**Linux Quiz-2**

1. What command would list all files (except . and ..) in the current working directory?

**A**: Ls –lrt

2. What is the simplest command for adding execute permission to file ~/foo, for all users

(without changing any other permission)

**A:** Chmodgo-rw filename

3. Explain what execute permission means/allows when it is associated with a directory.

So that I can execute and see results in my terminal. After giving permissions, I can run the file by typing

To allow access to the directory using chmod to the directory

4. Suppose that you wanted all users on the machine to be able to see the contents

of the file ~/public/software/instructions. text. Explain the minimum set of

permissions for files and directories needed to allow this, and any security issues that

arise.

**A**:

5. Suppose that you want to allow (only) other users bob and chuck to be able to access

the above file. Explain what you would have to do differently from what you described

above. (You are not allowed to consider the use of ACLs.)

6. How would your answer to the previous problem change if you were to use ACLs (access

control lists)?

7. What are set UID (SUID) files, and when are they typically used?

**A:** **SUID** (**S**et owner **U**ser **ID** up on execution) is a special type of file permissions given to a file. Normally in Linux/Unix when a program runs, it inherits access permissions from the logged in user. SUID is defined as giving temporary permissions to a user to run a program/file with the permissions of the file owner rather that the user who runs it**.**

**In simple words users will get file owner’s permissions as well as owner UID and GID when executing a file/program/command.**

8. Find one SUID file on a Linux system, and show its “long listing” (permissions, owner,

etc.).

**A:** find / -perm +4000

9. Why are SUID root files considered a security issue?

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**A:** Because these programs grant special privileges to the user who is executing them, it is necessary to ensure that insecure programs are not installed.

10. What command would be used to set a file foo to be SUID, and how exactly would it

be done?

**A:** Chmod u+s filename

11. What command could determine the process ID (PID) of a running SSH server (sshd)?

**A:** Ps –ef | grep processor name

12. What command would best identify which process is using excessive CPU resources?

**A:** Top / iostat

13. What command that should definitely terminate the process identified above?

**A:** Kill

14. What file contains the list of valid user ID’s (UID’s) and their associated usernames?

**A:** Cat / etc /passwd

15. What file contains passwords on a Linux system (if that system is using local authentication rather than NIS, etc.)?

**A**: Cat /etc/shadow

16. What is difference between telnet and ssh. When will you use each command? give examples.

**A:**