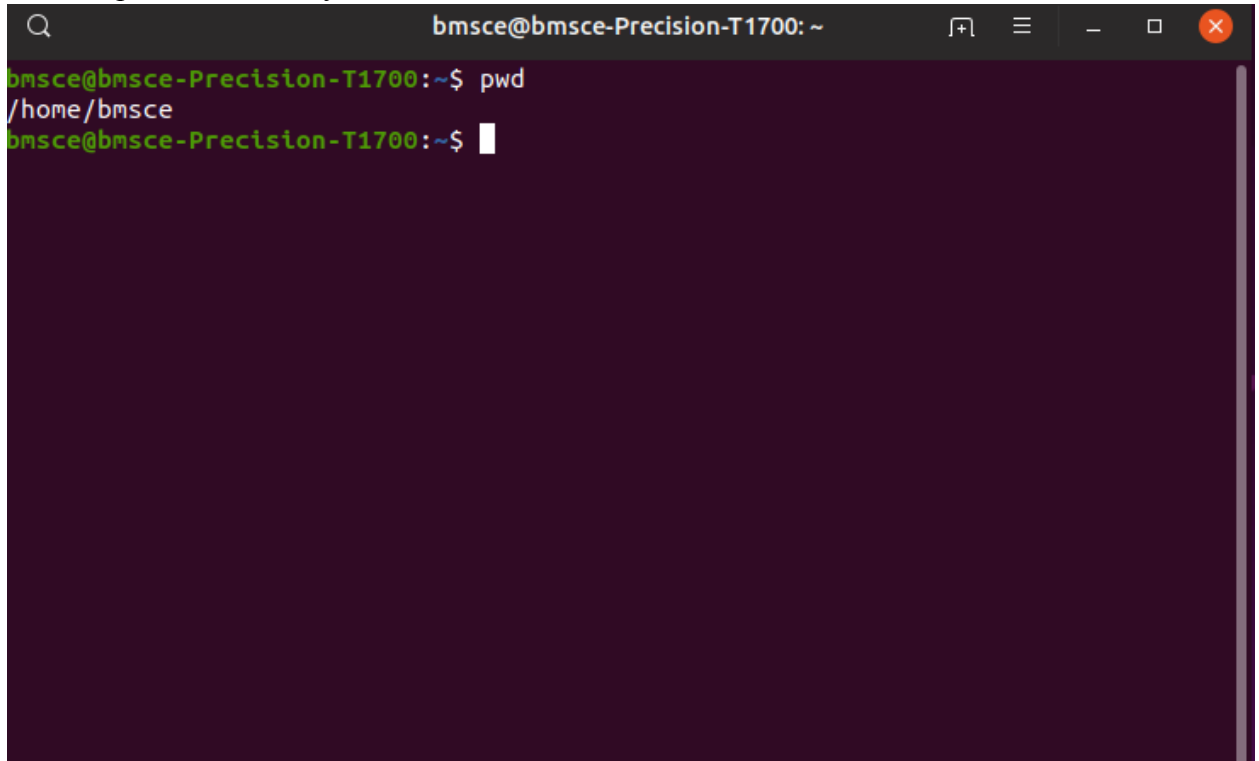


LINUX LAB- 1 ASSIGNMENT

1. Find the present Directory

A terminal window titled 'bmsce@bmsce-Precision-T1700: ~' with standard window controls. The terminal shows a green prompt 'bmsce@bmsce-Precision-T1700:~\$' followed by the command 'pwd'. The output is '/home/bmsce' on the next line. A second green prompt 'bmsce@bmsce-Precision-T1700:~\$' is shown with a white cursor, indicating the command has been executed.

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

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

```
bmsce@bmsce-Precision-T1700: ~  
bmsce@bmsce-Precision-T1700:~$ ls  
Android          file3             new3.sh           q2.cc  
AndroidStudioProjects file3.txt         new4.sh           R  
cassandra        file4             new5.sh           second.sh  
client.py        file4.txt        ns-allinone-2.35  server  
Desktop          file5             ns-allinone-2.35.tar.gz server.py  
Documents        file5.txt        ns-allinone-3.29  snap  
Downloads        first.sh          ns-allinone-3.29.tar.bz2 softwares  
eclipse-workspace fp                parjanya          Templates  
file1            Music             Pictures           test  
file1.txt        netanim.cc        prog1.c           Videos  
file2            new1.sh           pt  
file2.txt        new2.sh           Public  
bmsce@bmsce-Precision-T1700:~$ ps  
  PID TTY          TIME CMD  
  4938 pts/0    00:00:00 bash  
  7471 pts/0    00:00:00 ps  
bmsce@bmsce-Precision-T1700:~$ cat> nikhil.txt  
bmsce  
^C  
bmsce@bmsce-Precision-T1700:~$ cp  
cp: missing file operand  
Try 'cp --help' for more information.  
bmsce@bmsce-Precision-T1700:~$ cp nikhil.txt  
cp: missing destination file operand after 'nikhil.txt'  
Try 'cp --help' for more information.  
bmsce@bmsce-Precision-T1700:~$ cp nikhil.txt abc.txt  
bmsce@bmsce-Precision-T1700:~$ ls  
abc.txt          client.py         eclipse-workspace file2.txt  file4.txt  fp  
ond.sh           new2.sh          nikhil.txt          ns-allinone-3.29.tar.bz2 pt          sec  
ond.sh           softwares  
Android          Desktop          file1              file3      file5      Musi  
c               new3.sh          ns-allinone-2.35  parjanya   Public     ser  
ver             Templates  
AndroidStudioProjects Documents file1.txt        file3.txt  file5.txt  neta  
nim.cc          new4.sh          ns-allinone-2.35.tar.gz Pictures    q2.cc      ser  
ver.py          test  
cassandra       Downloads        file2              file4      first.sh   new1  
.sh             new5.sh          ns-allinone-3.29  prog1.c    R          sna  
p               Videos  
bmsce@bmsce-Precision-T1700:~$ cat abc.txt  
bmsce  
bmsce@bmsce-Precision-T1700:~$
```

