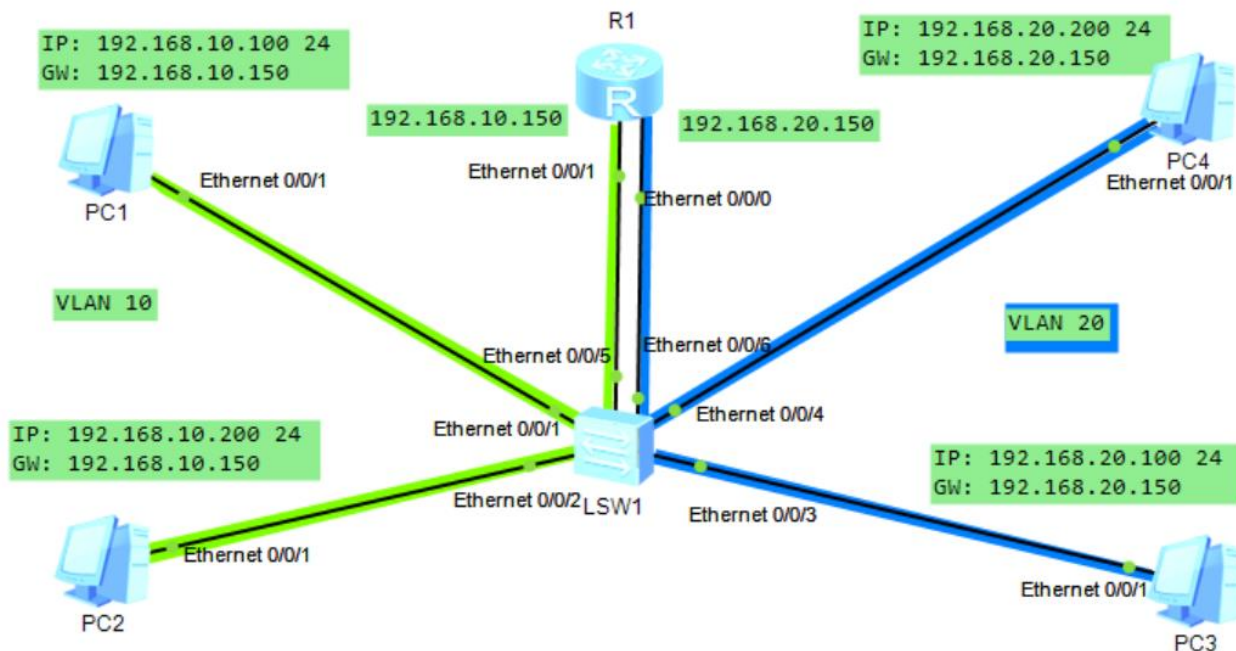


## LAB-05

Implement the following VLAN scenario in eNSP simulator:

eNSP simulation:



