File Permission Task

Create a file with .txt extension (/home/demo.txt). Change the permission set of that file, so that any user can read it, group can read/write & owner can read/write/execute it.

This task is divided into 2 subdivided tasks:

1. Creating a file with .txt extension
   - Created "demo.txt" using "echo" command with absolute output path direction as root user

```
echo "This is a sample file for file permission task" >  /home/demo.txt
```

2. Changing the file permission set of the file, so that any user can read it, group can read/write and owner can read/write/execute it using "chmod" command
   - Changing permissions based on the provided conditions.

   Owner (rwx) = 7
   Group (rw-) = 6
   Others (r--) = 4

```
chmod 764 demo.txt
```

Screenshots :

1. Creating a file with .txt extension (/home/demo.txt)

   Explanation:

   The file with .txt extension is expected to be created in "/home/demo.txt."

   The default profile is "breniesekar" with default location as "/home/breniesekar".

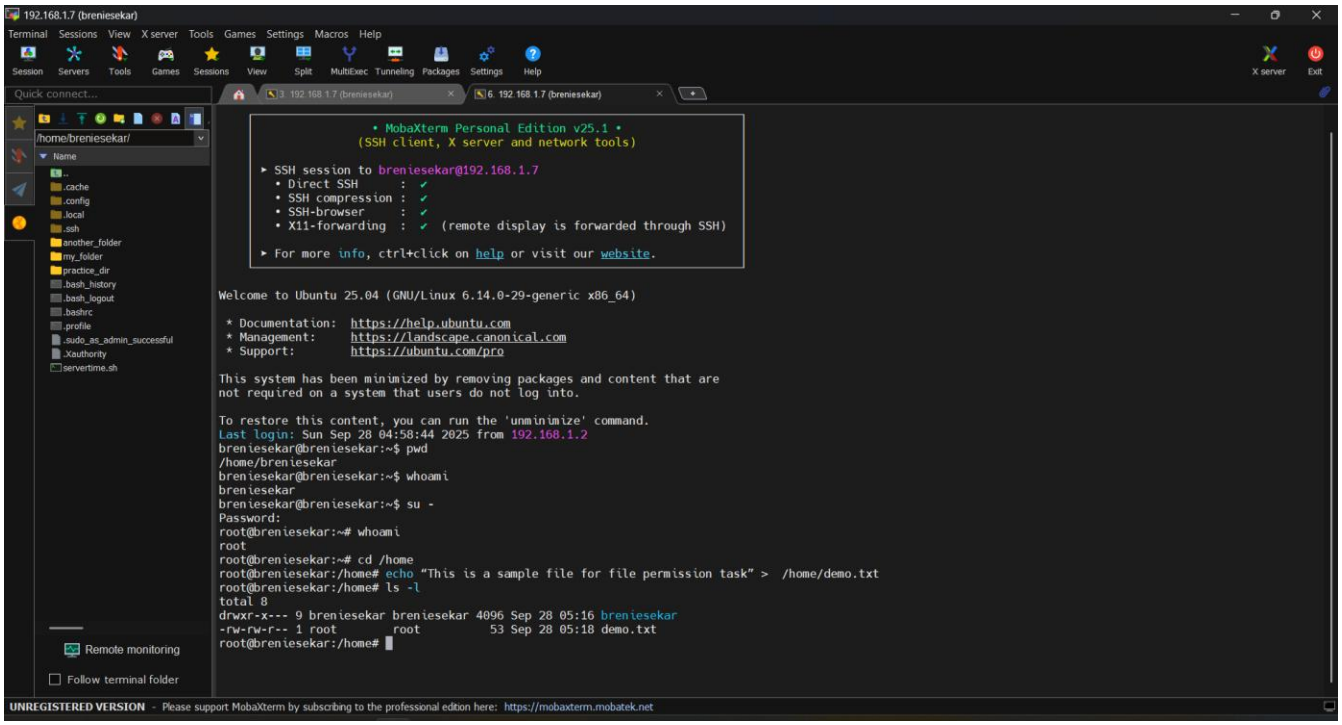
   To create a .txt file at "/home directory", the role should be changed to the "root" user.

   Then the file "demo.txt" was created using the "echo" command with the specified path.

   Finally, the file creation and its permissions were verified using "ls -l".

Commands used:

Command	Output	Inference
pwd	/home/breniesekar	Printed the current working directory
whoami	breniesekar	Showed the current user
su -		Changing to root user
whoami	root	Showed that the current user is the root user
cd /home		Navigating to the home directory
echo “This is a sample file for file permission task” > /home/demo.txt		Created a sample file “demo.txt” in /home directory
ls -l	-rw-rw-r-- 1 root root 53 Sep 28 05:18 demo.txt	Checked the file permissions



-rw-rw-r-- 1 root root 53 Sep 28 05:18 demo.txt

- ✓ The display shows that demo.txt is a regular file (-).
- ✓ Owner has permissions for **read and write** (rw-, no execute).
- ✓ Group has permissions for **read and write** (rw-, no execute).
- ✓ Others have permission for **read only** (r--).

