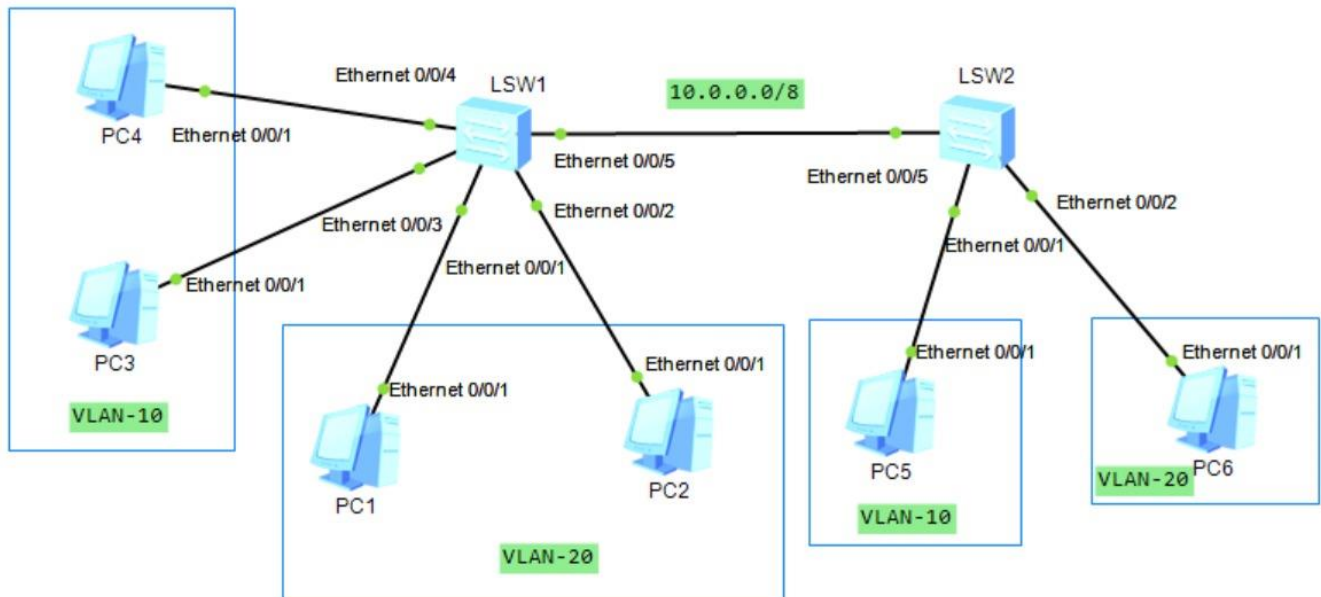


## LAB-04

Implement the following VLAN scenario in eNSP simulator:

