Physical   Config   Desktop   Programming   Attributes

Terminal   X

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/21, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/21, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/21, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/21, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/21, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/21, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/7, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/8, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/8, changed state to up

% Please answer 'yes' or 'no'.
Would you like to enter the initial configuration dialog? [yes/no]: no
```

Laptop1 _ □ ✕

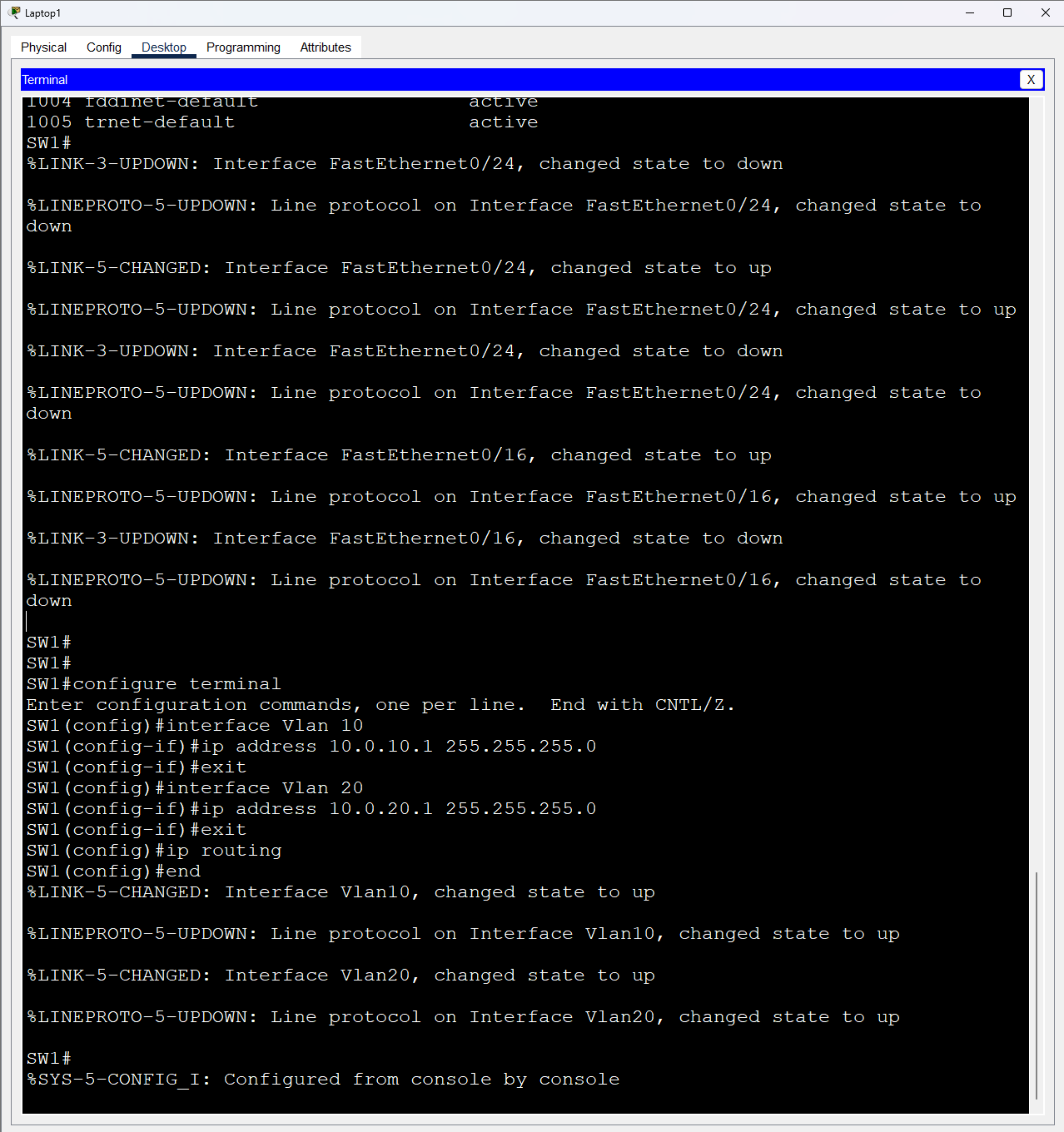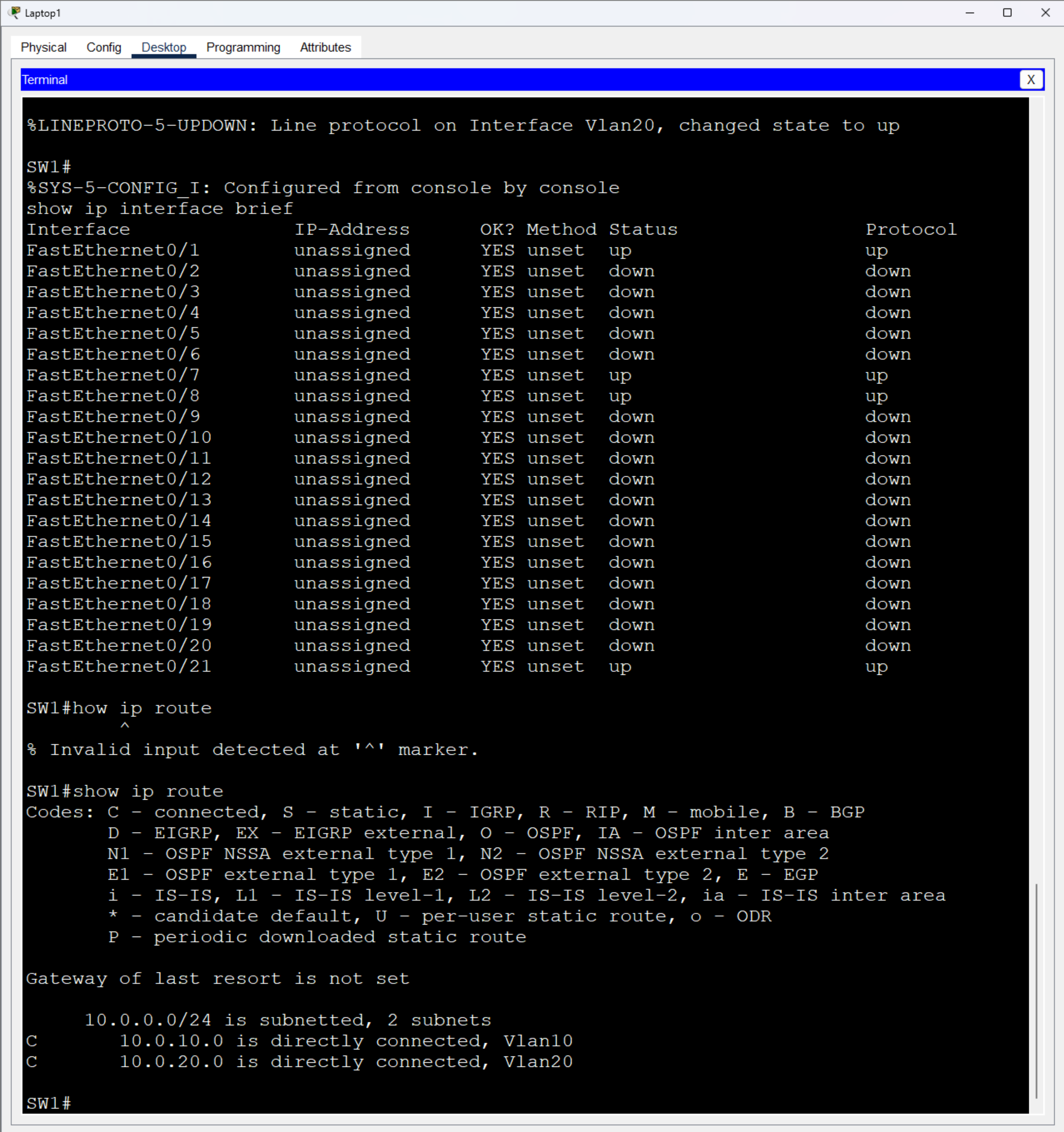Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig /renew
DHCP request failed.

C:\>DHCP request failed.

C:\>DHCP request failed.

C:\>ipconfig /renew

    IP Address......................: 10.0.20.2
    Subnet Mask.....................: 255.255.255.0
    Default Gateway.................: 10.0.20.1
    DNS Server......................: 0.0.0.0

C:\>
```