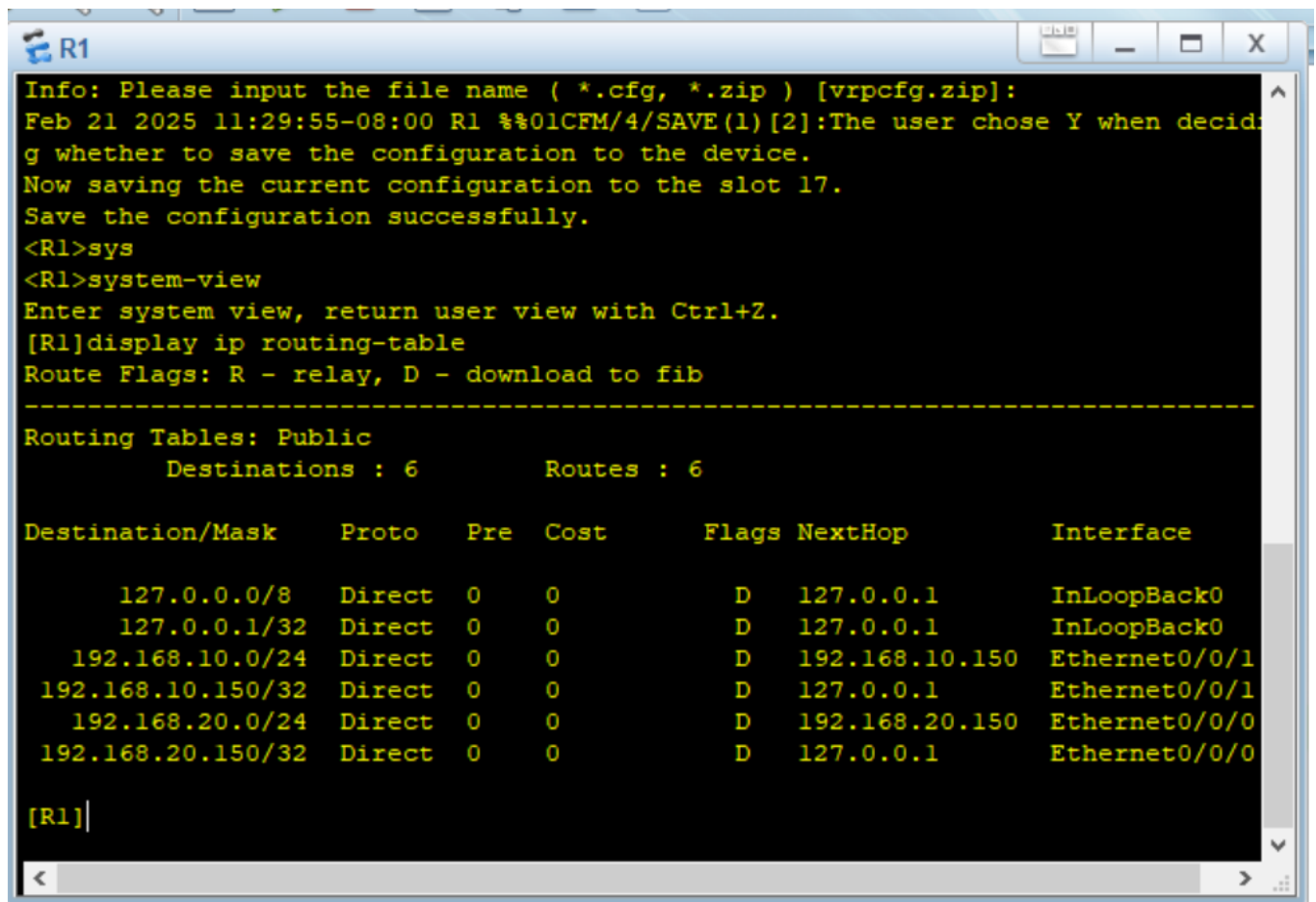
VLAN CONFIGURATION ON LSW1:

```
LSW1
# : ProtocolTransparent-vlan;      *: Management-vlan;

-----
VID  Type    Ports
-----
1    common   UT:Eth0/0/7 (D)   Eth0/0/8 (D)   Eth0/0/9 (D)   Eth0/0/10 (D)
                        Eth0/0/11 (D)   Eth0/0/12 (D)   Eth0/0/13 (D)   Eth0/0/14 (D)
                        Eth0/0/15 (D)   Eth0/0/16 (D)   Eth0/0/17 (D)   Eth0/0/18 (D)
                        Eth0/0/19 (D)   Eth0/0/20 (D)   Eth0/0/21 (D)   Eth0/0/22 (D)
                        GE0/0/1 (D)    GE0/0/2 (D)
10   common   UT:Eth0/0/1 (U)   Eth0/0/2 (U)   Eth0/0/5 (U)
20   common   UT:Eth0/0/3 (U)   Eth0/0/4 (U)   Eth0/0/6 (U)

VID  Status  Property    MAC-LRN  Statistics  Description
-----
1    enable   default    enable   disable    VLAN 0001
10   enable   default    enable   disable    VLAN 0010
20   enable   default    enable   disable    VLAN 0020
[LSW1]
```