eNSP simulation:



```

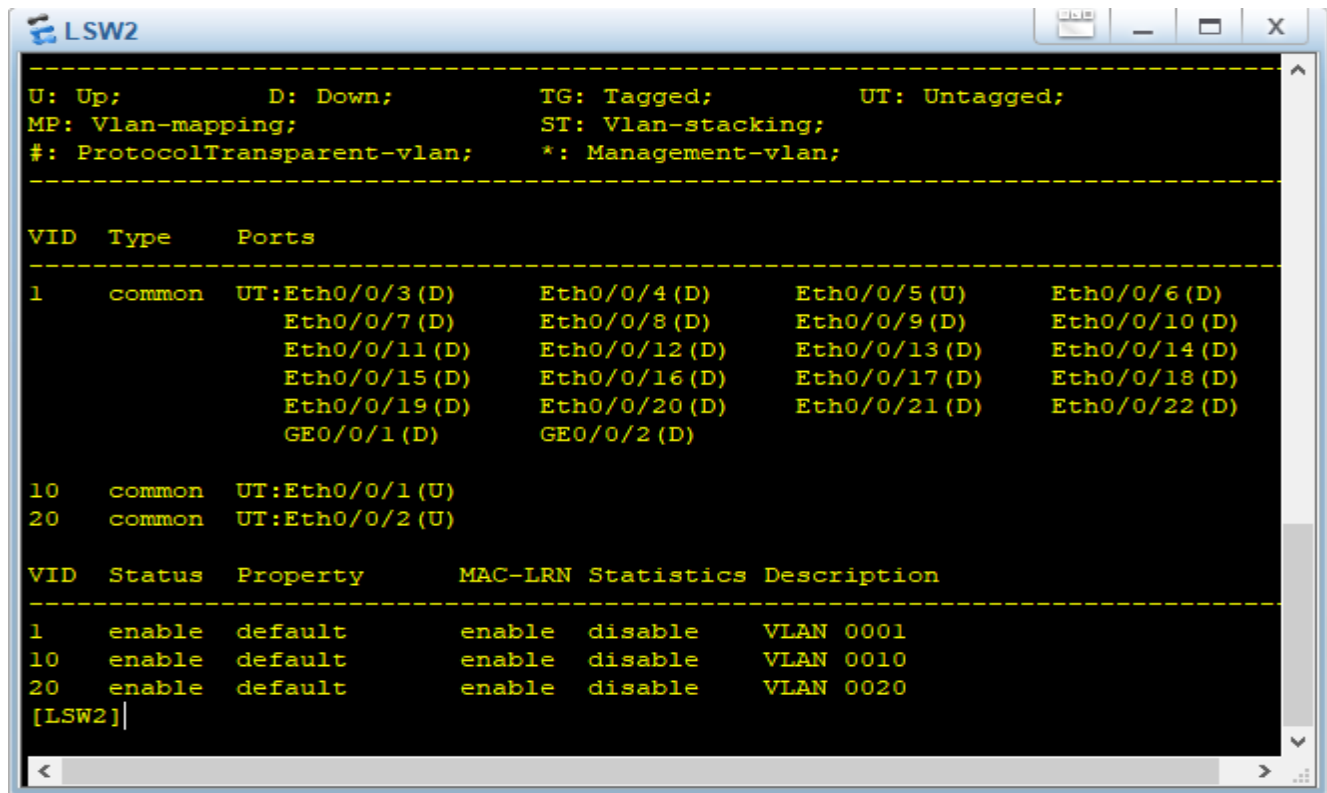
LSW1
The total number of vlans is : 3
-----
U: Up;           D: Down;           TG: Tagged;       UT: Untagged;
MP: Vlan-mapping; ST: Vlan-stacking;
#: ProtocolTransparent-vlan; *: Management-vlan;
-----

VID  Type    Ports
-----
1    common  UT:Eth0/0/5 (U)  Eth0/0/6 (D)    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)

10   common  UT:Eth0/0/3 (U)  Eth0/0/4 (U)
20   common  UT:Eth0/0/1 (U)  Eth0/0/2 (U)    GE0/0/1 (D)      GE0/0/2 (D)

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]