PC0 — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig /renew

   IP Address.........................:
10.0.10.2
   Subnet Mask........................:
255.255.255.0
   Default Gateway....................:
10.0.10.1
   DNS Server.........................: 0.0.0.0

C:\>
```

```
1004 fddinet-default                active
1005 trnet-default                  active
SW1#
%LINK-3-UPDOWN: Interface FastEthernet0/24, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/24, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/24, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to
down

%LINK-5-CHANGED: Interface FastEthernet0/16, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/16, changed state to up

%LINK-3-UPDOWN: Interface FastEthernet0/16, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/16, changed state to
down

SW1#
SW1#
SW1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SW1(config)#interface Vlan 10
SW1(config-if)#ip address 10.0.10.1 255.255.255.0
SW1(config-if)#exit
SW1(config)#interface Vlan 20
SW1(config-if)#ip address 10.0.20.1 255.255.255.0
SW1(config-if)#exit
SW1(config)#ip routing
SW1(config)#end
%LINK-5-CHANGED: Interface Vlan10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan10, changed state to up

%LINK-5-CHANGED: Interface Vlan20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan20, changed state to up

SW1#
%SYS-5-CONFIG_I: Configured from console by console
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan20, changed state to up

SW1#
%SYS-5-CONFIG_I: Configured from console by console
show ip interface brief
Interface              IP-Address      OK? Method Status                Protocol
FastEthernet0/1        unassigned      YES unset  up                    up
FastEthernet0/2        unassigned      YES unset  down                  down
FastEthernet0/3        unassigned      YES unset  down                  down
FastEthernet0/4        unassigned      YES unset  down                  down
FastEthernet0/5        unassigned      YES unset  down                  down
FastEthernet0/6        unassigned      YES unset  down                  down
FastEthernet0/7        unassigned      YES unset  up                    up
FastEthernet0/8        unassigned      YES unset  up                    up
FastEthernet0/9        unassigned      YES unset  down                  down
FastEthernet0/10       unassigned      YES unset  down                  down
FastEthernet0/11       unassigned      YES unset  down                  down
FastEthernet0/12       unassigned      YES unset  down                  down
FastEthernet0/13       unassigned      YES unset  down                  down
FastEthernet0/14       unassigned      YES unset  down                  down
FastEthernet0/15       unassigned      YES unset  down                  down
FastEthernet0/16       unassigned      YES unset  down                  down
FastEthernet0/17       unassigned      YES unset  down                  down
FastEthernet0/18       unassigned      YES unset  down                  down
FastEthernet0/19       unassigned      YES unset  down                  down
FastEthernet0/20       unassigned      YES unset  down                  down
FastEthernet0/21       unassigned      YES unset  up                    up

SW1#how ip route
         ^
% Invalid input detected at '^' marker.

SW1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     10.0.0.0/24 is subnetted, 2 subnets
C       10.0.10.0 is directly connected, Vlan10
C       10.0.20.0 is directly connected, Vlan20

SW1#
```

Physical   Config   Desktop   Programming   Attributes

Terminal   X

```
Processor board ID FTX1524ORS
2 Gigabit Ethernet interfaces
DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)


        --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no


Press RETURN to get started!



Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface GigabitEthernet0/1.10
R1(config-subif)#encapsulation dot1Q 10
R1(config-subif)#ip address 10.0.10.1 255.255.255.0
R1(config-subif)#exit
R1(config)#interface GigabitEthernet0/1.20
R1(config-subif)#encapsulation dot1Q 20
R1(config-subif)#ip address 10.0.20.1 255.255.255.0
R1(config-subif)#exit
R1(config)#ip dhcp pool LW5_VLAN10
R1(dhcp-config)#network 10.0.10.0 255.255.255.0
R1(dhcp-config)#default-router 10.0.10.1
R1(dhcp-config)#exit
R1(config)#ip dhcp pool LW5_VLAN20
R1(dhcp-config)#network 10.0.20.0 255.255.255.0
R1(dhcp-config)#default-router 10.0.20.1
R1(dhcp-config)#exit
R1(config)#interface GigabitEthernet0/1
R1(config-if)#no shutdown

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

%LINK-5-CHANGED: Interface GigabitEthernet0/1.10, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/1.20, changed state to up


R1#
%SYS-5-CONFIG_I: Configured from console by console
```

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
      Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 10.0.20.1

Pinging 10.0.20.1 with 32 bytes of data:

Reply from 10.0.20.1: bytes=32 time<1ms TTL=255
Reply from 10.0.20.1: bytes=32 time<1ms TTL=255
Reply from 10.0.20.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.20.1:
      Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ping 10.0.10.1

Pinging 10.0.10.1 with 32 bytes of data:

Reply from 10.0.10.1: bytes=32 time<1ms TTL=255
Reply from 10.0.10.1: bytes=32 time<1ms TTL=255
Reply from 10.0.10.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.10.1:
      Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ping 10.0.10.2

Pinging 10.0.10.2 with 32 bytes of data:

Request timed out.
Reply from 10.0.10.2: bytes=32 time<1ms TTL=127
Reply from 10.0.10.2: bytes=32 time<1ms TTL=127
Reply from 10.0.10.2: bytes=32 time<1ms TTL=127

Ping statistics for 10.0.10.2:
      Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
      Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
    Default Gateway................: 10.0.20.1
    DNS Server.....................: 0.0.0.0

C:\>ping 10.0.10.1

Pinging 10.0.10.1 with 32 bytes of data:

Reply from 10.0.10.1: bytes=32 time<1ms TTL=255
Reply from 10.0.10.1: bytes=32 time<1ms TTL=255
Reply from 10.0.10.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.10.1:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

Control-C
^C
C:\>ping 10.0.10.2

Pinging 10.0.10.2 with 32 bytes of data:

Request timed out.
Reply from 10.0.10.2: bytes=32 time<1ms TTL=127
Reply from 10.0.10.2: bytes=32 time=1ms TTL=127
Reply from 10.0.10.2: bytes=32 time<1ms TTL=127

Ping statistics for 10.0.10.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
C:\>ping 10.0.20.1

Pinging 10.0.20.1 with 32 bytes of data:

Reply from 10.0.20.1: bytes=32 time<1ms TTL=255
Reply from 10.0.20.1: bytes=32 time=1ms TTL=255
Reply from 10.0.20.1: bytes=32 time=2ms TTL=255

Ping statistics for 10.0.20.1:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 1ms

Control-C
^C
C:\>
```