**How many Fast Ethernet interfaces does the switch have?**

There are 24 ethernet cables.

**How many Gigabit Ethernet interfaces does the switch have?**

There are two Gigabit Ethernet.

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

The range of values shown for vty lines is 0 to 15.

**Which command will display the current contents of non-volatile random-access memory (NVRAM)?**

The command to display the current contents of non-volatile random-access memory (NVRAM)

show startup config

**Why does the switch respond with “startup-config is not present?”**

The switch responds with "startup-config is not present" because it cannot find the configuration file called "startup-config" that it normally loads when it starts up.

**Part 2: Create a Basic Switch Configuration**

**Why is the login command required?**

The login command is required to enforce password-based authentication for accessing the switch's console line. It adds security by prompting for a password when someone tries to access the console, ensuring that only authorized users can gain entry. Without the login command, anyone with physical access to the console port could bypass password authentication and access the switch's configuration.

**What is displayed for the enable secret password?**

For enable secret password, it is showing:

* enable secret 5 $1$mERr$ILwq/b7kc.7X/ejA4Aosn0

**Why is the enable secret password displayed differently from what we configured?**

Due to encryption of password. It is encrypted form, not plain text.

**If you configure any more passwords on the switch, will they be displayed in the configuration file as plain text or in encrypted form? Explain.**

The "service password-encryption" command in Cisco switches encrypts **all current and future passwords stored in the configuration file**. This adds an extra layer of security by preventing unauthorized access to the passwords, as they are stored in an encrypted form rather than plain text.

**When will this banner be displayed?**

This banner will be displayed when someone logs in onto the switch.

**Why should every switch have a MOTD banner?**

Every switch has a MOTD banner for informing or giving message to person who wants to log-in.

**What is the shortest, abbreviated version of the copy running-config startup-config command?**

The shortest abbreviated version of the copy running-config startup-config command is: copy run startup

**Which command will display the contents of NVRAM?**

The commands for displaying the contents of NVRAM is : **show nvram**

**Are all the changes that were entered recorded in the file?**

Yes, all the configurations are recorded in the file.