

LINUX LAB- 1 ASSIGNMENT

1. Login as guest (password is guest123)

```
us root(switch to root)
useradd guest
passwd guest123
us guest
```

2. Find the present Directory

```
pwd
```

3. Write the / directory structure

Directory	Main Contents
/bin	This directory contains the binaries for the minimal Linux O/S. Without this, Linux won't even boot
/boot	Boot files for the O/S (-the grub loader sits under here). Without this directory, the O/S won't boot. Normally, people install this directory into it's own filesystem (-sized 50Mb+)
/dev	The devices directory : any attached devices such as disc drives, USB drives, etc will be listed under this (-normally in the format /dev/sd<id>)
/etc	Contains most of the configuration files for the Linux system: these are normally text and are editable (-with extreme caution)
/home	All the users directories sit under this (-for example /home/user1). Normally, people install this directory into it's own filesystem (-sized as big as they can get it!)
/lib	Contains the Linux (code) libraries
/lib32	Normally this is a symbolic link to /lib on 32 bit systems
/lib64	Normally this is a symbolic link to /lib on 64 bit systems
/opt	Holds any application that can be run by Linux users (-rather than the Linux kernel itself)
/sbin	Contains Linux executables that are not essential at boot time: normally administration tools
/sys	Holds system resources
/tmp	Contains temporary files created by the system or the users: normally the contents are deleted on reboot
/usr	Contains user installed applications (applications)

/var Contains files written to by the Linux system (-for example, logs)

4. Write a few commands available in /bin and /sbin directory

```
/bin  pwd,cat,echo
/sbin traceroute, netconfig, ifconfig
```

5. Find the guest directory

```
cd
find . -name guest
```

6. Write the permissions of guest directory

```
ls
```

7. Create a new Directory test in guest directory

```
mkdir /home/guest/test
```

8. Write the permissions of test directory

```
ls
```

9. Copy the file /etc/resolv.conf in test directory

```
cp /etc/resolv.conf /home/guest/test
```

10. Rename the test directory to testing

```
mv /home/guest/test /home/guest/testing
```

11. Delete the testing directory

```
rmdir /home/guest/testing
```

12. Change the permissions of guest directory to 775

```
chmod 775 /home/guest
```

13. Change the permissions of /tmp directory to 700

```
chmod 700 /tmp
```

14. Login as root user

```
us root
```

15. Change the permissions of guest directory to 700

```
chmod 700 /home/guest
```

16. The location of kernel files in Unix File System is /boot and by looking at the kernel file, write the kernel version you are using in your system.

```
Uname -r  
3.13.0-32-generic
```

17. Login as guest

```
us guest
```

18. Change directory to /

```
cd  
cd /
```

19. List the contents of /home directory

```
ls
```

20. Find the group to which guest belongs

```
groups or id -Gn guest
```

21. Create a file sidbi in the home area of guest (hint: use touch command)

```
touch /home/sidbi
```

22. Find the permissions of the file sidbi

```
ls -l
```

23. Find the inode number of file sidbi (hint: ls -li)

```
stat sidbi
```

24. Copy the file sidbi to sidbi1

```
cp /home/sidbi /home/sidbi1
```

25. Find the inode number of file sidbi1 (hint: ls -li)

```
stat sidbi1
```

26. Move the file sidbi to sidbi2

```
mv /home/sidbi /home/sidbi2
```

27. Find the inode number of file sidbi2 (hint: ls -li)

```
stat sidbi2
```

28. Move sidbi2 to sidbi

```
mv /home/sidb2 /home/sidbi
```

29. Login as root

```
su root
```

30. Create a new user guest1 with same group as guest (hint: use GUI tool Applications→System Settings→ Users and Groups)[More on this later in the course]

```
su root
```

```
useradd guest
```

31. Create a new user guest2 with a different group than the group of guest (hint: use GUI tool Applications→System Settings→ Users and Groups)