```



```

LSW2
-----
U: Up;           D: Down;           TG: Tagged;       UT: Untagged;
MP: Vlan-mapping; ST: Vlan-stacking;
#: ProtocolTransparent-vlan; *: Management-vlan;
-----

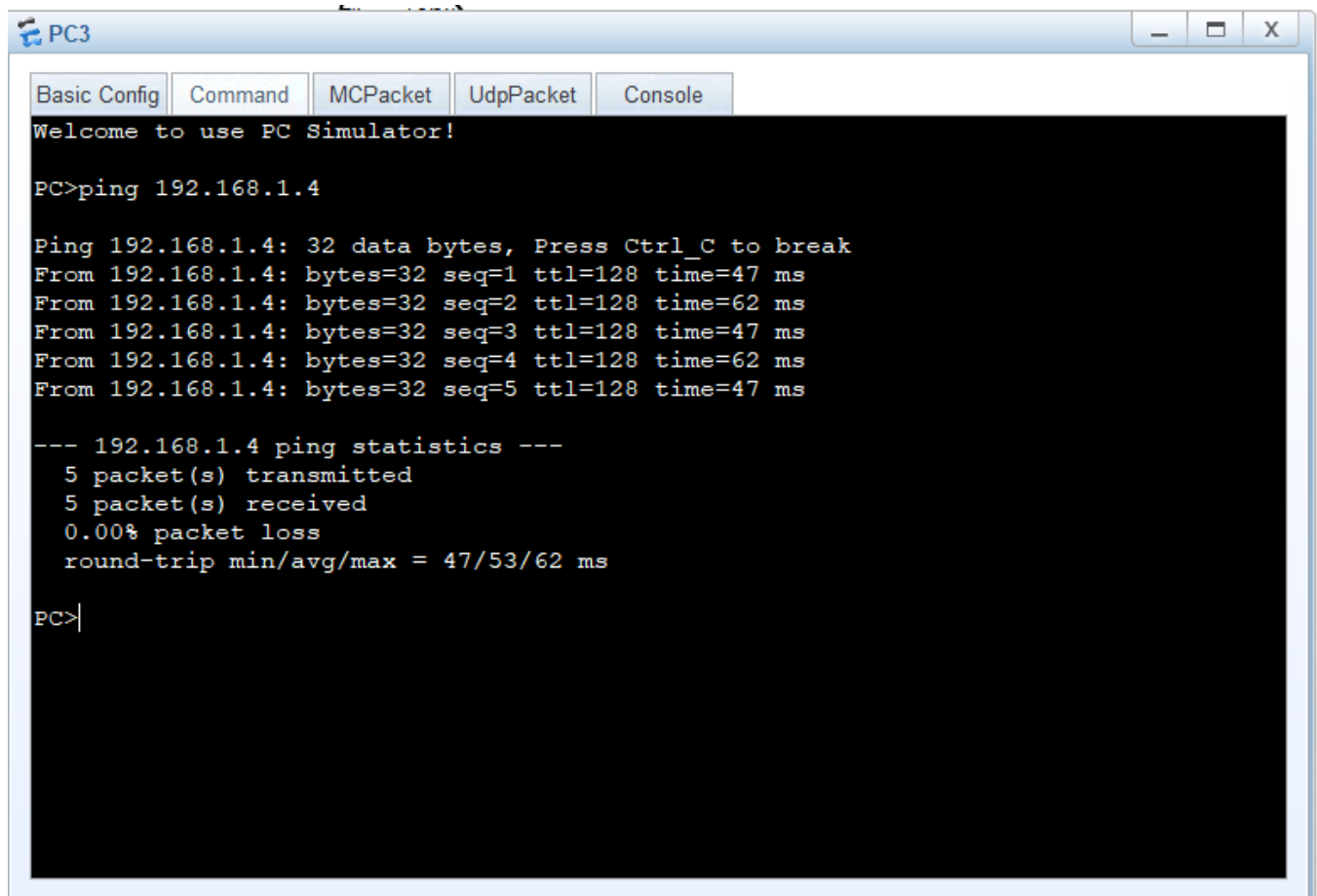
VID  Type    Ports
-----
1    common  UT:Eth0/0/3 (D)   Eth0/0/4 (D)     Eth0/0/5 (U)     Eth0/0/6 (D)
                        Eth0/0/7 (D)     Eth0/0/8 (D)     Eth0/0/9 (D)     Eth0/0/10 (D)
                        Eth0/0/11 (D)    Eth0/0/12 (D)    Eth0/0/13 (D)    Eth0/0/14 (D)
                        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)
20   common  UT:Eth0/0/2 (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
[LSW2]

