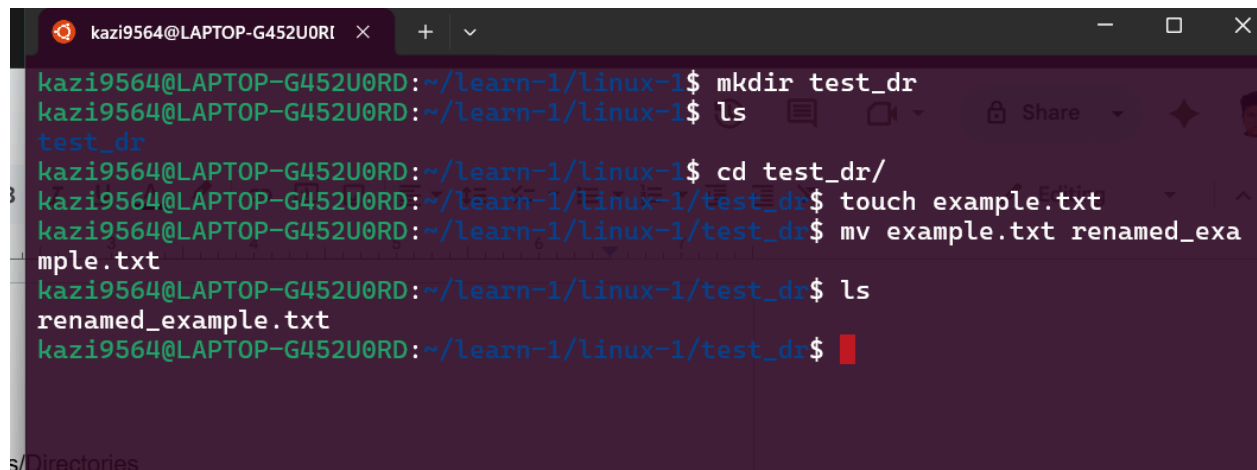


## 1. Creating and Renaming Files/Directories

Create a directory named `test_dir` using `mkdir`.

Inside `test_dir`, create an empty file called `example.txt`.

Rename `example.txt` to `renamed_example.txt` using `mv`

A terminal window with a dark background and light-colored text. The window title bar shows 'kazi9564@LAPTOP-G452U0RI'. The terminal output shows the following commands and their results:

```
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ mkdir test_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ ls
test_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ cd test_dir/
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1/test_dir$ touch example.txt
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1/test_dir$ mv example.txt renamed_example.txt
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1/test_dir$ ls
renamed_example.txt
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1/test_dir$
```

## 2. Viewing File Contents

Use `cat` to display the contents of `/etc/passwd`.

```
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$ mv example.txt renamed_example.txt
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$ ls
renamed_example.txt
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
systemd-timesync:x:996:996:systemd Time Synchronization:/:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon,,,:/usr/lib/dhcpcd:/bin/false
messagebus:x:101:101::/nonexistent:/usr/sbin/nologin
syslog:x:102:102::/nonexistent:/usr/sbin/nologin
systemd-resolve:x:991:991:systemd Resolver:/:/usr/sbin/nologin
uidd:x:103:103::/run/uidd:/usr/sbin/nologin
landscape:x:104:105::/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/:/usr/sbin/nologin
kazi9564:x:1000:1000:::/home/kazi9564:/bin/bash
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$
```

Display only the first 5 lines of /etc/passwd using head.

```
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$ head -n 5 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$
```

Display only the last 5 lines of /etc/passwd using tail.

```
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$ tail -n 5 /etc/passwd
systemd-resolve:x:991:991:systemd Resolver:/:/usr/sbin/nologin
uidd:x:103:103::/run/uidd:/usr/sbin/nologin
landscape:x:104:105::/var/lib/landscape:/usr/sbin/nologin
polkitd:x:990:990:User for polkitd:/:/usr/sbin/nologin
kazi9564:x:1000:1000:::/home/kazi9564:/bin/bash
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dr$
```

### 3. Searching for Patterns

Use grep to find all lines containing the word "root" in /etc/passwd.

```
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dir$ grep "root" /etc/passwd
root:x:0:0:root:/root:/bin/bash
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dir$
```

### 4. Zipping and Unzipping

Compress the test\_dir directory into a file named test\_dir.zip using zip.

