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### **Linux 1 QUIZ Answers**

- 1. Suppose that the Current Working Directory is /lib/modules, give a single "CAT" command using a relative pathname and a command using an absolute pathname, that would print out the contents of the regular file /lib/security/pam-access.**

**Answer:**

Absolute Path is location from the root directory. (Always starts with “/”).

```
vamsi@vamsi-VirtualBox:~$ cat /lib/security/pam-access
```

Relative Path is location from the current directory. (Specify the current directory).

```
vamsi@vamsi-VirtualBox:/lib/modules$ cd ../security/pam-access
```

- 2. What is the standard command to determine the pathname/location of the mv command/program?**

**Answer:**

```
vamsi@vamsi-VirtualBox:~$ cd vk/A/B/C
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ mv a.txt b.txt
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ ls
b.txt
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ cat b.txt
Hello a text file.
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ cat a.txt
cat: a.txt: No such file or directory
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ cat b.txt
Hello a text file.
vamsi@vamsi-VirtualBox:~/vk/A/B/C$ pwd
/home/vamsi/vk/A/B/C
vamsi@vamsi-VirtualBox:~/vk/A/B/C$
```

**3. What is the purpose of the /sbin subdirectory? (I.e., what is normally stored there?)**

**Answer:**

\$ sbin – Standard subdirectory of the root directory in LINUX.

This sbin contains the executable programs which is ready to run mostly they are administrative tools, they are available only in the root.

```
vamsi@vamsi-VirtualBox:~$ ls /sbin
acpi_available      isosize             plipconfig
agetty              iw                  plymouthd
alsa                iwconfig            poweroff
apm_available       iwevent             pvchange
apparmor_parser     iwgetid             pvck
badblocks           iwlist              pvcreate
blkdeactivate        iwpriv              pvdisplay
blkdiscard           iwspy               pvmove
blkid                kbdrate             pvremove
blockdev             killall5             pvresize
bridge              ldconfig            pvs
brltty               ldconfig.real        pvscan
brltty-setup         logsave              rarp
capsh                losetup              raw
cfdisk               lsmod               reboot
cgdisk               lspcmcia             regdbdump
chcpu                lvchange             resize2fs
crda                 lvconvert            rmmod
ctrlaltdel           lvcreate             route
debugfs              lvdisplay            rtacct
depmod               lvextend             rtmon
devlink              lvm                  runlevel
dhclient             lvmconf              runuser
dhclient-script      lvmconfig            setcap
dmeventd             lvmddiskscan         setvtrgb
dmsetup              lvmddump             sfdisk
dmstats              lvmetad              sgdisk
dosfsck              lvmpolld             shadowconfig
dosfslabel           lvmsadc              shutdown
```

**4. Explain the difference between “the root directory” and “root’s directory”.**

**Answer:**

The root directory is the main which always begins with (/). The root’s directory is the users directory which comes under root directory.

**5. Explain what the term “search path” means in the context of a shell (like Bash).**

**Answer:**

A search path is the sequence of directories where the shell looks for commands to execute. Directories usually contain normal files, but can also contain executable files, called either programs or commands.

```
vamsi@vamsi-VirtualBox:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/
games:/usr/local/games:/snap/bin
vamsi@vamsi-VirtualBox:~$
```

**6. What are two commands that could be used to display your current search path?**

*Answer:*

1. echo \$PATH
2. env

**7. Suppose your current env PATH variable is set to /usr/bin:/bin:/usr/local/bin. Explain what the shell does when you type the command “foo” at a prompt (and type return).**

*Answer:*

**8. Logged in as a non-root user, is /sbin in your search path? Explain why it is or is not there.**

*Answer:*

/sbin are there in the search path because it is an administrative tool, executable process which is ready to run. It comes under the root.

**9. Suppose you have created a shell script named foo and have made it executable, but when you type it as a command (“foo”), Bash says: “command not found”. What is wrong and what must you do to run the command?**

*Answer:*

When we type foo and bash says Command not found because we should always execute the file with the extension of the bash or shell. We need to execute as foo.sh and then it works fine.

**10. Explain why the Linux does not have drive letters like Windows does.**

*Answer:*

In Linux everything is under the root directory (/), no files above the root directory. When we connect a device, it shows under media directory. The contents of the directory display the contents of the mounted partition.

**11. What is the contents of a file ~/song.mp3?**

*Answer:* We need to install the following command

\$ sudo apt-get install ffmpeg

Or

\$ sudo apt-get install mp3info

To get the song.mp3

Mp3info -p %a song.mp3

**12. What command would show all lines containing the string “brace expansion” (ignoring case) in the man pages for Bash?**

**Answer:**

The brace expansion is { } and man pages for bash \$( )

**13. What command would delete some files from the directory /tmp, where the relevant filenames have this pattern: they begin with “A” or “B”, contain the string “406”, and have a (final) extension of “.txt” or “.text”.**

**Answer:**

```
vamsi@vamsi-VirtualBox:~/krishna$ cat > a.txt
Hello a text file .txt file
^C
vamsi@vamsi-VirtualBox:~/krishna$ ls
a.txt  vamsi
vamsi@vamsi-VirtualBox:~/krishna$ cat > Afile
Hello A file
bye
^C
vamsi@vamsi-VirtualBox:~/krishna$ cat > Bfile
Hello B file
bye
^C
vamsi@vamsi-VirtualBox:~/krishna$ ls
Afile  a.txt  Bfile  vamsi
vamsi@vamsi-VirtualBox:~/krishna$ cat > stringfile
Hello string file
406
bye
^C
vamsi@vamsi-VirtualBox:~/krishna$ ls
Afile  a.txt  Bfile  stringfile  vamsi
```

```

vamsi@vamsi-VirtualBox:~/krishna$ ls
Afile a.txt Bfile stringfile vamsi
vamsi@vamsi-VirtualBox:~/krishna$ ls | grep '^A\|^B\|.txt' | xargs
rm -rf | sed -i -e '/406/d' stringfile
vamsi@vamsi-VirtualBox:~/krishna$ ls
stringfile vamsi
vamsi@vamsi-VirtualBox:~/krishna$ cat stringfile
Hello string file
bye
vamsi@vamsi-VirtualBox:~/krishna$

```

**14. What are the commands that will reset the current working directory to your home directory, regardless of what directory you are currently in?**

*Answer:*

1. \$ cd
2. \$cd ~

```

vamsi@vamsi-VirtualBox:~/krishna/hello$ cd
vamsi@vamsi-VirtualBox:~$ cd -
/home/vamsi/krishna/hello
vamsi@vamsi-VirtualBox:~/krishna/hello$ cd ~
vamsi@vamsi-VirtualBox:~$

```

**15. What are hidden files in Linux/UNIX, why are they called that, and what are they commonly used for?**

*Answer:*

We can see the hidden files using the command

\$ ls -al

Here .(dot) represents the present directory and ..(dot dot) represents the parent directory

Parent directory which contains the present directory.