```

Ping 192.168.1.4 from 192.168.1.3 (same vlan-10)



```

PC3
Basic Config  Command  MCPacket  UdpPacket  Console
Welcome to use PC Simulator!

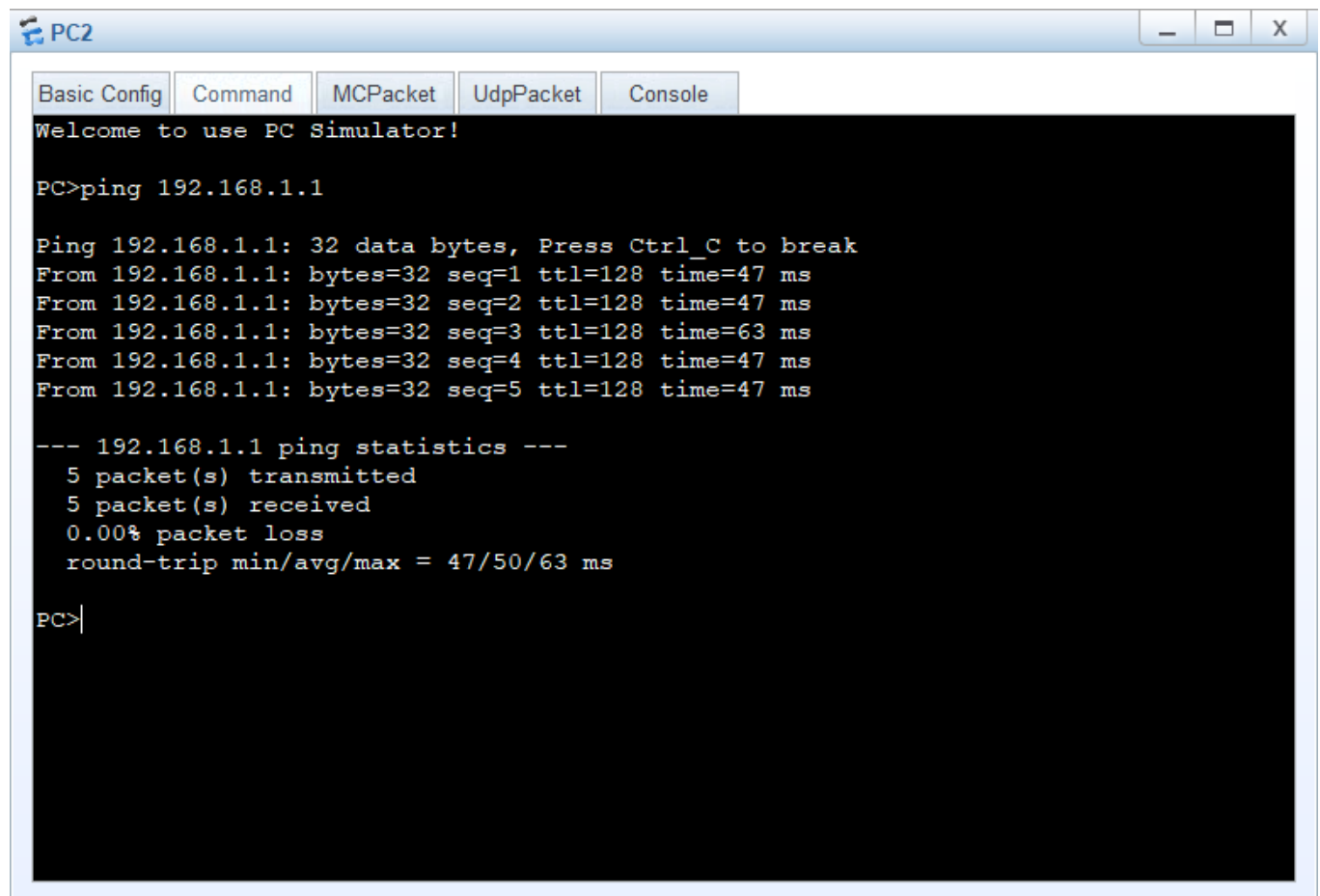
PC>ping 192.168.1.4

Ping 192.168.1.4: 32 data bytes, Press Ctrl_C to break
From 192.168.1.4: bytes=32 seq=1 ttl=128 time=47 ms
From 192.168.1.4: bytes=32 seq=2 ttl=128 time=62 ms
From 192.168.1.4: bytes=32 seq=3 ttl=128 time=47 ms
From 192.168.1.4: bytes=32 seq=4 ttl=128 time=62 ms
From 192.168.1.4: bytes=32 seq=5 ttl=128 time=47 ms

--- 192.168.1.4 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 47/53/62 ms

PC>

```

**Ping 192.168.1.1 from 192.168.1.2 (same vlan-20)**

The screenshot shows a PC2 window with a console tab selected. The console displays the output of a ping command from 192.168.1.2 to 192.168.1.1. The output shows five successful pings with varying response times (47, 47, 63, 47, 47 ms). The statistics show 5 packets transmitted, 5 received, and 0.00% packet loss.

