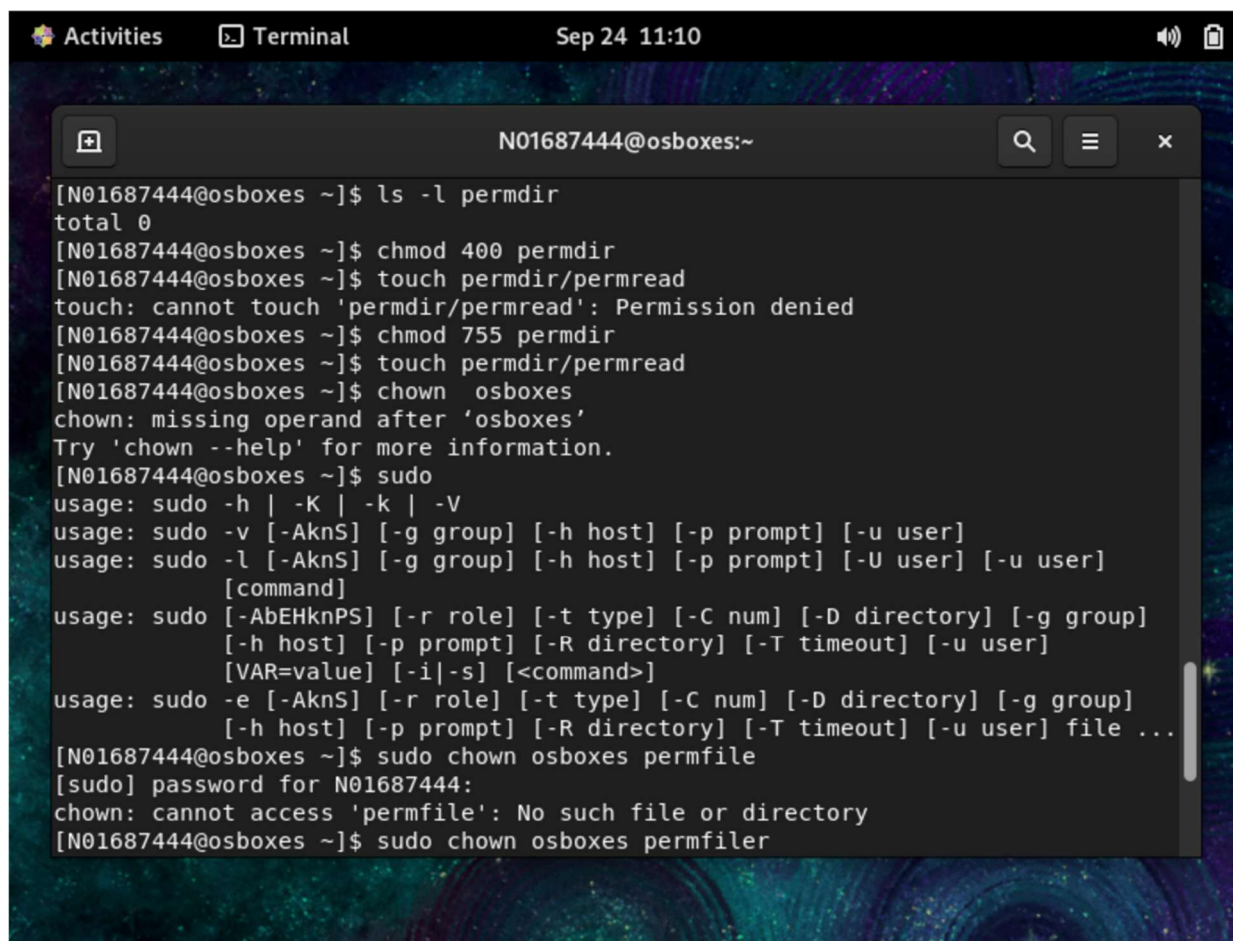


Exercise

Don't forget to paste the output including the command used. Write in your own words.

Please note that some commands will not run. Paste the error message and explain why.

1. Create a directory 'permdir' and create a file 'permfile' inside the permdir. Check the permission of permdir and permfile one by one and past here. Note these permissions are default permissions.
2. Open the permfile using nano and write the following text.
"There are three basic permissions. Read (r), Write (w) and Execute (x)."
Save the file.
3. Change the permission of file that user and group have only read permission.
[paste here]
4. Edit the permfile and add a new line (if possible) "I can write". Discuss your experience, what happened and why.

