

## Assignment 1 :- Performed on Azure By Lavin Choudhary.

Q1:- Create a file, assign permissions (read, write, execute) to different user categories (owner, group, others), and practice changing permissions using chmod.

```
root@M1:~# touch demo.txt
root@M1:~# ls -l demo.txt
-rw-r--r-- 1 root root 0 Jun 12 10:01 demo.txt
root@M1:~# chmod u+x demo.txt
root@M1:~# ls -l demo.txt
-rwxr--r-- 1 root root 0 Jun 12 10:01 demo.txt
root@M1:~# chmod go-w demo.txt
root@M1:~# chmod g+x testing
root@M1:~# ls -l demo.txt
-rwxr--r-- 1 root root 0 Jun 12 10:01 demo.txt
root@M1:~#
```

Q2 :- Execute basic Linux commands (e.g., ls, cd, mkdir, rm, touch) to manipulate files and directories, with an emphasis on understanding their usage.

```
root@M1:~# mkdir demodir
root@M1:~# cd demodir
root@M1:~/demodir# ls -l
total 0
root@M1:~/demodir# touch demo
root@M1:~/demodir# ls
demo
root@M1:~/demodir# rm demo
root@M1:~/demodir# ls
root@M1:~/demodir# ls -l
total 0
root@M1:~/demodir# touch first.txt
root@M1:~/demodir# cat first.txt
root@M1:~/demodir#
```

Q3 :- Using the terminal, practice navigating through directories, listing file contents, and moving files to different locations.

```
root@M1:~/demodir# cd ~
root@M1:~# ls
demo.txt  demodir  snap  testing
root@M1:~# cd Documents
-bash: cd: Documents: No such file or directory
root@M1:~# cd demodir
root@M1:~/demodir# ls
first.txt
root@M1:~/demodir# mkdir Projects
root@M1:~/demodir# cd Projects
root@M1:~/demodir/Projects# touch project1.txt
root@M1:~/demodir/Projects# ls
project1.txt
root@M1:~/demodir/Projects# cd ..
root@M1:~/demodir# mv Projects/project1.txt ~
root@M1:~/demodir# ls ~
demo.txt  demodir  project1.txt  snap  testing
root@M1:~/demodir# mkdir Pictures
root@M1:~/demodir# cd Pictures
root@M1:~/demodir/Pictures# ls
root@M1:~/demodir/Pictures# cd ~
root@M1:~# mv project1.txt Pictures/
mv: cannot move 'project1.txt' to 'Pictures/': Not a directory
root@M1:~# mv project1.txt Pictures
```

Q4 :- Create a new user and group, set their permissions, and explore user management commands like useradd, usermod, and userdel.

```
root@M1:~# sudo groupadd developers
root@M1:~# sudo useradd -m -G developers john
root@M1:~# sudo passwd
New password:
Retype new password:
passwd: password updated successfully
root@M1:~# groupadd admins
root@M1:~# sudo usermod -aG admins john
root@M1:~# sudo userdel john
root@M1:~# sudo usermod -g admins john
usermod: user 'john' does not exist
```

Q5:- Practices more linux commands.

We can practice many command like grep, find , chown , tail etc.