Task 7.2: Hackers

Basic Linux Commands Practice

1. cd

- Usage: The cd command is used to change the current directory.
- Example: cd Downloads changes the directory to /home/ess/Downloads.

```
ess@Esraa:~$ cd Downloads
ess@Esraa:~/Downloads$
```

2. cd ..

- Usage: The cd .. command moves the user up one level in the directory structure.
- Example: If you're in /home/ess/Downloads, running cd .. will take you to /home/ess.

```
ess@Esraa:~/Downloads$ cd ..
ess@Esraa:~$
```

3. ls

- Usage: The ls command lists the contents of a directory.
- Example: ls displays the files and directories in the current directory.

```
ess@Esraa:~$ ls
clion_projects   Desktop   Documents   Downloads   IdeaSnapshots   kubectl   Music   Pictures   projects
Public   snap   Templates   Tools   'Untitled Document 1'   Videos
```

4. ls -l

- Usage: The ls -l command lists the contents of a directory in long format, showing detailed information such as file permissions, owner, size, and modification date.
- Example: ls -l displays a detailed list of files and directories in the current directory.

```
ess@Esraa:~$ ls -l
total 50308
drwxrwxr-x 4 ess ess      4096 23:40 16 يول   clion_projects
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Desktop
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Documents
drwxr-xr-x 3 ess ess      4096 18:10 10 أغ   Downloads
drwxrwxr-x 2 ess ess      4096 21:36 19 مي   IdeaSnapshots
-rw-rw-r-- 1 ess ess 51454104 00:42 21 مي   kubectl
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Music
drwxr-xr-x 3 ess ess      4096 02:21 12 مي   Pictures
drwxrwxr-x 3 ess ess      4096 00:11 17 يول   projects
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Public
drwx------ 5 ess ess      4096 21:38 12 مي   snap
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Templates
drwxrwxr-x 3 ess ess      4096 01:38 12 مي   Tools
-rw-rw-r-- 1 ess ess        72 19:41 24 يون  'Untitled Document 1'
drwxr-xr-x 2 ess ess      4096 02:41 12 مي   Videos
```
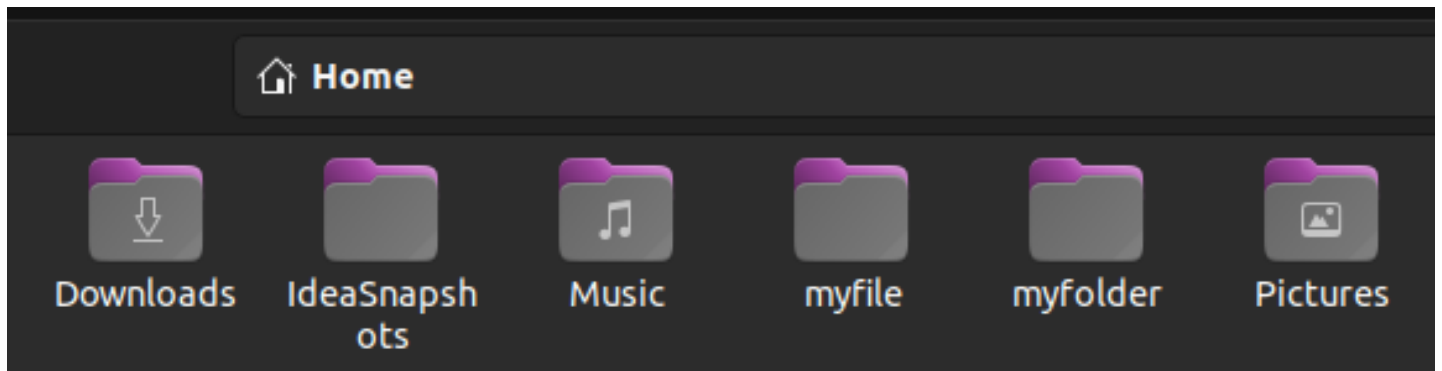
5. ls -a