4. Create a new Directory test
5. Write the permissions of test directory

```
bmsce@bmsce-Precision-T1700: ~  
bmsce@bmsce-Precision-T1700:~$ mkdir test  
bmsce@bmsce-Precision-T1700:~$ ls  
abc.txt          file2.txt      new2.sh         pt  
Android          file3          new3.sh         Public  
AndroidStudioProjects file3.txt      new4.sh         q2.cc  
cassandra        file4          new5.sh         R  
client.py        file4.txt      nikhil.txt      second.sh  
Desktop          file5          ns-allinone-2.35 server  
Documents        file5.txt      ns-allinone-2.35.tar.gz server.py  
Downloads        first.sh       ns-allinone-3.29 snap  
eclipse-workspace fp             ns-allinone-3.29.tar.bz2 softwares  
file1            Music          parjanya        Templates  
file1.txt        netanim.cc     Pictures         test  
file2            new1.sh        prog1.c         Videos
```

6. Copy the file /etc/resolv.conf in test directory
7. Rename the test directory to testing
8. Change the permissions of testing directory to 775

```
bmsce@bmsce-Precision-T1700:~$ cp /etc/resolv.conf /home/bmsce/test  
bmsce@bmsce-Precision-T1700:~$ mv test testing  
bmsce@bmsce-Precision-T1700:~$ pwd  
/home/bmsce  
bmsce@bmsce-Precision-T1700:~$ cd testing  
bmsce@bmsce-Precision-T1700:~/testing$ pwd  
/home/bmsce/testing  
bmsce@bmsce-Precision-T1700:~/testing$ cd ..  
bmsce@bmsce-Precision-T1700:~$ chmod 775 testing  
bmsce@bmsce-Precision-T1700:~$ ls -ld testing  
drwxrwxr-x 2 bmsce bmsce 4096 Oct 21 11:58 testing
```

9. Change the permissions of /tmp directory to 700
10. Change the permissions of guest directory to 700
11. Delete the testing 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:~$ mkdir guest  
bmsce@bmsce-Precision-T1700:~$ chmod 700 guest  
bmsce@bmsce-Precision-T1700:~$ ls -ld guest  
drwx----- 2 bmsce bmsce 4096 Oct 21 12:15 guest  
bmsce@bmsce-Precision-T1700:~$ rmdir testing  
rmdir: failed to remove 'testing': Directory not empty  
bmsce@bmsce-Precision-T1700:~$ rm -rf testing  
bmsce@bmsce-Precision-T1700:~$ cd testing  
bash: cd: testing: No such file or directory  
bmsce@bmsce-Precision-T1700:~$ uname -r  
5.0.0-38-generic
```

13. Change directory to /
14. List the contents of /home directory

```

bmsce@bmsce-Precision-T1700:/$ pwd
/
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
bmsce@bmsce-Precision-T1700:/$ cd hduser

```

15. Create a file sidbi in the home directory
16. Find the permissions of the file sidbi
17. Find the inode number of file sidbi (hint: ls -li)
18. Copy the file sidbi to sidbi1
19. Find the inode number of file sidbi1 (hint: ls -li)

```

bmsce@bmsce-Precision-T1700: /home
bmsce@bmsce-Precision-T1700:/home$ cat > sidbi
bash: sidbi: Permission denied
bmsce@bmsce-Precision-T1700:/home$ cat > hduser/sidbi
abcdefghijklmnopqrstuvwxy
^C
bmsce@bmsce-Precision-T1700:/home$ cat hduser/sidbi
abcdefghijklmnopqrstuvwxy
bmsce@bmsce-Precision-T1700:/home$ ls -a
.  ..  bmsce  exam  hduser
bmsce@bmsce-Precision-T1700:/home$ ls -l hduser/sidbi
-rw-r--r-- 1 bmsce bmsce 27 Oct 21 12:31 hduser/sidbi
bmsce@bmsce-Precision-T1700:/home$ ls -la hduser/sidbi
-rw-r--r-- 1 bmsce bmsce 27 Oct 21 12:31 hduser/sidbi
bmsce@bmsce-Precision-T1700:/home$ ls -li hduser/sidbi
7354330 -rw-r--r-- 1 bmsce bmsce 27 Oct 21 12:31 hduser/sidbi
bmsce@bmsce-Precision-T1700:/home$ cp hduser/sidbi hduser/sidbi1
bmsce@bmsce-Precision-T1700:/home$ ls -li hduser/sidbi1
7354946 -rw-r--r-- 1 bmsce bmsce 27 Oct 21 12:33 hduser/sidbi1
bmsce@bmsce-Precision-T1700:/home$

```

20. Move the file sidbi to sidbi2
21. Find the inode number of file sidbi2 (hint: ls -li)
22. Move sidbi2 to sidbi

```

bmsce@bmsce-Precision-T1700: /home/hduser
bmsce@bmsce-Precision-T1700:/home/hduser$ mv sidbi sidbi2
bmsce@bmsce-Precision-T1700:/home/hduser$ ls -li sidbi2
7354330 -rw-r--r-- 1 bmsce bmsce 27 Oct 21 12:31 sidbi2
bmsce@bmsce-Precision-T1700:/home/hduser$ mv sidbi2 sidbi
bmsce@bmsce-Precision-T1700:/home/hduser$

```