2. Changing the file permission set of the file, so that any user can read it, group can read/write and owner can read/write/execute it using “chmod command

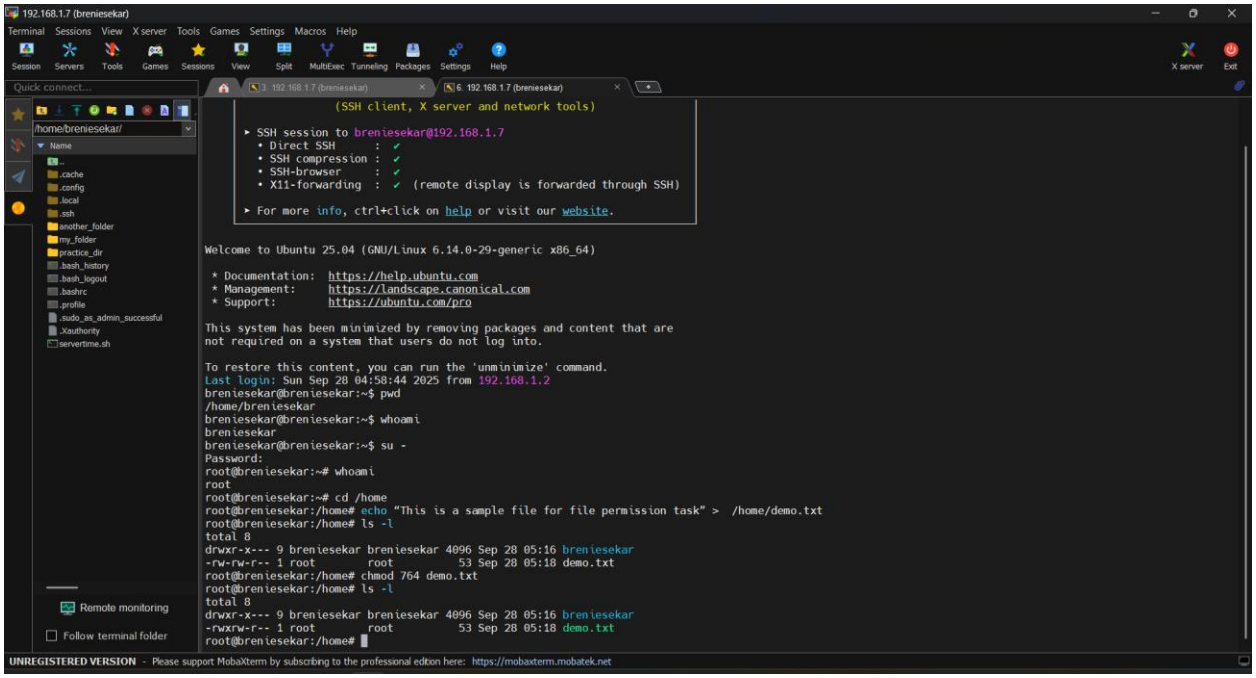
Explanation:

Changing permissions based on the provided conditions.

Owner (rwx) = 7; Group (rw-) = 6; Others (r--) = 4

Commands used:

Commands	Output	Inference
ls -l	-rw-rw-r-- 1 root root 53 Sep 28 05:18 demo.txt	Checked the file permissions
chmod 764 demo.txt		
ls -l	-rwxrw-r-- 1 root root 53 Sep 28 05:18 demo.txt	Checked the file permissions



-rwxrw-r-- 1 root root 53 Sep 28 05:18 demo.txt

- ✓ The display shows that demo.txt is a regular file (-).
- ✓ Owner has permissions for **read, write, and execute** (rwx).
- ✓ Group has permissions for **read and write** (rw-, no execute).
- ✓ Others have permission for **read only** (r--).

Alternate method :

Since the group and others already have the necessary access, it is enough to provide execute access to the owner.

Alternate command : chmod u+x demo.txt

Commands	Expected Output	Inference
chmod u+x demo.txt	-rwxrw-r-- 1 root root 53 Sep 28 05:18 demo.txt	Adding execute permission only to the user

```
root@breniesekar:/home# ls -l
total 8
drwxr-x--- 9 breniesekar breniesekar 4096 Sep 28 05:16 breniesekar
-rw-rw-r-- 1 root        root          53 Sep 28 05:18 demo.txt
root@breniesekar:/home# chmod u+x demo.txt
root@breniesekar:/home# ls -l
total 8
drwxr-x--- 9 breniesekar breniesekar 4096 Sep 28 05:16 breniesekar
-rwxrw-r-- 1 root        root          53 Sep 28 05:18 demo.txt
```

Task Summary

Created a .txt file named “demo.txt” at “/home/demo.txt” by switching to the “root” user. Used the echo command to add content to the file and verified its creation and permissions using “ls -l”. Changed its permissions to 764 so that the owner has read, write, and execute rights; the group has read and write rights; and others have read-only access using “chmod” command. Verified the permissions again using “ls -l”.

```
To restore this content, you can run the 'unminimize' command.
Last login: Sun Sep 28 04:58:44 2025 from 192.168.1.2
breniesekar@breniesekar:~$ pwd
/home/breniesekar
breniesekar@breniesekar:~$ whoami
breniesekar
breniesekar@breniesekar:~$ su -
Password:
root@breniesekar:~# whoami
root
root@breniesekar:~# cd /home
root@breniesekar:/home# echo “This is a sample file for file permission task” >  /home/demo.txt
root@breniesekar:/home# ls -l
total 8
drwxr-x--- 9 breniesekar breniesekar 4096 Sep 28 05:16 breniesekar
-rw-rw-r-- 1 root        root          53 Sep 28 05:18 demo.txt
root@breniesekar:/home# chmod 764 demo.txt
root@breniesekar:/home# ls -l
total 8
drwxr-x--- 9 breniesekar breniesekar 4096 Sep 28 05:16 breniesekar
-rwxrw-r-- 1 root        root          53 Sep 28 05:18 demo.txt
root@breniesekar:/home#
```