## ROUTER CONFIGURATION:



```

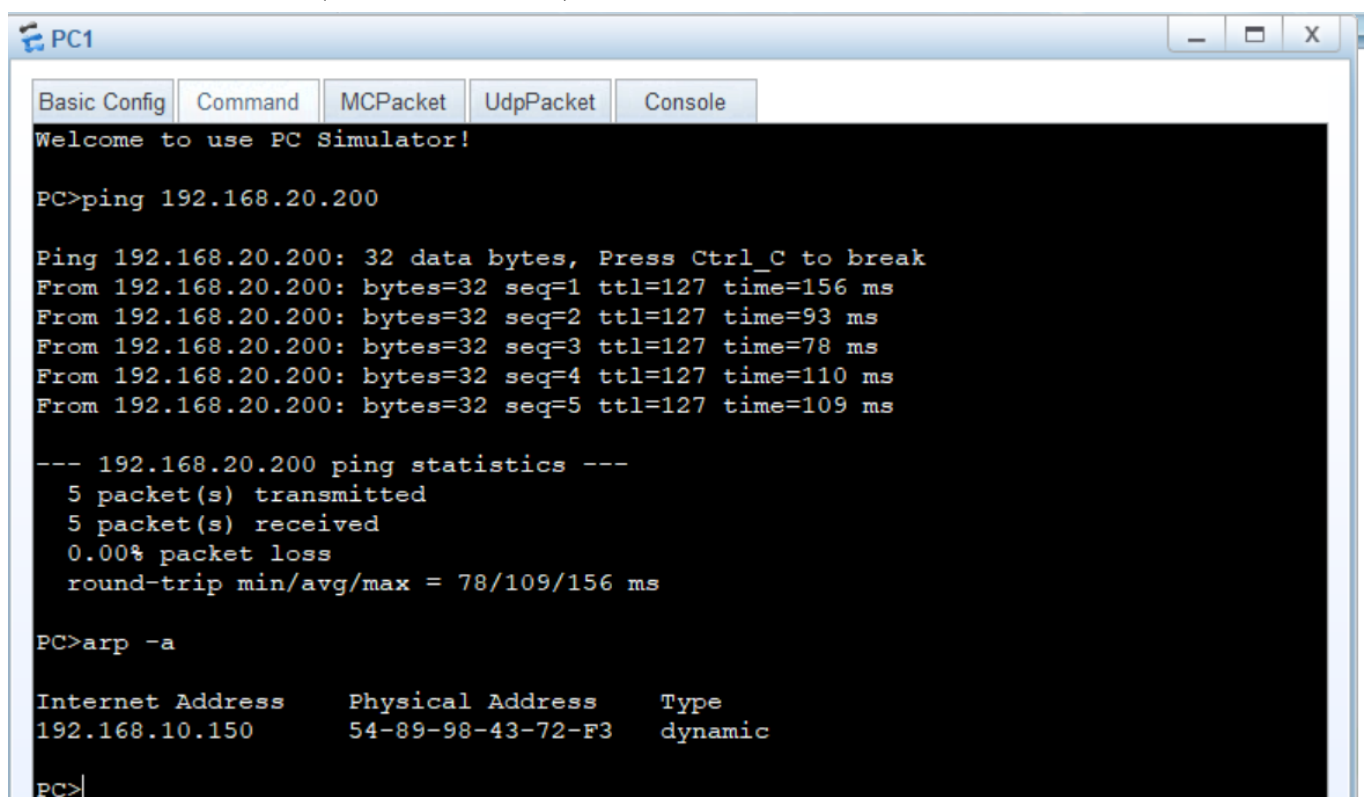
Info: Please input the file name ( *.cfg, *.zip ) [vrpcfg.zip]:
Feb 21 2025 11:29:55-08:00 R1 %01CFM/4/SAVE(1)[2]:The user chose Y when deciding whether to save the configuration to the device.
Now saving the current configuration to the slot 17.
Save the configuration successfully.
<R1>sys
<R1>system-view
Enter system view, return user view with Ctrl+Z.
[R1]display ip routing-table
Route Flags: R - relay, D - download to fib
-----
Routing Tables: Public
      Destinations : 6              Routes : 6

Destination/Mask    Proto   Pre  Cost      Flags NextHop         Interface
-----
127.0.0.0/8        Direct  0    0          D   127.0.0.1       InLoopBack0
127.0.0.1/32       Direct  0    0          D   127.0.0.1       InLoopBack0
192.168.10.0/24     Direct  0    0          D   192.168.10.150  Ethernet0/0/1
192.168.10.150/32   Direct  0    0          D   127.0.0.1       Ethernet0/0/1
192.168.20.0/24     Direct  0    0          D   192.168.20.150  Ethernet0/0/0
192.168.20.150/32   Direct  0    0          D   127.0.0.1       Ethernet0/0/0

[R1]