- Usage: The ls -a command lists all contents of a directory, including hidden files (those starting with a dot .).
- Example: ls -a shows all files, including hidden ones, in the current directory.

```
ess@Esraa:~$ ls -a
.             .bash_logout   clion_projects   Documents    .gitconfig   IdeaSnapshots   .jmc      .local      Music
  Pictures    projects    .ssh                      Templates            Videos
..            .bashrc        .config          Downloads    .gnome       .java           .kube     .m2         .nuget
  .pki        Public     .sudo_as_admin_successful   Tools
.bash_history   .cache         Desktop          .emacs.d     .gnupg       .jdks                     kubectl   .minikube   .password-store
  .profile    snap       .swt                      'Untitled Document 1'
```

6. mkdir

- Usage: The mkdir command creates a new directory.
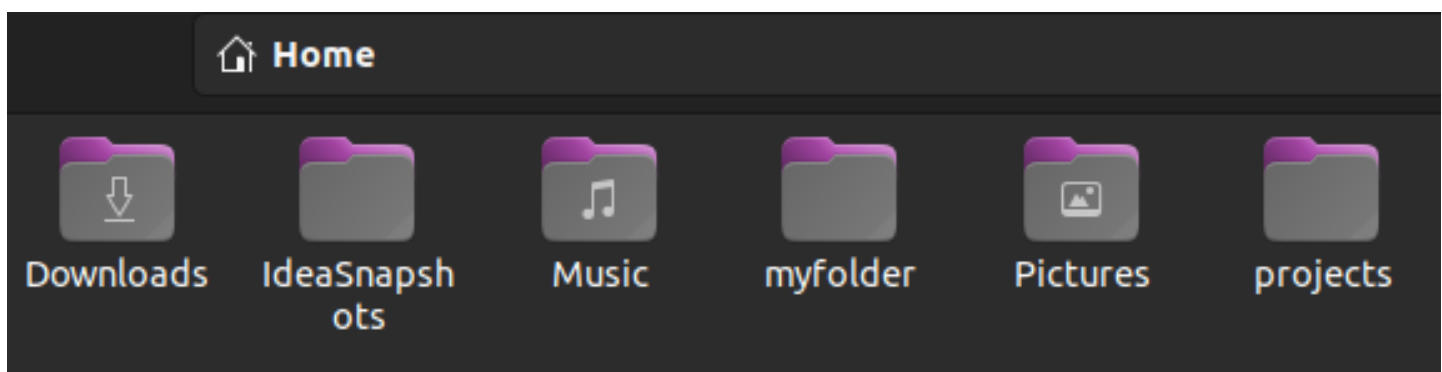- Example: mkdir newfile creates a directory named newfilein the current location.

```
ess@Esraa:~$ mkdir myfile
ess@Esraa:~$
```


7. rm -r

- Usage: The rm -r command recursively removes a directory and all its contents.
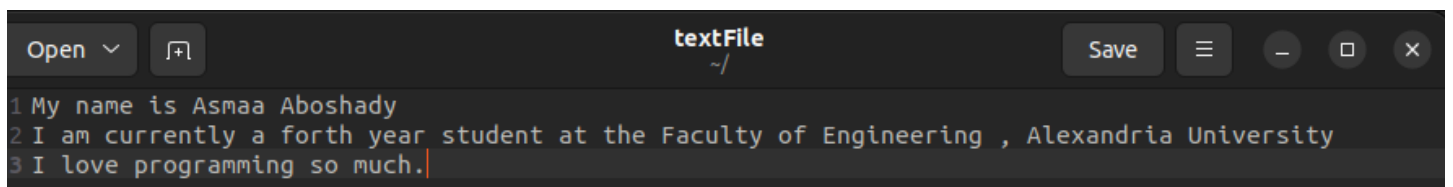- Example: rm -r myfile deletes the directory myfile and everything inside it.

```
ess@Esraa:~$ rm -r myfile
ess@Esraa:~$
```

