

Assignment -1

Linux Filesystem Mastery

Name : Harsh

1. Create the following directory structure:

linux_practice/

├─ day1/

| └─ files/

| └─ backup/

```
ubuntu@ip-172-31-16-28:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-16-28:~$ mkdir linux_practice
ubuntu@ip-172-31-16-28:~$ cd linux_
-bash: cd: linux_: No such file or directory
ubuntu@ip-172-31-16-28:~$ cd linux_practice
-bash: cd: linux_practice: No such file or directory
ubuntu@ip-172-31-16-28:~$ rmdir linux_practice
ubuntu@ip-172-31-16-28:~$ mkdir linux_practice
ubuntu@ip-172-31-16-28:~$ cd linux_practice/
ubuntu@ip-172-31-16-28:~/linux_practice$ mkdir day1
ubuntu@ip-172-31-16-28:~/linux_practice$ ls
day1
ubuntu@ip-172-31-16-28:~/linux_practice$ cd day1
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ mkdir files backup
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ ls
backup files
```

2. Inside files/:

- Create 3 text files

- Write content using both > and >>

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ cd files
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ touch f1.txt f2.txtx f3.t
ext
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ ls
f1.txt  f2.txtx  f3.text
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ ls -lh
total 0
-rw-rw-r-- 1 ubuntu ubuntu 0 Jan 13 09:19 f1.txt
-rw-rw-r-- 1 ubuntu ubuntu 0 Jan 13 09:19 f2.txtx
-rw-rw-r-- 1 ubuntu ubuntu 0 Jan 13 09:19 f3.text
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "This is file 1." >
f1.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cat f1.txt
This is file 1.
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "Welcome to GE" >> f
1.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cat f1.txt
This is file 1.
Welcome to GE
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "This is file 2." > f2.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "Welcome to DevOps" >> f2.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cat f2.txt
This is file 2.
Welcome to DevOps
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "This is file 3." > f3.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "Welcome to GE Bangalore" >> f3.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cat f3.txt
This is file 3.
Welcome to GE Bangalore
```

○ Display content using cat, less, head, tail

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ echo "Linux Architecture  
has 3 components. It includes Hardware, Kernel, Shell, User/Applications pro  
grams." >> f1.txt  
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ less f1.txt  
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ █
```

```
This is file 1.  
Welcome to GE  
Linux Architecture has 3 components. It includes Hardware, Kernel, Shell, Us  
er/Applications programs.  
f1.txt (END) █
```

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ head f1.txt -n 3  
This is file 1.  
Welcome to GE  
Linux Architecture has 3 components. It includes Hardware, Kernel, Shell, Us  
er/Applications programs.  
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ tail f1.txt -n 3  
This is file 1.  
Welcome to GE  
Linux Architecture has 3 components. It includes Hardware, Kernel, Shell, Us  
er/Applications programs.  
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ █
```

3. Copy one file to backup/ and rename it.

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cp f1.txt ../backup/
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ ls -l ../backup/
total 4
-rw-rw-r-- 1 ubuntu ubuntu 133 Jan 13 09:50 f1.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cp ..
cp: missing destination file operand after '..'
Try 'cp --help' for more information.
ubuntu@ip-172-31-16-28:~/linux_practice/day1/files$ cd ..
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ cd backup/
ubuntu@ip-172-31-16-28:~/linux_practice/day1/backup$ mv f1.txt newFile.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/backup$ ls -lh
total 4.0K
-rw-rw-r-- 1 ubuntu ubuntu 133 Jan 13 09:50 newFile.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1/backup$
```

4. Search for a specific word across all files using grep

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1/backup$ grep GE newFile.txt
Welcome to GE
```

5. Use find to locate:

○ Files created today

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ find -ctime -1
.
./backup
./backup/newFile.txt
./files
./files/f1.txt
./files/f3.txt
./files/f2.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$
```

○ Files larger than 1 KB

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1/backup$ cd ..
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ find . -size +1k
.
./backup
./files
ubuntu@ip-172-31-16-28:~/linux_practice/day1$
```