```

## PING PC4 FROM PC1 (Different VLAN's)



```

Welcome to use PC Simulator!

PC>ping 192.168.20.200

Ping 192.168.20.200: 32 data bytes, Press Ctrl_C to break
From 192.168.20.200: bytes=32 seq=1 ttl=127 time=156 ms
From 192.168.20.200: bytes=32 seq=2 ttl=127 time=93 ms
From 192.168.20.200: bytes=32 seq=3 ttl=127 time=78 ms
From 192.168.20.200: bytes=32 seq=4 ttl=127 time=110 ms
From 192.168.20.200: bytes=32 seq=5 ttl=127 time=109 ms

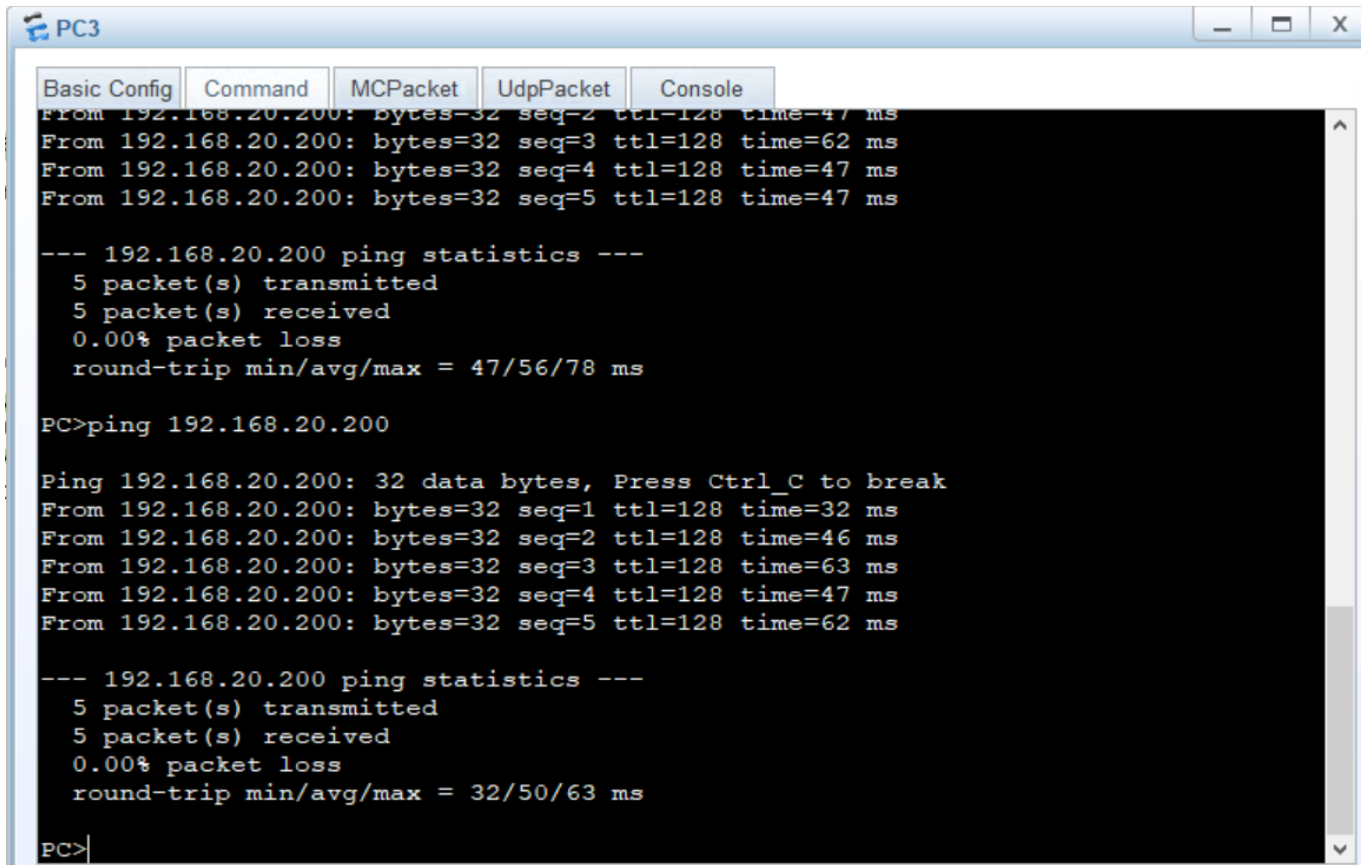
--- 192.168.20.200 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 78/109/156 ms

PC>arp -a

Internet Address      Physical Address      Type
192.168.10.150        54-89-98-43-72-F3    dynamic
PC>

