

Linux Tasks Report

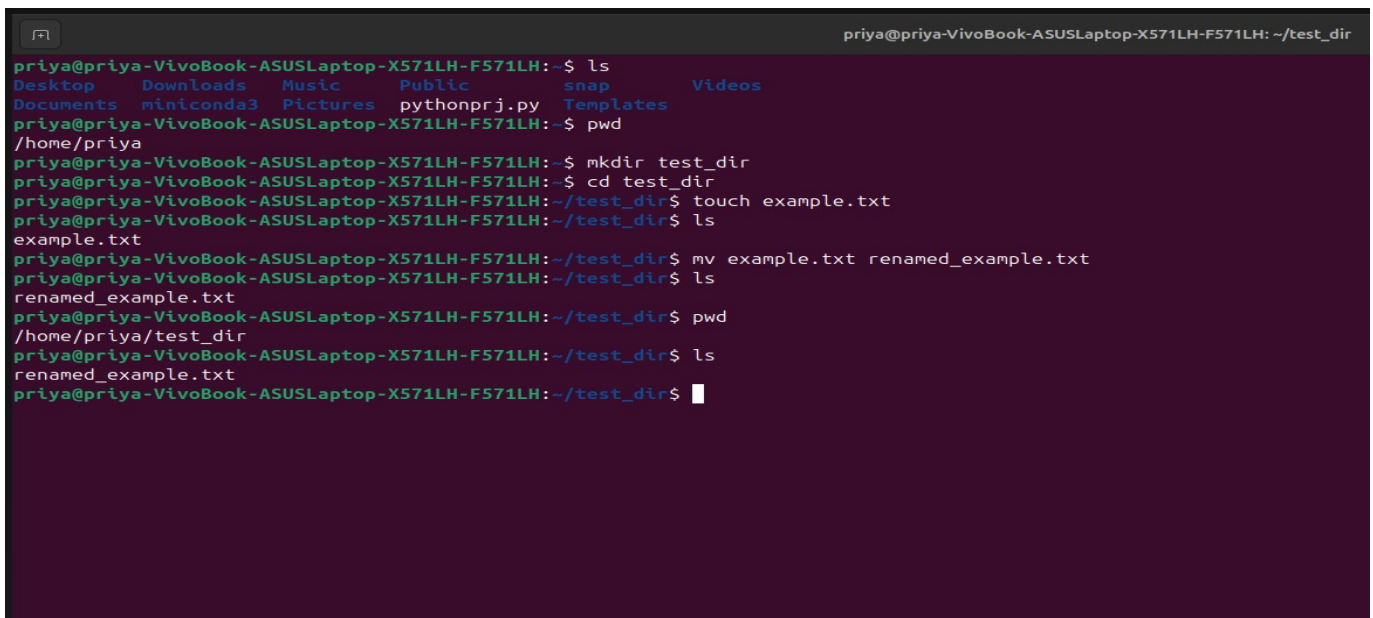
GitHub repo URL = <https://github.com/Priya-Kumari-108/Linux-basic-assignment>

1. Creating and Renaming Files/Directories Commands:

```
mkdir test_dir
cd test_dir
touch example.txt
mv example.txt renamed_example.txt
```

Explanation:

- `mkdir` creates a directory.
- `touch` creates an empty file.
- `mv` is used to rename or move files.

A terminal window screenshot with a dark purple background. The terminal shows a series of commands and their outputs. The user is in a directory named ~/test_dir. The commands executed are: 'ls' (listing files), 'mkdir test_dir' (creating a directory), 'cd test_dir' (changing to the directory), 'touch example.txt' (creating an empty file), 'ls' (listing files), 'mv example.txt renamed_example.txt' (renaming the file), 'ls' (listing files), 'pwd' (showing the current directory), and 'ls' (listing files). The output of 'ls' shows 'renamed_example.txt'. The terminal title bar indicates the user is 'priya' on a 'priya-VivoBook-ASUSLaptop-X571LH-F571LH' machine, and the current directory is '~/test_dir'.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH: ~/test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop  Downloads  Music      Public     snap       Videos
Documents  miniconda3  Pictures  pythonprj.py  Templates
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ mkdir test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cd test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ touch example.txt
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ ls
example.txt
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ mv example.txt renamed_example.txt
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ ls
renamed_example.txt
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ pwd
/home/priya/test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ ls
renamed_example.txt
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$
```

2. Viewing File Contents Commands:

```
cat my_passwd
head -n 5 my_passwd
tail -n 5 my_passwd
```

Explanation:

- `cat` displays the whole file.
- `head -n 5` shows the first 5 lines.
- `tail -n 5` shows the last 5 lines.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH: ~  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd  
/home/priya  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls  
Desktop  Downloads  Music      Public     snap       Videos  
Documents  miniconda3  Pictures  pythonprj.py  Templates  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ touch my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd  
/home/priya  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls  
Desktop  Downloads  Music      Pictures  pythonprj.py  Templates  
Documents  miniconda3  my_passwd  Public    snap          Videos  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cd my_passwd  
bash: cd: my_passwd: Not a directory  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "hello" >my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cat my_passwd  
hello  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "i am student">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "Atomic Habits">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "Become the best version of yourself">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "Make the cues of good habits">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "What will other think of me">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo "create an environment where doing the right thing is as easy as possible">>my_passwd  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cat my_passwd  
hello  
i am student  
Atomic Habits  
Become the best version of yourself  
Make the cues of good habits  
What will other think of me  
create an environment where doing the right thing is as easy as possible  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ head -n 5 my_passwd  
hello  
i am student  
Atomic Habits  
Become the best version of yourself  
Make the cues of good habits  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ tail -n 5 my_passwd  
Atomic Habits  
Become the best version of yourself  
Make the cues of good habits  
What will other think of me  
create an environment where doing the right thing is as easy as possible  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$
```

3. Searching for Patterns Command:

grep "root" my_passwd

Explanation:

- grep searches for the word "root" in each line.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cat my_passwd  
hello  
i am student  
Atomic Habits  
Become the best version of yourself  
Make the cues of good habits  
never delete the root account  
root is the superuser in linux  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ grep "root" my_passwd  
never delete the root account  
root is the superuser in linux  
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$
```

4. Zipping and Unzipping Commands:

```
cd ..
zip -r test_dir.zip test_dir
unzip test_dir.zip -d unzipped_dir
```

Explanation:

- `zip -r` compresses a folder.
- `unzip -d` extracts it into a new directory.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH: ~
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop  Documents  Downloads  miniconda3  Music  my_passwd  Pictures  Public  pythonprj.py  snap  Templates  Videos
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ mkdir test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ cd test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ zip -r test_dir.zip test_dir
zip warning: name not matched: test_dir

zip error: Nothing to do! (try: zip -r test_dir.zip . -i test_dir)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~/test_dir$ cd ..
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ zip -r test_dir.zip test_dir
  adding: test_dir/ (stored 0%)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ unzip test_dir.zip
Archive:  test_dir.zip
  Desktop      Music      pythonprj.py  test_dir.zip
Documents     my_passwd   snap          Videos
Downloads     Pictures    Templates
miniconda3    Public      test_dir
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ zip -r test_dir.zip test_dir
updating: test_dir/ (stored 0%)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop  Documents  Downloads  miniconda3  Music  my_passwd  Pictures  Public  pythonprj.py  snap  Templates  test_dir  test_dir.zip  Videos
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ upriya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ unzip test_dir.zip -d unzipped_dir
Archive:  test_dir.zip
  creating: unzipped_dir/test_dir/
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop  Documents  Downloads  miniconda3  Music  my_passwd  Pictures  Public  pythonprj.py  snap  Templates  test_dir  test_dir.zip  unzipped_dir  Videos
```

5. Downloading Files Command:

```
wget https://www.w3.org/TR/PNG/iso_8859-1.txt
```

Explanation:

- `wget` downloads a file from the given URL.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop  Documents  Downloads  miniconda3  Music  my_passwd  Pictures  Public  pythonprj.py  snap  Templates  test_dir  test_dir.zip  unzipped_dir  Videos
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ wget https://www.w3.org/TR/PNG/iso_8859-1.txt
Command 'wget' not found, did you mean:
  command 'wxget' from deb wxpython-tools (4.2.1+dfsg-3)
  command 'wmget' from deb wmget (0.6.1-2)
  command 'wget' from deb wget (1.21.4-1ubuntu4.1)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ wget https://www.w3.org/TR/PNG/iso_8859-1.txt
--2025-06-18 09:50:16-- https://www.w3.org/TR/PNG/iso_8859-1.txt
Resolving www.w3.org (www.w3.org)... 2606:4700:99e1:741c:8759:16:19e3:8f51, 104.18.23.19, 104.18.22.19
Connecting to www.w3.org (www.w3.org)[2606:4700:99e1:741c:8759:16:19e3:8f51]:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.w3.org/TR/png/iso_8859-1.txt [following]
--2025-06-18 09:50:18-- https://www.w3.org/TR/png/iso_8859-1.txt
Reusing existing connection to [www.w3.org]:443.
HTTP request sent, awaiting response... 404 Not Found
2025-06-18 09:50:19 ERROR 404: Not Found.

priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$
```

6. Changing Permissions Commands:

```
chmod 421 my_passwd
ls -l my_passwd
```

Explanation:

- `chmod 421` gives read permission to the owner, write to the group, and execute to others."

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH: ~
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop Documents Downloads miniconda3 Music my_passwd Pictures Public pythonprj.py snap Templates test_dir test_dir.zip unzipped_dir Videos
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ weget https://www.w3.org/TR/PNG/iso_8859-1.txt
Command 'weget' not found, did you mean:
  command 'wxget' from deb wxpython-tools (4.2.1+dfsg-3)
  command 'wmget' from deb wmget (0.6.1-2)
  command 'wget' from deb wget (1.21.4-1ubuntu4.1)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ wget https://www.w3.org/TR/PNG/iso_8859-1.txt
--2025-06-18 09:50:16-- https://www.w3.org/TR/PNG/iso_8859-1.txt
Resolving www.w3.org (www.w3.org)... 2606:4700:99e1:741c:8759:16:19e3:8f51, 104.18.23.19, 104.18.22.19
Connecting to www.w3.org (www.w3.org)[2606:4700:99e1:741c:8759:16:19e3:8f51]:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.w3.org/TR/png/iso_8859-1.txt [following]
--2025-06-18 09:50:18-- https://www.w3.org/TR/png/iso_8859-1.txt
Reusing existing connection to [www.w3.org]:443.
HTTP request sent, awaiting response... 404 Not Found
2025-06-18 09:50:19 ERROR 404: Not Found.
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls -l my_passwd
-rw-rw-r-- 1 priya priya 159 Jun 18 09:37 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ chmod 421 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls -l my_passwd
-r--w---x 1 priya priya 159 Jun 18 09:37 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$
```

7. Working with Environment Variables Commands:

```
export my_var="Hello, Linux!"
echo $my_var
```

Explanation:

- `export` sets a new environment variable.
- `echo` displays its value.

```
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH: ~
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ pwd
/home/priya
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls
Desktop Documents Downloads miniconda3 Music my_passwd Pictures Public pythonprj.py snap Templates test_dir test_dir.zip unzipped_dir Videos
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ weget https://www.w3.org/TR/PNG/iso_8859-1.txt
Command 'weget' not found, did you mean:
  command 'wxget' from deb wxpython-tools (4.2.1+dfsg-3)
  command 'wmget' from deb wmget (0.6.1-2)
  command 'wget' from deb wget (1.21.4-1ubuntu4.1)
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ wget https://www.w3.org/TR/PNG/iso_8859-1.txt
--2025-06-18 09:50:16-- https://www.w3.org/TR/PNG/iso_8859-1.txt
Resolving www.w3.org (www.w3.org)... 2606:4700:99e1:741c:8759:16:19e3:8f51, 104.18.23.19, 104.18.22.19
Connecting to www.w3.org (www.w3.org)[2606:4700:99e1:741c:8759:16:19e3:8f51]:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.w3.org/TR/png/iso_8859-1.txt [following]
--2025-06-18 09:50:18-- https://www.w3.org/TR/png/iso_8859-1.txt
Reusing existing connection to [www.w3.org]:443.
HTTP request sent, awaiting response... 404 Not Found
2025-06-18 09:50:19 ERROR 404: Not Found.
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls -l my_passwd
-rw-rw-r-- 1 priya priya 159 Jun 18 09:37 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls -l my_passwd
-rw-rw-r-- 1 priya priya 159 Jun 18 09:37 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ chmod 421 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ ls -l my_passwd
-r--w---x 1 priya priya 159 Jun 18 09:37 my_passwd
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ export my_var="hello, Linux!"
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo my_var
my_var
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$ echo $my_var
hello, Linux!
priya@priya-VivoBook-ASUSLaptop-X571LH-F571LH:~$
```