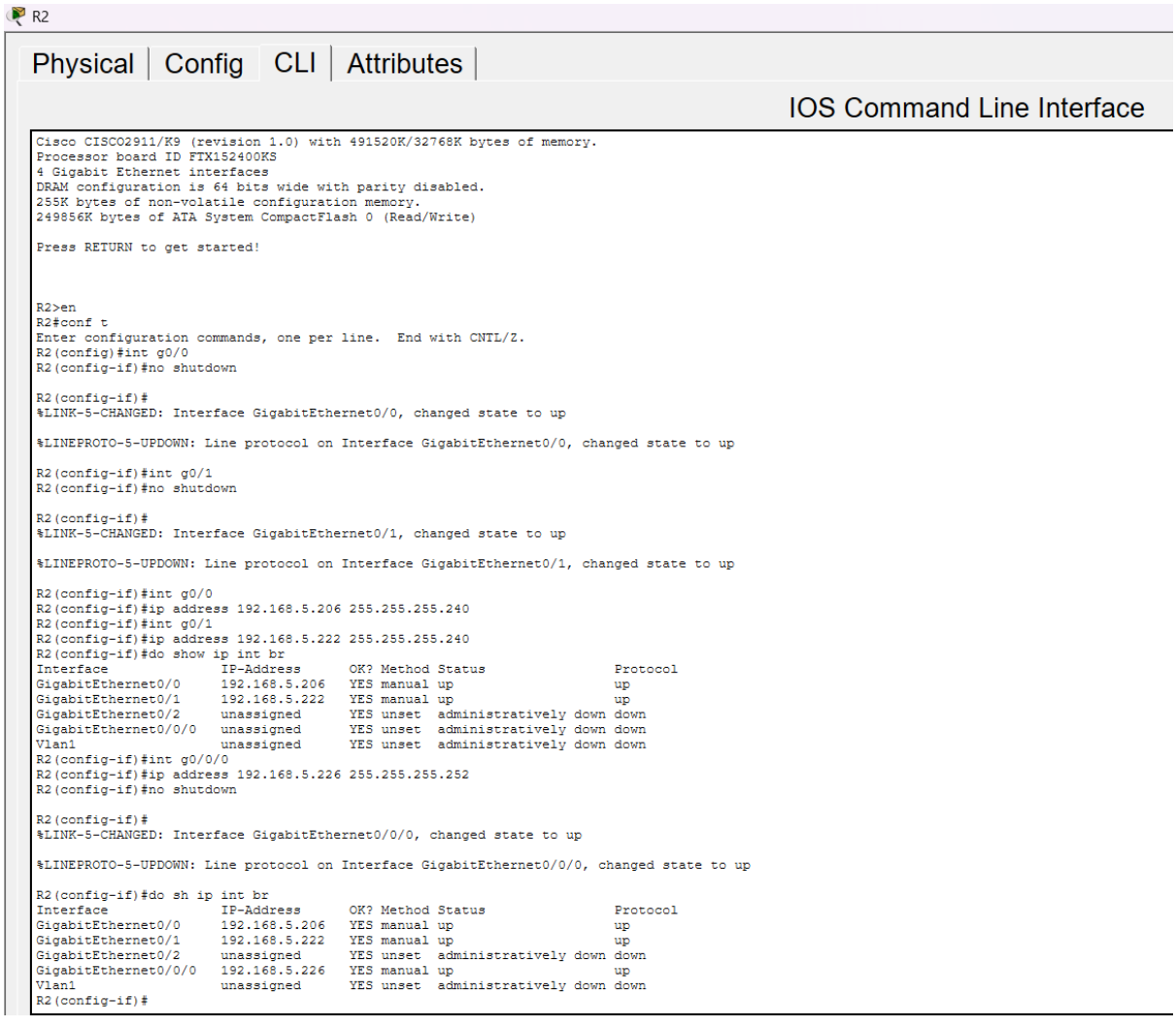


Figure 3 R2 CLI (1)