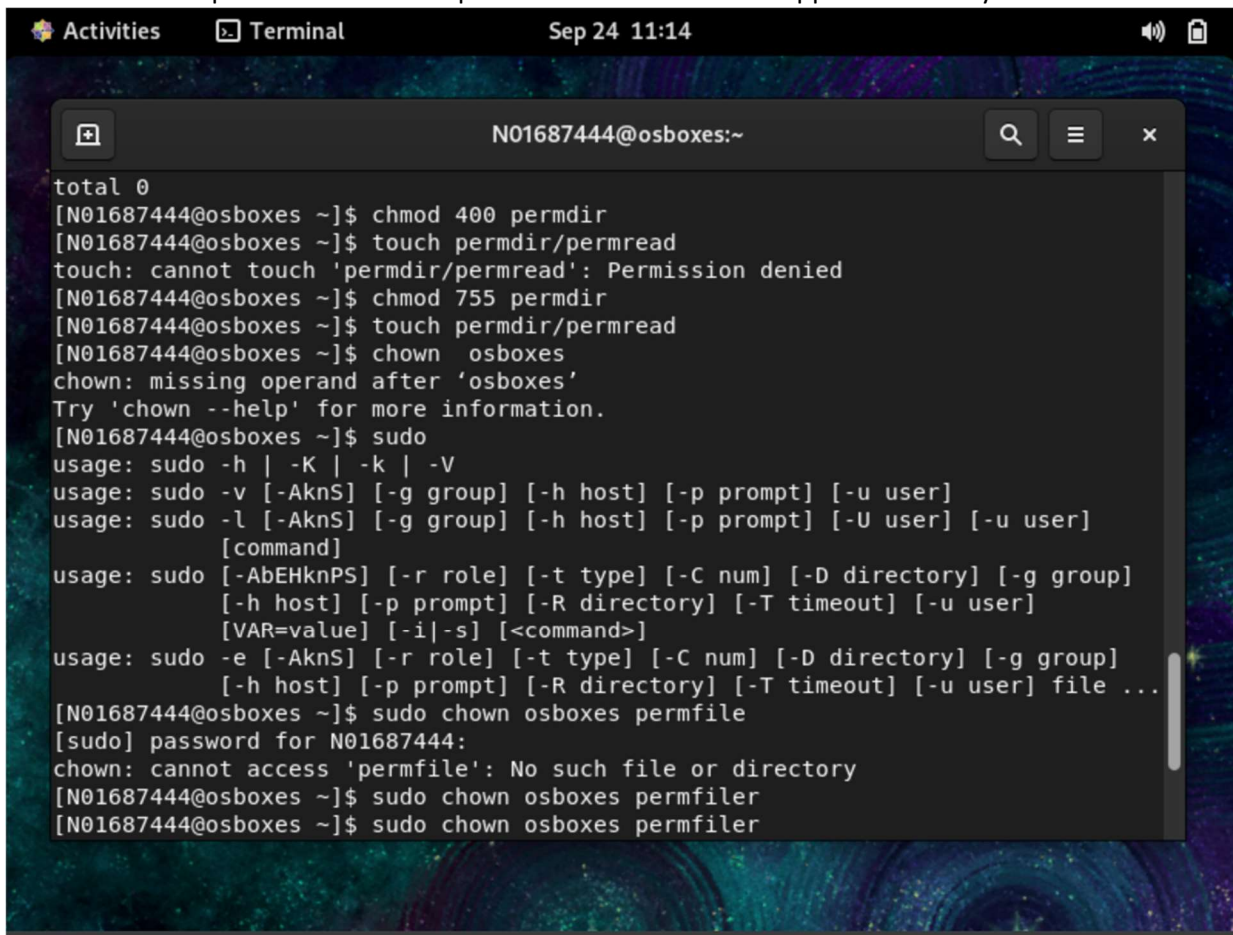


```
N01687444@osboxes:~  
[N01687444@osboxes ~]$ ls -l permdir  
total 0  
[N01687444@osboxes ~]$ chmod 400 permdir  
[N01687444@osboxes ~]$ touch permdir/permread  
touch: cannot touch 'permdir/permread': Permission denied  
[N01687444@osboxes ~]$ chmod 755 permdir  
[N01687444@osboxes ~]$ touch permdir/permread  
[N01687444@osboxes ~]$ chown osboxes  
chown: missing operand after 'osboxes'  
Try 'chown --help' for more information.  
[N01687444@osboxes ~]$ sudo  
usage: sudo -h | -K | -k | -V  
usage: sudo -v [-AknS] [-g group] [-h host] [-p prompt] [-u user]  
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]  
[command]  
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-D directory] [-g group]  
[-h host] [-p prompt] [-R directory] [-T timeout] [-u user]  
[VAR=value] [-i|-s] [<command>]  
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-D directory] [-g group]  
[-h host] [-p prompt] [-R directory] [-T timeout] [-u user] file ...  
[N01687444@osboxes ~]$ sudo chown osboxes permfile  
[sudo] password for N01687444:  
chown: cannot access 'permfile': No such file or directory  
[N01687444@osboxes ~]$ sudo chown osboxes permfiler
```

In number 3 we have changed the permission and removed the write permission so when we enter the code it shows permission denied. for that we need to assign it write permission and after that we can write in it.