8. cat

- Usage: The cat command is used to concatenate and display the contents of files.
- Example: cat textfile displays the contents of textfile in the terminal.
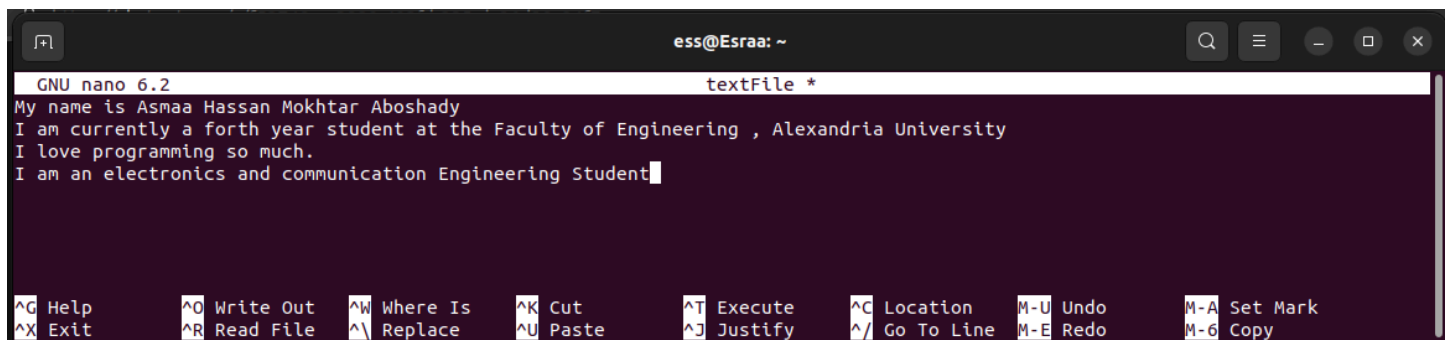
```
ess@Esraa:~$ cat textFile
My name is Asmaa Aboshady
I am currently a forth year student at the Faculty of Engineering , Alexandria University
I love programming so much.
ess@Esraa:~$
```
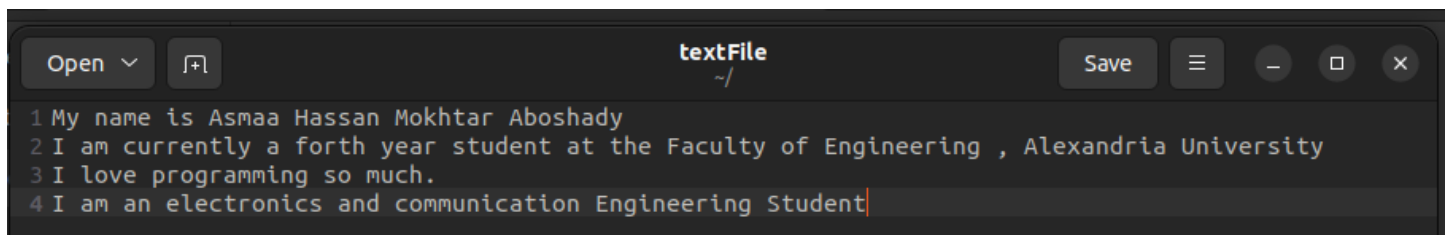
```
Open ∨    ⊞                        textFile                        Save   ≡   —  ☐  ✕
                                     ~/
1 My name is Asmaa Aboshady
2 I am currently a forth year student at the Faculty of Engineering , Alexandria University
3 I love programming so much.
```

