Assignment-1

Linux Filesystem Mastery

1. Create the following directory structure:

linux_practice/

├── day1/

│ ├── files/

│ └── backup/

```
ubuntu@ip-172-31-25-177:~$ cd
ubuntu@ip-172-31-25-177:~$ ls
linux_lab_day1
ubuntu@ip-172-31-25-177:~$ mkdir linux_practice
ubuntu@ip-172-31-25-177:~$ cd linux_practice
ubuntu@ip-172-31-25-177:~/linux_practice$ mkdir day1
ubuntu@ip-172-31-25-177:~/linux_practice$ ls
day1
ubuntu@ip-172-31-25-177:~/linux_practice$ ls -l
total 4
drwxrwxr-x 2 ubuntu ubuntu 4096 Jan 13 09:14 day1
ubuntu@ip-172-31-25-177:~/linux_practice$ cd day1
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ mkdir files backup
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ ls
backup  files
```

2. Inside files/:

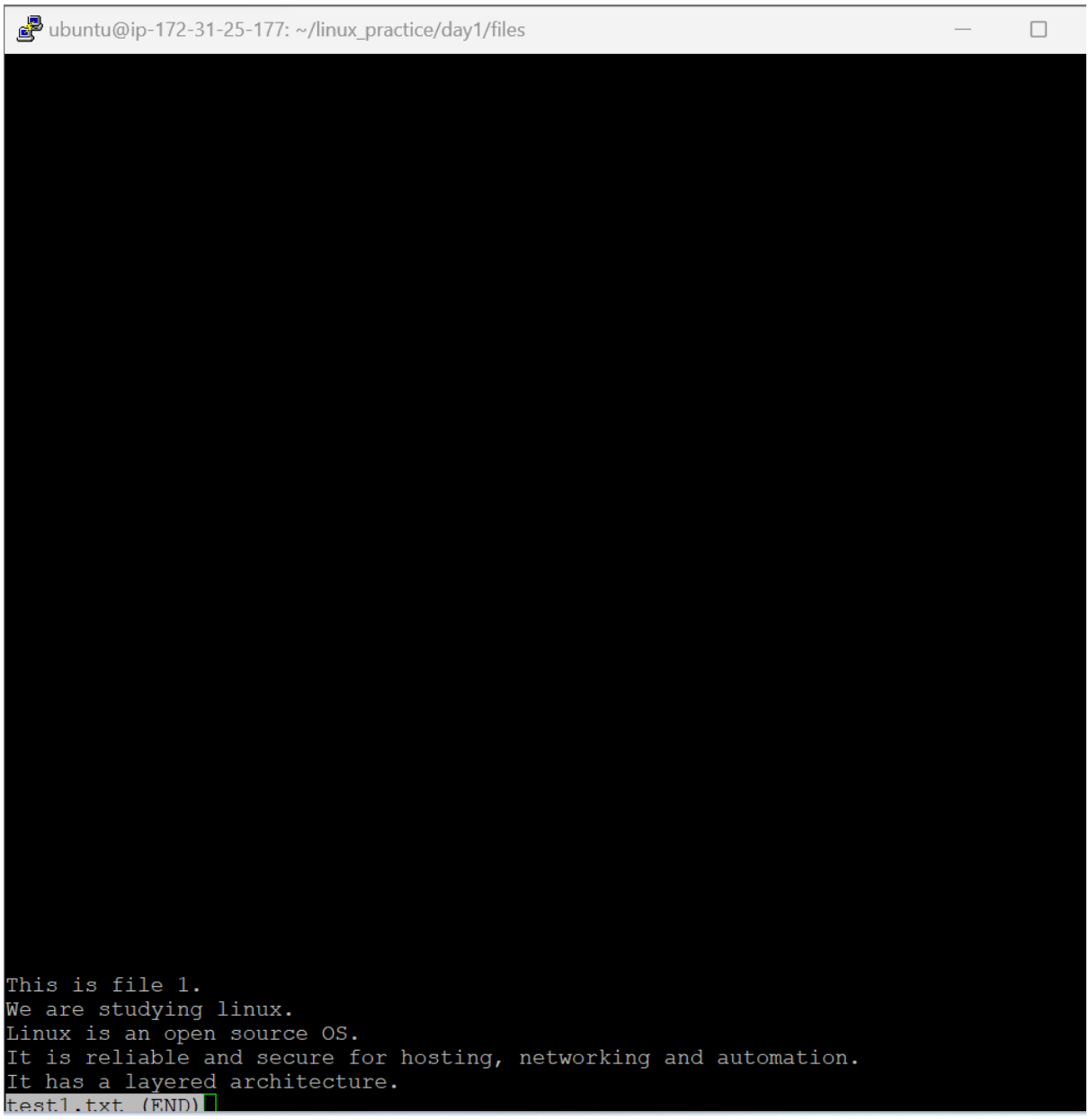
○ Create 3 text files

○ Write content using both > and >>

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ cd files/
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ touch test1.txt test2.tx
t test3.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ ls
test1.txt  test2.txt  test3.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "This is file 1." >
test1.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cat test1.txt
This is file 1.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "We are studying li
nux." >> test1.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cat test1.txt
This is file 1.
We are studying linux.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "This is file 2." >
test2.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "Hello World!" >> t
est2.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cat test2.txt
This is file 2.
Hello World!
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "This is file 3." >
 test3.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ echo "This is assignment
 1." >> test3.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cat test3.txt
This is file 3.
This is assignment 1.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ ls
test1.txt  test2.txt  test3.txt
```

- Display content using cat, less, head, tail

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cat test1.txt
This is file 1.
We are studying linux.
Linux is an open source OS.
It is reliable and secure for hosting, networking and automation.
It has a layered architecture.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ less test1.txt
```




```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ less test1.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ head test1.txt -n 3
This is file 1.
We are studying linux.
Linux is an open source OS.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ tail  test1.txt -n 2
It is reliable and secure for hosting, networking and automation.
It has a layered architecture.
```

3. Copy one file to backup/

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cp test1.txt ../backup/
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ ls -l ../backup/
total 4
-rw-rw-r-- 1 ubuntu ubuntu 164 Jan 13 09:50 test1.txt
```

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cd backup/
-bash: cd: backup/: No such file or directory
ubuntu@ip-172-31-25-177:~/linux_practice/day1/files$ cd ..
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ cd backup
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ mv test1.txt newfile.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ ls -l ../backup/
total 4
-rw-rw-r-- 1 ubuntu ubuntu 164 Jan 13 09:50 newfile.txt
```

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

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ grep linux test1.txt
grep: test1.txt: No such file or directory
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ grep linux newfile.txt
We are studying linux.
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ grep is newfile.txt
This is file 1.
Linux is an open source OS.
It is reliable and secure for hosting, networking and automation.
```

5. Use find to locate:

- ○ Files created today
- ○ Files larger than 1 KB

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1/backup$ cd ..
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ find -ctime -1
.
./backup
./backup/newfile.txt
./files
./files/test2.txt
./files/test3.txt
./files/newfile.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ find . -size +1k
.
./backup
./files
```