Unzip test\_dir.zip into a new directory named unzipped\_dir.

```
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/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)
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/test_dir$ cd ..
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ zip -r test_dir.zip test_dir
  adding: test_dir/ (stored 0%)
  adding: test_dir/renamed_example.txt (stored 0%)
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ ls
test_dir  test_dir.zip
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ mkdir unzipped_dir
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ cd unzipped_dir/
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1/unzipped_dir$ cd ..
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ unzip test_dir.zip -d unzipped_dir
Archive:  test_dir.zip
  creating: unzipped_dir/test_dir/
  extracting: unzipped_dir/test_dir/renamed_example.txt
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ ls
test_dir  test_dir.zip  unzipped_dir
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$ ls unzipped_dir/
test_dir
kazi9564@LAPTOP-G452U0RD: ~/learn-1/linux-1$
```

## 5. Downloading Files

Use `wget` to download a file from a URL (e.g., <https://example.com/sample.txt>).

```
APT@G452U0RD:~/learn-1/linux-1$ wget https://pokeapi.co/api/v2/pokemon/pikachu
--2025-12-07 11:36:03-- https://pokeapi.co/api/v2/pokemon/pikachu
Resolving pokeapi.co (pokeapi.co)... 104.21.76.139, 172.67.195.193, 2606:4700:3037::ac43:c3c1, ...
Connecting to pokeapi.co (pokeapi.co)|104.21.76.139|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/json]
Saving to: 'pikachu'

pikachu [ <=> ] 254.14K 634KB/s in 0.4s

2025-12-07 11:36:04 (634 KB/s) - 'pikachu' saved [260240]

kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ ls
pikachu test_dir test_dir.zip unzipped_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$
```

## 6. Changing Permissions

Create a file named `secure.txt` and change its permissions to read-only for everyone using `chmod`.

```
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ touch secure.txt
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ ls
pikachu secure.txt test_dir test_dir.zip unzipped_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ ls -l
total 268
-rw-r--r-- 1 kazi9564 kazi9564 260240 Dec 7 11:36 pikachu
-rw-r--r-- 1 kazi9564 kazi9564 0 Dec 7 11:37 secure.txt
drwxr-xr-x 2 kazi9564 kazi9564 4096 Dec 7 11:18 test_dir
-rw-r--r-- 1 kazi9564 kazi9564 352 Dec 7 11:30 test_dir.zip
drwxr-xr-x 3 kazi9564 kazi9564 4096 Dec 7 11:32 unzipped_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ chmod 444 secure.txt
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ ls -l
total 268
-rw-r--r-- 1 kazi9564 kazi9564 260240 Dec 7 11:36 pikachu
-r--r--r-- 1 kazi9564 kazi9564 0 Dec 7 11:37 secure.txt
drwxr-xr-x 2 kazi9564 kazi9564 4096 Dec 7 11:18 test_dir
-rw-r--r-- 1 kazi9564 kazi9564 352 Dec 7 11:30 test_dir.zip
drwxr-xr-x 3 kazi9564 kazi9564 4096 Dec 7 11:32 unzipped_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$
```

## 7. Working with Environment Variables

Use export to set a new environment variable called MY\_VAR with the value "Hello, Linux!".

```
drwxr-xr-x 3 kazi9564 kazi9564 4096 Dec 7 11:32 unzipped_dir
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ export MY_VAR="Hello, Linux!"
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$ env | grep MY_VAR
MY_VAR=Hello, Linux!
kazi9564@LAPTOP-G452U0RD:~/learn-1/linux-1$
```

**Submission Guidelines -:** Attach Screenshots or command along with explanation and submit in doc(google doc or microsoft doc) format also attach github repo link