

Task2

- 1) On your pi and using groupadd, create a group cst8254.

Which command did you use?

```
sudo groupadd cst8254
```

- 2) Check the users are created in the passwd file.

Where is the file located?

```
iawd1:x:1001:1001::/home/iawd1:/bin/bash
iawd2:x:1002:1002::/home/iawd2:/bin/bash
iawd3:x:1003:1003::/home/iawd3:/bin/bash
mizonj:x:1004:1004::/home/mizonj:/bin/bash
```

- 3) Check the groups are created in the group file.

Where is the file located?

Yes, group is created and can be located by

```
cat /etc/group
```

- 4) To change the File owner and Group owner of file1-1.txt, type in chown mizonj:group1 file1-1.txt (the File owner will be mizonj and the Group owner will be group1)

What are the commands you used for iawd3

```
sudo chown iawd3:group1 file1-1.txt
```

- 5) Using sudo create the following folders: home/iawd1, home/iawd2,home/iawd3,home/mizonj

What are the default permissions, owner and group membership of iawd1?

The default permissions of the folder "home/iawd1" will be -rwxrwxr-x, with the owner as the user who created the folder using the sudo command and the group as the user's default primary group.

- 6) Using sudo have the 4 folders home/iawd1, home/iawd2, home/iawd3, home/mizonj owned by iawd1, iawd2, iawd3 and mizonj respectively.

What command did you use for iawd1?

```
sudo chown iawd1:iawd1 iawd1
```

- 7) Using the table below, adjust the Owner, Group Owner and Permissions of the files you created in Task 1, use the octal values.

What are the commands you used for the file file2-1.txt?

```
sudo chown iawd2:group1 /home/pi/lab3/folder2/file2-1.txt
```

```
sudo chmod 742 /home/pi/lab3/folder2/file2-1.txt
```

- 8) Go to home/pi/lab3

Can you edit /home/pi/lab3/file1-1.txt using nano?

No, the file is uneditable for the user.

- 9) **Can you modify it and save it?**

No, I cant edit it as well because of permission denied.

- 10) **Explain why.**

The user iawd1 cannot edit or modify /home/pi/lab3/file1-1.txt and save it using nano because the file's permissions and ownership do not allow it. According to the permissions listed, the owner of the file is Pi and the group owner is pi. The owner (Pi) has read and write permissions (RW), but iawd1 does not belong to the pi group and does not have write permission (R) for others. This means that iawd1 is not able to edit or modify the file and save changes. This is a security feature in Linux to prevent unauthorized modification of files by users who do not have the necessary permissions.

11) Go to `home/pi/lab3/folder1`

Can you edit `/home/pi/lab3/desktop1/file1-3.txt` using nano?

Explain.

The permissions for this file are set as follows:

```
/home/pi/lab3/folder1/file1-3.txt    iawd3  group3  R      W      RW
```

This means that the owner of the file is iawd3 and the group owner is group3. The owner (iawd3) has read permission (R) and the group (group3) has write permission (W). iawd1 is not the owner of the file and does not belong to the group group3, so they only have read permission (RW). To edit the file, the user needs write permission, which iawd1 does not have in this case.