**Part 1**

**Step 2 Part b:**

Switch# show running-config

How many FastEthernet interfaces does a 2960 switch have? 24

How many Gigabit Ethernet interfaces does a 2960 switch have? 2

What is the range of values shown for the vty lines?

line vty 0 4

login

line vty 5 15

login

**Step 2 Part c:**

Switch# show startup-config

startup-config is not present

Why does this message appear?

The configuration file does not exist at this time

**Step 2 Part d:**

Examine the characteristics of the SVI for VLAN 1.

Switch# show interface vlan1

Is there an IP address assigned to VLAN 1? Not at this time

What is the MAC address of this SVI? Answers will vary. 0090.0c4a.ce18

Is this interface up? Not at this time

**Step 2 Part e:**

Examine the IP properties of the SVI VLAN 1.

Switch# show ip interface vlan1

What output do you see?

Vlan1 is administratively down, line protocol is down

Internet protocol processing disabled

**Step 2 Part f:**

f. Connect an Ethernet cable from PC-A to port 6 on the switch and examine the IP properties of the SVI VLAN 1. Allow time for the switch and PC to negotiate duplex and speed parameters.

Switch# show ip interface vlan1

What output do you see?

**Step 2 Part g:**

Examine the Cisco IOS version information of the switch.

Switch# show version

What is the Cisco IOS version that the switch is running? Version 12.2(25)FX

What is the system image filename? C2960 Boot Loader (C2960-HBOOT-M) Version 12.2(25r)FX, RELEASE SOFTWARE (fc4)

What is the base MAC address of this switch? Answers will vary. 0090.0C4A.CE18

**Step 2 Part h:**

Examine the default properties of the FastEthernet interface used by PC-A.

Switch# show interface f0/6

Is the interface up or down? up

What event would make an interface go up? The plugging in of a Ethernet cable

What is the MAC address of the interface? 000c.853b.1806

What is the speed and duplex setting of the interface? Full-duplex 100Mb/s

**Step 2 Part i:**

Examine the default VLAN settings of the switch.

Switch# show vlan

What is the default name of VLAN 1? default

Which ports are in VLAN 1? All ethernet port

Is VLAN 1 active? Yes

What type of VLAN is the default VLAN? Examine flash memory. Ethernet

Issue one of the following commands to examine the contents of the flash directory.

Switch# show flash

Switch# dir flash:

Files have a file extension, such as .bin, at the end of the filename. Directories do not have a file extension.

What is the filename of the Cisco IOS image? c2960-lanbase-mz.122-25.FX.bin

**Part 2**

**Step 1 Part g:**

Configure the virtual terminal (vty) lines for the switch to allow Telnet access. If you do not configure a vty password, you will not be able to Telnet to the switch.

S1(config)# line vty 0 15

S1(config-line)# password cisco

S1(config-line)# login

S1(config-line)# end

S1#

Why is the login command required? To increase security, a person doesn’t have access to the switch just because they have physical access to the computer

**Part 3**

**Step 1 Part b:**

Verify the management VLAN 99 settings.

S1# show interface vlan 99

What is the bandwidth on this interface? 100000 Kbit = 12500Kbyte = 12Mbyte = 100Mbit

What is the VLAN 99 state? up

What is the line protocol state? Up

**Part 4**

**Step 2:**

Display the MAC addresses using the show mac address-table command.

S1# show mac address-table

How many dynamic addresses are there? 1

How many MAC addresses are there in total? 1

Does the dynamic MAC address match the MAC address of PC-A? Yes

**Step 3 part a:**

Display the MAC address table options.

S1# show mac address-table ?

How many options are available for the show mac address-table command? 3

**Step 3 part b:**

Issue the show mac address-table dynamic command to display only the MAC addresses that were learned dynamically.

S1# show mac address-table dynamic

How many dynamic addresses are there? 1

**Step 3 part c:**

View the MAC address entry for PC-A. The MAC address formatting for the command is xxxx.xxxx.xxxx.

S1# show mac address-table address <PC-A MAC here> [Broken]

**Step 4 part a:**

Verify that the MAC address table was cleared.

S1# show mac address-table

How many static MAC addresses are there? 0

**Reflection**