```

PING PC4 FROM PC3 (same VLAN's)



```
PC3
Basic Config Command MCPacket UdpPacket Console
From 192.168.20.200: bytes=32 seq=2 ttl=128 time=47 ms
From 192.168.20.200: bytes=32 seq=3 ttl=128 time=62 ms
From 192.168.20.200: bytes=32 seq=4 ttl=128 time=47 ms
From 192.168.20.200: bytes=32 seq=5 ttl=128 time=47 ms

--- 192.168.20.200 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 47/56/78 ms

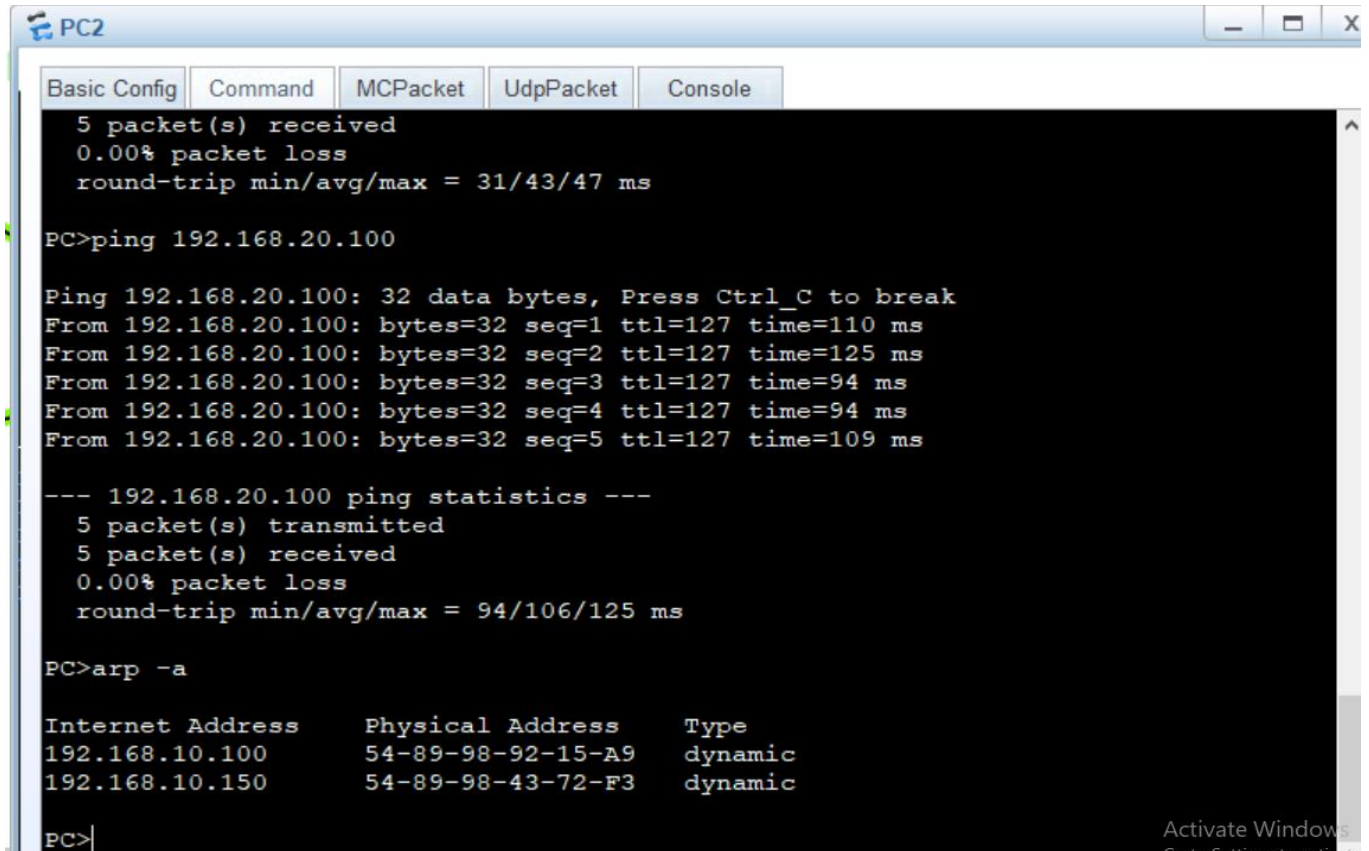
PC>ping 192.168.20.200

Ping 192.168.20.200: 32 data bytes, Press Ctrl_C to break
From 192.168.20.200: bytes=32 seq=1 ttl=128 time=32 ms
From 192.168.20.200: bytes=32 seq=2 ttl=128 time=46 ms
From 192.168.20.200: bytes=32 seq=3 ttl=128 time=63 ms
From 192.168.20.200: bytes=32 seq=4 ttl=128 time=47 ms
From 192.168.20.200: bytes=32 seq=5 ttl=128 time=62 ms

--- 192.168.20.200 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 32/50/63 ms

PC>
```