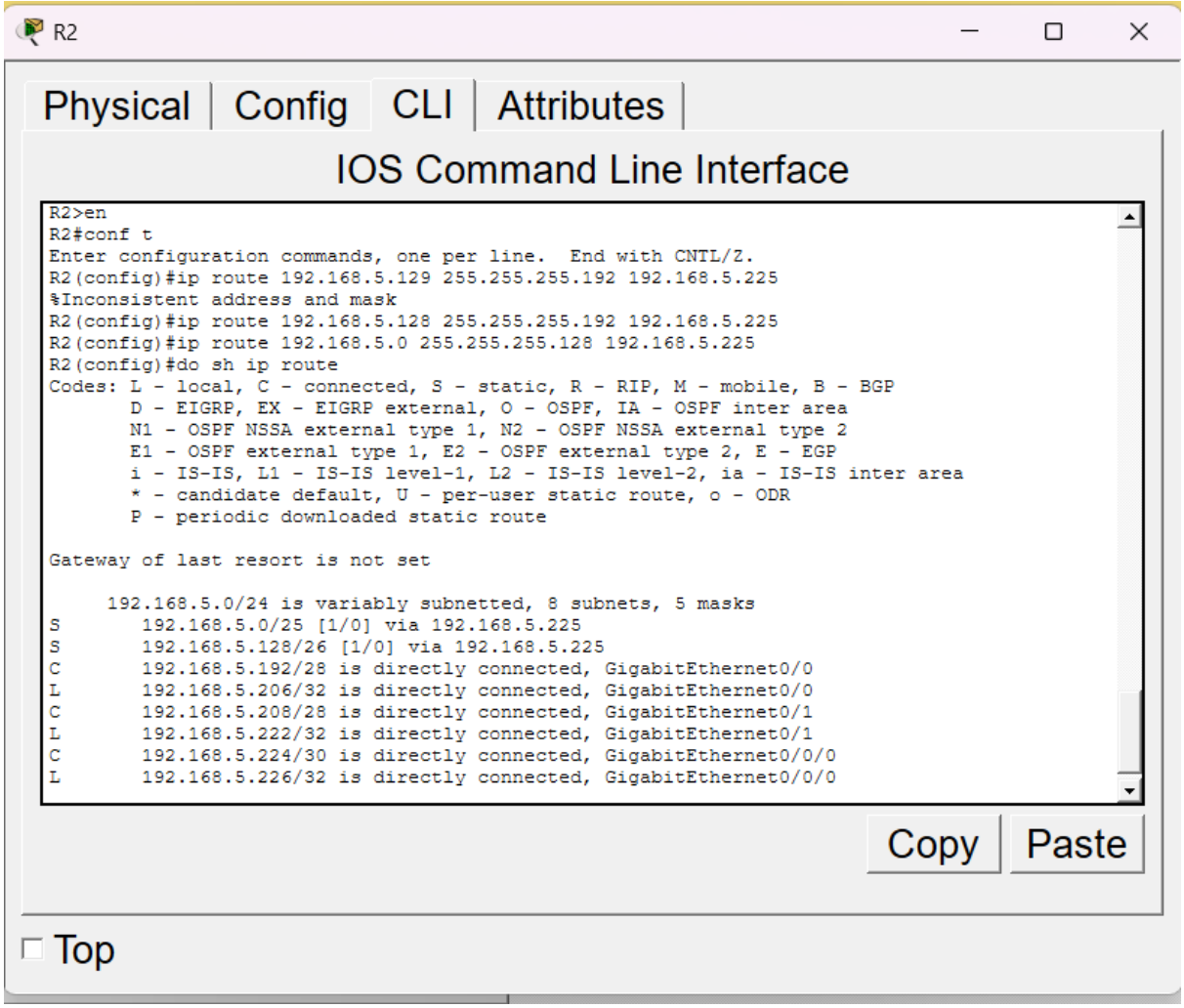


Figure 4 R2 CLI (2)