9. nano

- Usage: The nano command opens a simple text editor in the terminal, allowing you to create or edit files.
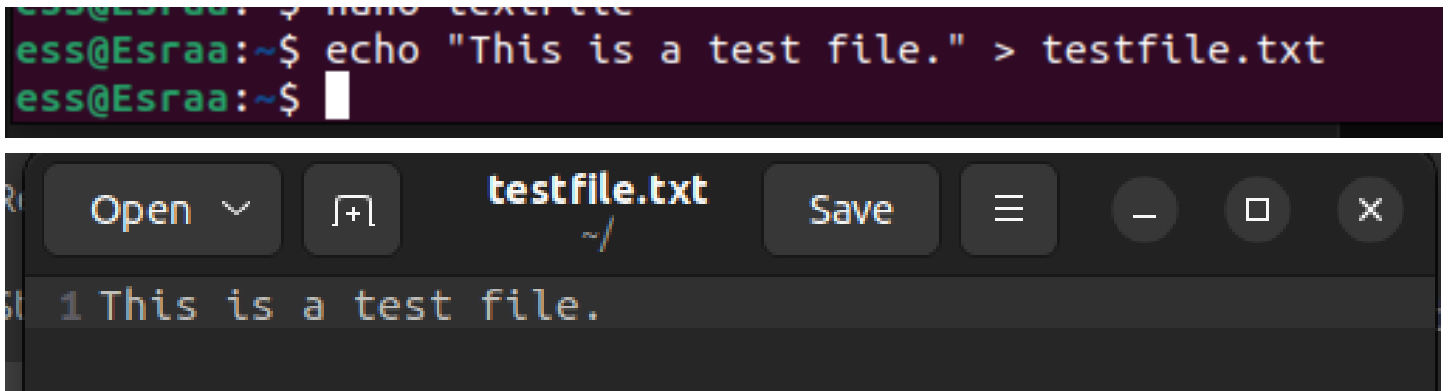- Example: nano textfileopens textfile in the Nano text editor.

```
⊞                              ess@Esraa: ~                          Q  ≡   —  ☐  ✕
  GNU nano 6.2                        textFile *
My name is Asmaa Hassan Mokhtar Aboshady
I am currently a forth year student at the Faculty of Engineering , Alexandria University
I love programming so much.
I am an electronics and communication Engineering Student


^G Help      ^O Write Out   ^W Where Is   ^K Cut       ^T Execute    ^C Location   M-U Undo   M-A Set Mark
^X Exit      ^R Read File   ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line M-E Redo   M-6 Copy
```

```
Open ∨    ⊞                        textFile                        Save   ≡   —  ☐  ✕
                                     ~/
1 My name is Asmaa Hassan Mokhtar Aboshady
2 I am currently a forth year student at the Faculty of Engineering , Alexandria University
3 I love programming so much.
4 I am an electronics and communication Engineering Student
```
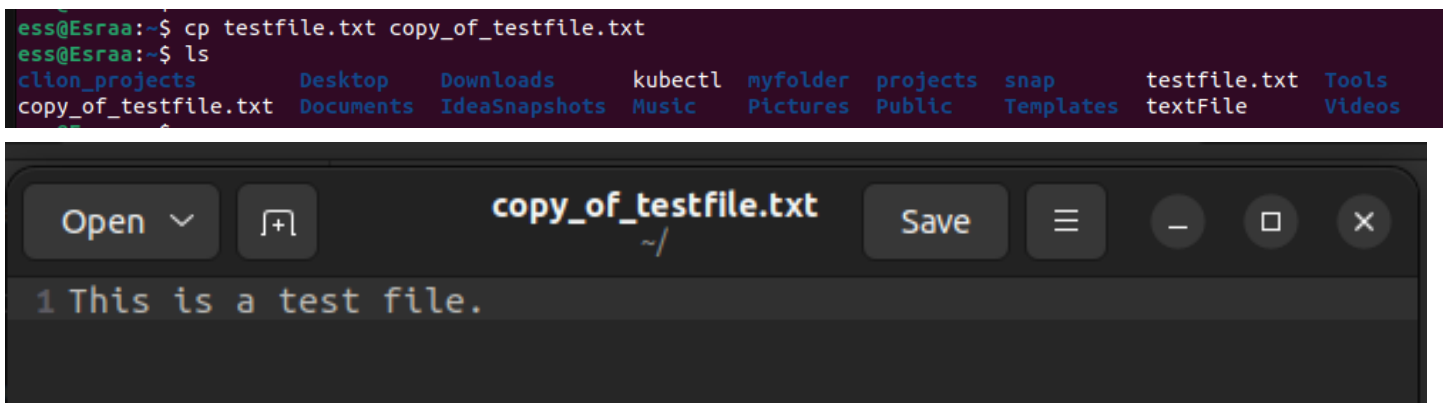
10. echo

- Usage: The echo command outputs the given string to the terminal or writes it to a file.
- Example: echo "Hello, World!" prints "Hello, World!" to the terminal. echo "This is a test file" > testfile.txt writes "This is a test file" to a file named testfile.txt.

11. cp

- Usage: The cp command o copy the file to a new location or with a new name..
- Example: cp testfile.txt copy_of_testfile.txt This command creates a copy of testfile.txt and names it copy_of_testfile.txt in the same directory.

12. pwd

- Usage: The pwd command prints the current working directory, showing the full path to the directory you are currently in.
- Example: pwd might display something like /home/user/Documents, indicating your current location in the filesystem.

```
ess@Esraa:~$ pwd
/home/ess
```