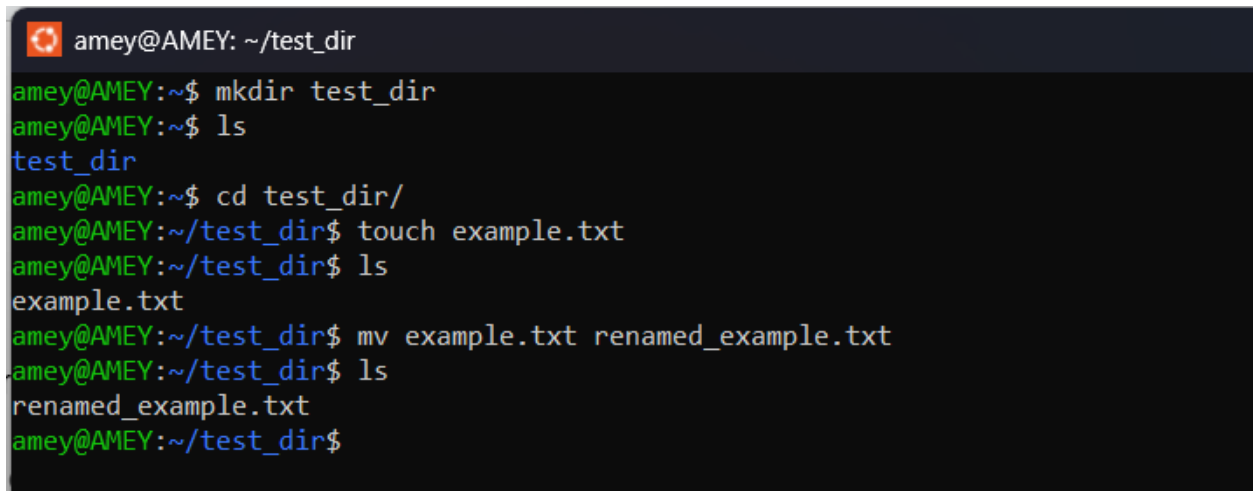


1. Creating and Renaming Files/Directories

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 prompt is 'amey@AMEY: ~/test_dir'. The user enters 'mkdir test_dir', then 'ls' showing 'test_dir'. They then enter 'cd test_dir/', then 'touch example.txt', then 'ls' showing 'example.txt'. Finally, they enter 'mv example.txt renamed_example.txt', then 'ls' showing 'renamed_example.txt', and the prompt returns to 'amey@AMEY: ~/test_dir\$'.

```
amey@AMEY: ~/test_dir
amey@AMEY:~$ mkdir test_dir
amey@AMEY:~$ ls
test_dir
amey@AMEY:~$ cd test_dir/
amey@AMEY:~/test_dir$ touch example.txt
amey@AMEY:~/test_dir$ ls
example.txt
amey@AMEY:~/test_dir$ mv example.txt renamed_example.txt
amey@AMEY:~/test_dir$ ls
renamed_example.txt
amey@AMEY:~/test_dir$
```

2. Viewing File Contents

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

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

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

```

Select amey@AMEY: ~/test_dir
amey@AMEY:~/test_dir$ 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
amey:x:1000:1000:,,./home/amey:/bin/bash
amey@AMEY:~/test_dir$ 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
amey@AMEY:~/test_dir$ 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
amey:x:1000:1000:,,./home/amey:/bin/bash
amey@AMEY:~/test_dir$

```

3.Searching for Patterns

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

```
amey@AMEY: ~/test_dir
amey@AMEY:~/test_dir$ grep "root" /etc/passwd
root:x:0:0:root:/root:/bin/bash
amey@AMEY:~/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.

```
amey@AMEY: ~
amey@AMEY:~$ zip -r test_dir.zip test_dir/
  adding: test_dir/ (stored 0%)
  adding: test_dir/renamed_example.txt (stored 0%)
amey@AMEY:~$ ls
test_dir  test_dir.zip
```

```
amey@AMEY: ~/unzipped_dir
amey@AMEY:~$ unzip test_dir.zip -d unzipped_dir
Archive:  test_dir.zip
   creating: unzipped_dir/test_dir/
  extracting: unzipped_dir/test_dir/renamed_example.txt
amey@AMEY:~$ ls
test_dir  test_dir.zip  unzipped_dir
amey@AMEY:~$ cd unzipped_dir/
amey@AMEY:~/unzipped_dir$ ls
test_dir
amey@AMEY:~/unzipped_dir$
```

5. Downloading Files

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

```
amey@AMEY: ~  
amey@AMEY:~$ wget https://raw.githubusercontent.com/dwyl/english-words/master/words.txt  
--2025-07-19 10:42:05-- https://raw.githubusercontent.com/dwyl/english-words/master/words.txt  
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.111.133, 185.199.109.133, 185.199.110.133, ..  
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.111.133|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 4862985 (4.6M) [text/plain]  
Saving to: 'words.txt'  
  
words.txt 100%[=====>] 4.64M 3.07MB/s in 1.5s  
  
2025-07-19 10:42:07 (3.07 MB/s) - 'words.txt' saved [4862985/4862985]  
  
amey@AMEY:~$ ls  
test_dir test_dir.zip unzipped_dir words.txt  
amey@AMEY:~$
```

6. Changing Permissions

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

```
amey@AMEY: ~  
amey@AMEY:~$ touch secure.txt  
amey@AMEY:~$ ls  
secure.txt test_dir test_dir.zip unzipped_dir words.txt  
amey@AMEY:~$ chmod a+r secure.txt  
amey@AMEY:~$ ls -l secure.txt  
-rw-r--r-- 1 amey amey 0 Jul 19 10:42 secure.txt  
amey@AMEY:~$
```

7. Working with Environment Variables

Use `export` to set a new environment variable called `MY_VAR` with the value "Hello, Linux!".

```
amey@AMEY: ~  
amey@AMEY:~$ export MY_VAR="Hello, Linux!"  
amey@AMEY:~$ echo "$MY_VAR"  
Hello, Linux!  
amey@AMEY:~$
```

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