PING PC3 FROM PC2 (Different VLAN's)



```
PC2
Basic Config Command MCPacket UdpPacket Console
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 31/43/47 ms

PC>ping 192.168.20.100

Ping 192.168.20.100: 32 data bytes, Press Ctrl_C to break
From 192.168.20.100: bytes=32 seq=1 ttl=127 time=110 ms
From 192.168.20.100: bytes=32 seq=2 ttl=127 time=125 ms
From 192.168.20.100: bytes=32 seq=3 ttl=127 time=94 ms
From 192.168.20.100: bytes=32 seq=4 ttl=127 time=94 ms
From 192.168.20.100: bytes=32 seq=5 ttl=127 time=109 ms

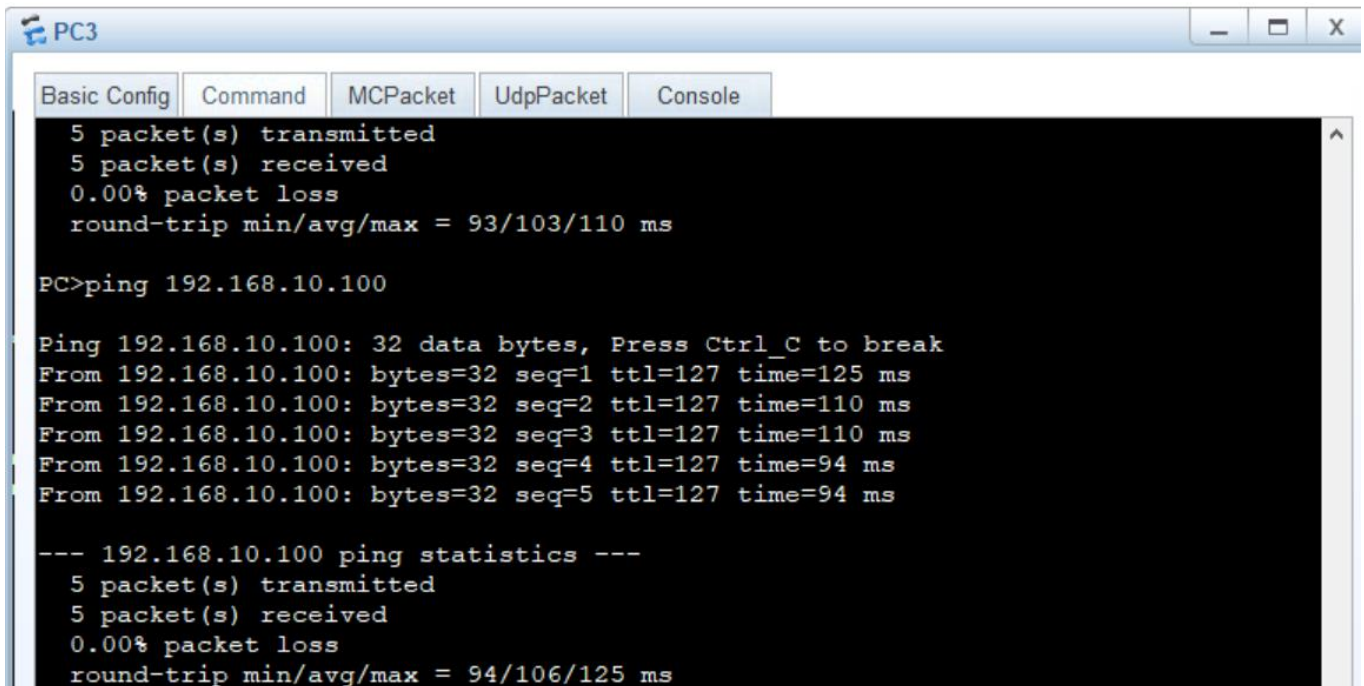
--- 192.168.20.100 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 94/106/125 ms

PC>arp -a

Internet Address      Physical Address      Type
192.168.10.100        54-89-98-92-15-A9    dynamic
192.168.10.150        54-89-98-43-72-F3    dynamic

PC>
```