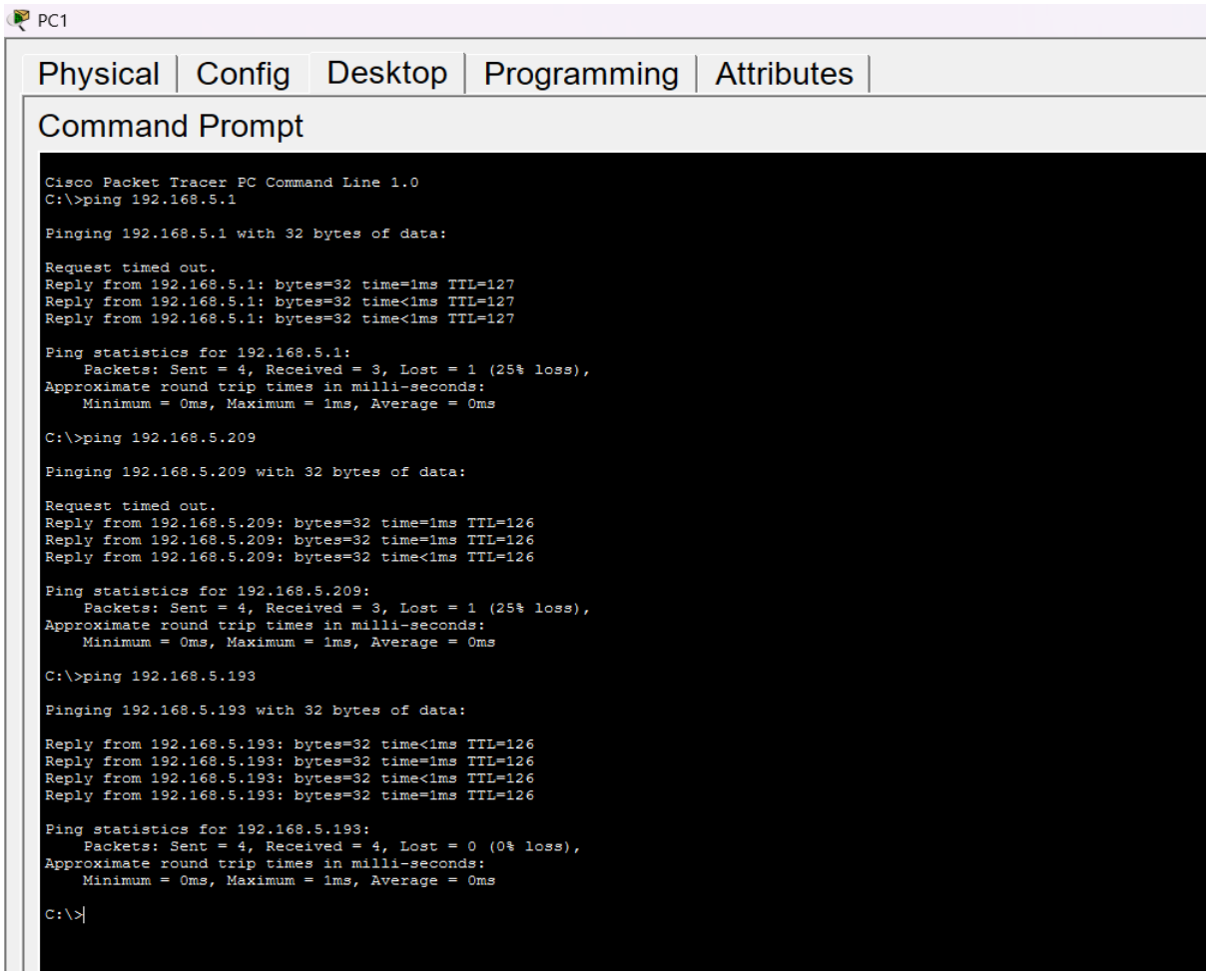


Figure 5 Ping from PC1 to PC2, PC3 & PC4