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USP LAB- 1 ASSIGNMENT

1. Find the present Directory

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

2. Write the / directory structure

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

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

```
bmsce@bmsce-Precision-T1700:/$ cd bin
bmsce@bmsce-Precision-T1700:/bin$ ls
 '['                mkzftree
 2to3-2.7           mlabel
 7z                 mlocate
 7za               mm2gv
 7zr              mmcli
 aa-enabled        mmd
 aa-exec          mmdbresolve
```

```
bmsce@bmsce-Precision-T1700:/sbin$ ls
a2disconf      getcap          pam_tally2
a2dismod       getpcaps        pam_timestamp_c
a2dissite      getty           paperconfig
a2enconf       getweb          parted
a2enmod        gnome-menus-blacklist  partprobe
a2enpita       gnart           pccardctl
```

4. Create a new Directory test

```
bmsce@bmsce-Precision-T1700:~/cs106$ mkdir test
bmsce@bmsce-Precision-T1700:~/cs106$ cd test
```

5. Write the permissions of test directory

```
bmsce@bmsce-Precision-T1700:~/cs106/test$ touch sample.txt
bmsce@bmsce-Precision-T1700:~/cs106/test$ ls -l
total 0
-rw-r--r-- 1 bmsce bmsce 0 Oct 21 11:48 sample.txt
```

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

```
bmsce@bmsce-Precision-T1700:~/cs106/test$ cp /etc/resolv.conf .  
bmsce@bmsce-Precision-T1700:~/cs106/test$ ls  
resolv.conf sample.txt
```

7. Rename the test directory to testing

```
bmsce@bmsce-Precision-T1700:~/cs106$ mv test testing  
bmsce@bmsce-Precision-T1700:~/cs106$ cd testing/  
bmsce@bmsce-Precision-T1700:~/cs106/testing$
```

8. Change the permissions of testing directory to 775

```
bmsce@bmsce-Precision-T1700:~/cs106/testing$ chmod 775 .  
bmsce@bmsce-Precision-T1700:~/cs106/testing$ ls -l
```

9. Change the permissions of /tmp directory to 700

```
bmsce@bmsce-Precision-T1700:/tmp$ sudo chmod 700 .  
[sudo] password for bmsce:  
bmsce@bmsce-Precision-T1700:/tmp$
```

10. Change the permissions of guest directory to 700

```
bmsce@bmsce-Precision-T1700:~/cs106$ chmod 700 guest  
bmsce@bmsce-Precision-T1700:~/cs106$ ls -l  
total 4  
drwx----- 2 bmsce bmsce 4096 Oct 21 12:26 guest  
-rw-r--r-- 1 bmsce bmsce 0 Oct 21 12:26 sample  
-rw-r--r-- 1 bmsce bmsce 0 Oct 21 12:26 sample2
```

11. Delete the testing directory

```
bmsce@bmsce-Precision-T1700:~/cs106$ rm -r testing
```

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:~/cs106$ cd /  
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
```

13. Change directory to /

```
bmsce@bmsce-Precision-T1700:/home$ cd /
```

14. List the contents of /home directory

```
bmsce@bmsce-Precision-T1700:/home$ ls  
bmsce exam
```

15. Create a file sidbi in the home directory

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

16. Find the permissions of the file sidbi

```
bmsce@bmsce-Precision-T1700:/home$ ls -l  
total 12  
drwxr-xr-x 39 bmsce bmsce 4096 Oct 21 12:10 bmsce  
drwxr-xr-x 19 exam exam 4096 Nov 29 2019 exam  
drwxrwxrwx 34 hduser hadoop 4096 Mar 1 2021 hduser  
-rw-r--r-- 1 root root 0 Oct 21 12:10 sidbi
```

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

```
bmsce@bmsce-Precision-T1700:/home$ ls -li  
total 12  
7346783 drwxr-xr-x 39 bmsce bmsce 4096 Oct 21 12:12 bmsce  
8128533 drwxr-xr-x 19 exam exam 4096 Nov 29 2019 exam  
7346914 drwxrwxrwx 34 hduser hadoop 4096 Mar 1 2021 hduser  
7355393 -rw-r--r-- 1 root root 0 Oct 21 12:10 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 -li  
total 12  
7346783 drwxr-xr-x 39 bmsce bmsce 4096 Oct 21 12:16 bmsce  
8128533 drwxr-xr-x 19 exam exam 4096 Nov 29 2019 exam  
7346914 drwxrwxrwx 34 hduser hadoop 4096 Mar 1 2021 hduser  
7355393 -rw-r--r-- 1 root root 0 Oct 21 12:10 sidbi  
7355388 -rw-r--r-- 1 root root 0 Oct 21 12:16 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  
total 12  
7346783 drwxr-xr-x 39 bmsce bmsce 4096 Oct 21 12:17 bmsce  
8128533 drwxr-xr-x 19 exam exam 4096 Nov 29 2019 exam  
7346914 drwxrwxrwx 34 hduser hadoop 4096 Mar 1 2021 hduser  
7355388 -rw-r--r-- 1 root root 0 Oct 21 12:16 sidbi1  
7355393 -rw-r--r-- 1 root root 0 Oct 21 12:10 sidbi2
```

22. Move sidbi2 to sidbi

```
bmsce@bmsce-Precision-T1700:/home$ sudo mv sidbi2 sidbi  
bmsce@bmsce-Precision-T1700:/home$ ls  
bmsce exam hduser sidbi sidbi1
```