

## LINUX LAB- 1 ASSIGNMENT

1. Find the present Directory

```
bmsce@bmsce-Precision-T1700:~$ pwd
/home/bmsce
bmsce@bmsce-Precision-T1700:~$
```

2. Write the / directory structure

```
bmsce@bmsce-Precision-T1700:/$ ls
app      core    home    lib32    media   root    srv      usr
bin      data    initrd.img  lib64    mnt     run     swapfile var
boot     dev     initrd.img.old libx32    opt     sbin    sys      vmlinuz
cdrom    etc     lib      lost+found proc     snap    tmp      vmlinuz.old
```

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

/bin :  
ls,ps,cp,cat,chmod

/sbin :  
reboot,fastboot,fdisk,halt

4. Create a new Directory test

```
bmsce@bmsce-Precision-T1700:~$ mkdir test
bmsce@bmsce-Precision-T1700:~$ cd test
bmsce@bmsce-Precision-T1700:~/test$
```

5. Write the permissions of test directory

```
bmsce@bmsce-Precision-T1700:~/test$ ls -ld /home/bmsce/test
drwxr-xr-x 2 bmsce bmsce 4096 Oct 21 11:35 /home/bmsce/test
```

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

```
bmsce@bmsce-Precision-T1700:~/test$ cp /etc/resolv.conf /home/bmsce/test
bmsce@bmsce-Precision-T1700:~/test$ ls
resolv.conf
```

7. Rename the test directory to testing

```
bmsce@bmsce-Precision-T1700:~$ mv test testing
bmsce@bmsce-Precision-T1700:~$ cd testing
bmsce@bmsce-Precision-T1700:~/testing$
```

8.Change the permissions of testing directory to 775

```
bmsce@bmsce-Precision-T1700:~/testing$ sudo chmod 775 .
[sudo] password for bmsce:
```

9.Change the permissions of /tmp directory to 700

```
bmsce@bmsce-Precision-T1700:~/testing$ sudo chmod 700 /tmp
bmsce@bmsce-Precision-T1700:~/testing$
```

10.Change the permissions of guest directory to 700

```
bmsce@bmsce-Precision-T1700:~$ mkdir guest
bmsce@bmsce-Precision-T1700:~$ sudo chmod 700 guest
```

11.Delete the testing directory

```
bmsce@bmsce-Precision-T1700:~$ rm -r testing
bmsce@bmsce-Precision-T1700:~$ cd testing
bash: cd: testing: No such file or directory
```

12.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.

```
bmsce@bmsce-Precision-T1700:~$ cd /boot
bmsce@bmsce-Precision-T1700:/boot$ ls
config-5.0.0-37-generic      memtest86+.bin
config-5.0.0-38-generic      memtest86+.elf
efi                          memtest86+_multiboot.bin
grub                          System.map-5.0.0-37-generic
grub.bak                     System.map-5.0.0-38-generic
initrd.img-5.0.0-37-generic  vmlinuz-5.0.0-37-generic
initrd.img-5.0.0-38-generic  vmlinuz-5.0.0-38-generic
bmsce@bmsce-Precision-T1700:/boot$ uname -r
5.0.0-38-generic
```

13.Change directory to /

```
bmsce@bmsce-Precision-T1700:/boot$ cd ..
```

14. List the contents of /home directory

```
bmsce@bmsce-Precision-T1700:/boot$ cd ..  
bmsce@bmsce-Precision-T1700:/$ cd home  
bmsce@bmsce-Precision-T1700:/home$ ls  
bmsce  exam  hduser
```

15. Create a file sidbi in the home directory

```
bmsce@bmsce-Precision-T1700:/home$ sudo touch sidbi
```

16. Find the permissions of the file sidbi

```
bmsce@bmsce-Precision-T1700:/home$ ls -li sidbi  
7351701 -rw-r--r-- 1 root root 0 Oct 21 12:03 sidbi
```

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

```
bmsce@bmsce-Precision-T1700:/home$ ls -i sidbi  
7351701 sidbi
```

18 . Copy the file sidbi to sidbi1

```
bmsce@bmsce-Precision-T1700:/home$ sudo cp sidbi sidbi1
```

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

```
bmsce@bmsce-Precision-T1700:/home$ ls -i sidbi1  
7351704 sidbi1
```

20. Move the file sidbi to sidbi2

```
bmsce@bmsce-Precision-T1700:/home$ sudo mv sidbi sidbi2
```

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

```
bmsce@bmsce-Precision-T1700:/home$ ls -li sidbi2
7351701 sidbi2
```

22. Move sidbi2 to sidbi

```
bmsce@bmsce-Precision-T1700:/home$ sudo mv sidbi2 sidbi
```