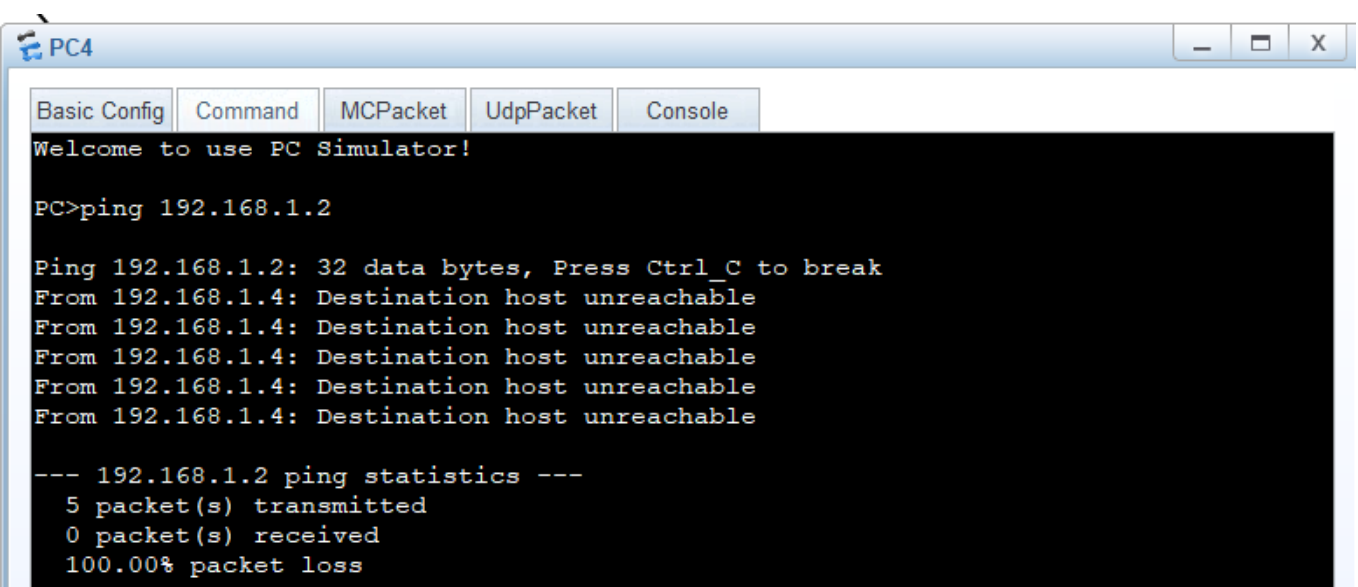
```
PC2
Basic Config | Command | MCPacket | UdpPacket | Console
Welcome to use PC Simulator!

PC>ping 192.168.1.1

Ping 192.168.1.1: 32 data bytes, Press Ctrl_C to break
From 192.168.1.1: bytes=32 seq=1 ttl=128 time=47 ms
From 192.168.1.1: bytes=32 seq=2 ttl=128 time=47 ms
From 192.168.1.1: bytes=32 seq=3 ttl=128 time=63 ms
From 192.168.1.1: bytes=32 seq=4 ttl=128 time=47 ms
From 192.168.1.1: bytes=32 seq=5 ttl=128 time=47 ms

--- 192.168.1.1 ping statistics ---
 5 packet(s) transmitted
 5 packet(s) received
 0.00% packet loss
 round-trip min/avg/max = 47/50/63 ms

PC>
```

**Ping 192.168.1.2 from 192.168.1.4 (Different vlan)**

The screenshot shows a PC4 window with a console tab selected. The console displays the output of a ping command from 192.168.1.4 to 192.168.1.2. The output shows five failed pings with the message 'Destination host unreachable'. The statistics show 5 packets transmitted, 0 received, and 100.00% packet loss.

```
PC4
Basic Config | Command | MCPacket | UdpPacket | Console
Welcome to use PC Simulator!

PC>ping 192.168.1.2

Ping 192.168.1.2: 32 data bytes, Press Ctrl_C to break
From 192.168.1.4: Destination host unreachable
From 192.168.1.4: Destination host unreachable
From 192.168.1.4: Destination host unreachable
From 192.168.1.4: Destination host unreachable
From 192.168.1.4: Destination host unreachable

--- 192.168.1.2 ping statistics ---
 5 packet(s) transmitted
 0 packet(s) received
100.00% packet loss
```