5. Rename the permfile and give a new name permfiler.
6. Change the permission of file so that user and group can edit, while other can only read.
Write both commands (with number and letters).

7. Change the permission of folder 'permdir' that only user have read permission.
8. Create a new file permread inside the permdir and discuss what happened and why.



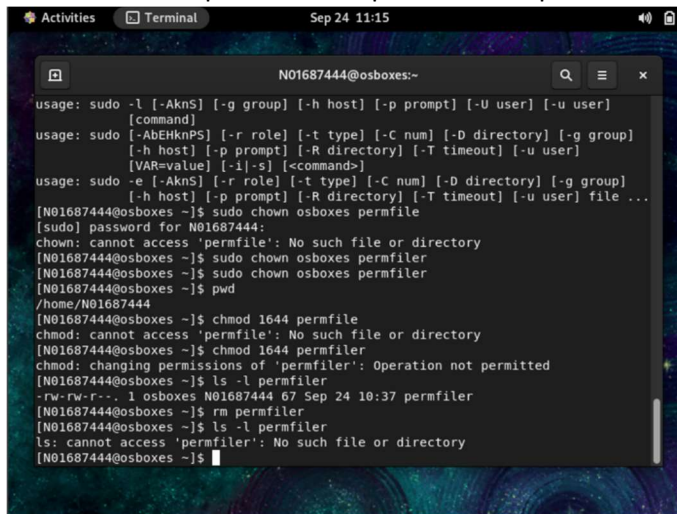
A terminal window titled 'Terminal' with the date 'Sep 24 11:14' in the top right corner. The window shows a series of commands and their outputs. The user 'N01687444' is at the 'osboxes' machine. The commands and outputs are as follows:

```
total 0
[N01687444@osboxes ~]$ chmod 400 permdir
[N01687444@osboxes ~]$ touch permdir/permread
touch: cannot touch 'permdir/permread': Permission denied
[N01687444@osboxes ~]$ chmod 755 permdir
[N01687444@osboxes ~]$ touch permdir/permread
[N01687444@osboxes ~]$ chown osboxes
chown: missing operand after 'osboxes'
Try 'chown --help' for more information.
[N01687444@osboxes ~]$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-AknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]
           [command]
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-D directory] [-g group]
           [-h host] [-p prompt] [-R directory] [-T timeout] [-u user]
           [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-D directory] [-g group]
           [-h host] [-p prompt] [-R directory] [-T timeout] [-u user] file ...
[N01687444@osboxes ~]$ sudo chown osboxes permfile
[sudo] password for N01687444:
chown: cannot access 'permfile': No such file or directory
[N01687444@osboxes ~]$ sudo chown osboxes permfiler
[N01687444@osboxes ~]$ sudo chown osboxes permfiler
```

It shows that permission is denied because it has only read permission.

9. Change the permission of folder 'permdir' to default permissions.
10. Repeat 8.
11. You have a classuser in virtualbox. Change the owner of file permfile to classuer.
12. Use the command *chmod 1644 permfile*

13. Show and explain the new permission of permfile.



```
N01687444@osboxes:~  
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]  
[command]  
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-D directory] [-g group]  
[-h host] [-p prompt] [-R directory] [-T timeout] [-u user]  
[VAR=value] [-i|-s] [<command>]  
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-D directory] [-g group]  
[-h host] [-p prompt] [-R directory] [-T timeout] [-u user] file ...  
[N01687444@osboxes ~]$ sudo chown osboxes permfile  
[sudo] password for N01687444:  
chown: cannot access 'permfile': No such file or directory  
[N01687444@osboxes ~]$ sudo chown osboxes permfiler  
[N01687444@osboxes ~]$ sudo chown osboxes permfiler  
[N01687444@osboxes ~]$ pwd  
/home/N01687444  
[N01687444@osboxes ~]$ chmod 1644 permfile  
chmod: cannot access 'permfile': No such file or directory  
[N01687444@osboxes ~]$ chmod 1644 permfiler  
chmod: changing permissions of 'permfiler': Operation not permitted  
[N01687444@osboxes ~]$ ls -l permfiler  
-rw-rw-r--. 1 osboxes N01687444 67 Sep 24 10:37 permfiler  
[N01687444@osboxes ~]$ rm permfiler  
[N01687444@osboxes ~]$ ls -l permfiler  
ls: cannot access 'permfiler': No such file or directory  
[N01687444@osboxes ~]$
```

The new permission is set for the new owner i.e osboxes and it's only to read and write.

14. Try to delete the permfile. What happened and why!