## PING PC1 FROM PC3 (Different VLAN's)

A screenshot of a PC3 console window. The window has a title bar with a PC icon and the text 'PC3'. Below the title bar are five tabs: 'Basic Config', 'Command', 'MCPacket', 'UdpPacket', and 'Console'. The 'Console' tab is selected. The console output shows a summary of a ping test: '5 packet(s) transmitted', '5 packet(s) received', '0.00% packet loss', and 'round-trip min/avg/max = 93/103/110 ms'. Below this, the command 'PC>ping 192.168.10.100' is entered. The output shows five successful ping attempts from 192.168.10.100 to 192.168.10.100, each with 32 data bytes, a TTL of 127, and various response times (125 ms, 110 ms, 110 ms, 94 ms, 94 ms). Finally, a summary of the ping statistics is shown: '--- 192.168.10.100 ping statistics ---', '5 packet(s) transmitted', '5 packet(s) received', '0.00% packet loss', and 'round-trip min/avg/max = 94/106/125 ms'.

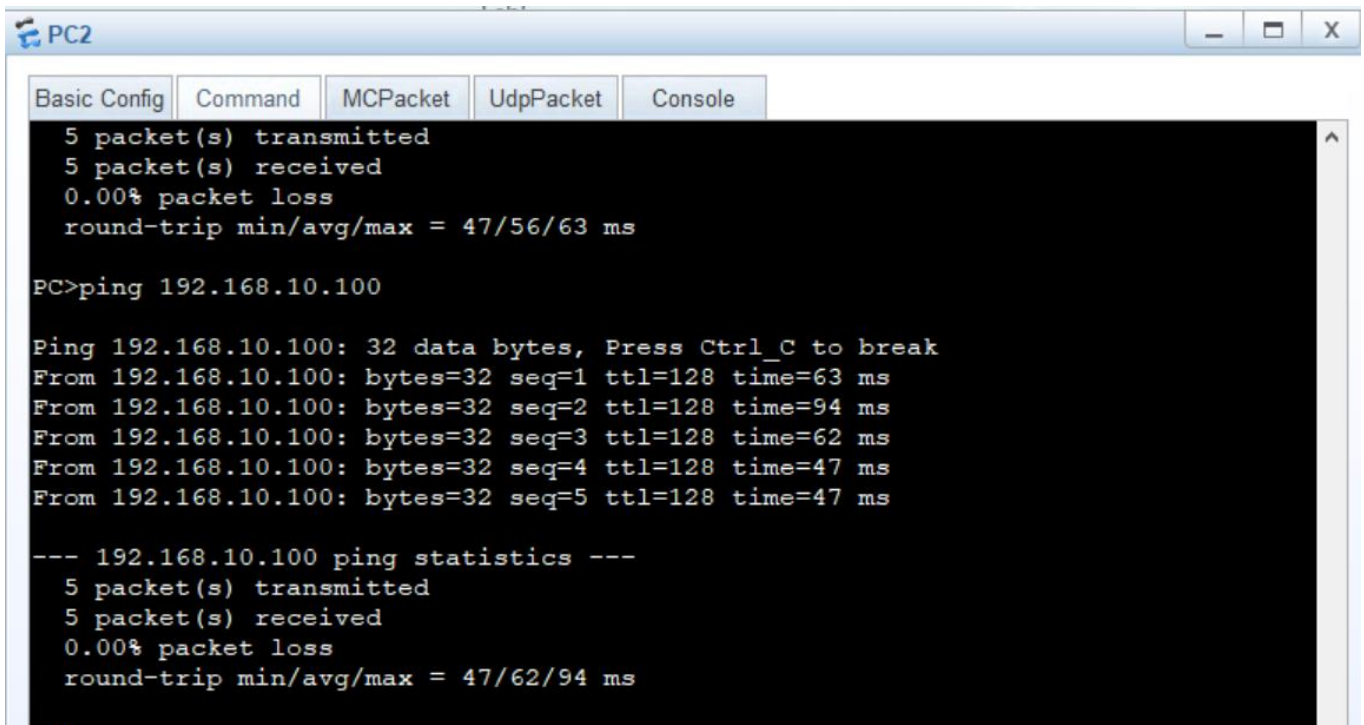
```
PC3
Basic Config Command MCPacket UdpPacket Console
5 packet(s) transmitted
5 packet(s) received
0.00% packet loss
round-trip min/avg/max = 93/103/110 ms

PC>ping 192.168.10.100

Ping 192.168.10.100: 32 data bytes, Press Ctrl_C to break
From 192.168.10.100: bytes=32 seq=1 ttl=127 time=125 ms
From 192.168.10.100: bytes=32 seq=2 ttl=127 time=110 ms
From 192.168.10.100: bytes=32 seq=3 ttl=127 time=110 ms
From 192.168.10.100: bytes=32 seq=4 ttl=127 time=94 ms
From 192.168.10.100: bytes=32 seq=5 ttl=127 time=94 ms

--- 192.168.10.100 ping statistics ---
5 packet(s) transmitted
5 packet(s) received
0.00% packet loss
round-trip min/avg/max = 94/106/125 ms
```

## PING PC1 FROM PC2 (same VLAN's)

A screenshot of a PC2 console window. The window has a title bar with a PC icon and the text 'PC2'. Below the title bar are five tabs: 'Basic Config', 'Command', 'MCPacket', 'UdpPacket', and 'Console'. The 'Console' tab is selected. The console output shows a summary of a ping test: '5 packet(s) transmitted', '5 packet(s) received', '0.00% packet loss', and 'round-trip min/avg/max = 47/56/63 ms'. Below this, the command 'PC>ping 192.168.10.100' is entered. The output shows five successful ping attempts from 192.168.10.100 to 192.168.10.100, each with 32 data bytes, a TTL of 128, and various response times (63 ms, 94 ms, 62 ms, 47 ms, 47 ms). Finally, a summary of the ping statistics is shown: '--- 192.168.10.100 ping statistics ---', '5 packet(s) transmitted', '5 packet(s) received', '0.00% packet loss', and 'round-trip min/avg/max = 47/62/94 ms'.

```
PC2
Basic Config Command MCPacket UdpPacket Console
5 packet(s) transmitted
5 packet(s) received
0.00% packet loss
round-trip min/avg/max = 47/56/63 ms

PC>ping 192.168.10.100

Ping 192.168.10.100: 32 data bytes, Press Ctrl_C to break
From 192.168.10.100: bytes=32 seq=1 ttl=128 time=63 ms
From 192.168.10.100: bytes=32 seq=2 ttl=128 time=94 ms
From 192.168.10.100: bytes=32 seq=3 ttl=128 time=62 ms
From 192.168.10.100: bytes=32 seq=4 ttl=128 time=47 ms
From 192.168.10.100: bytes=32 seq=5 ttl=128 time=47 ms

--- 192.168.10.100 ping statistics ---
5 packet(s) transmitted
5 packet(s) received
0.00% packet loss
round-trip min/avg/max = 47/62/94 ms
```