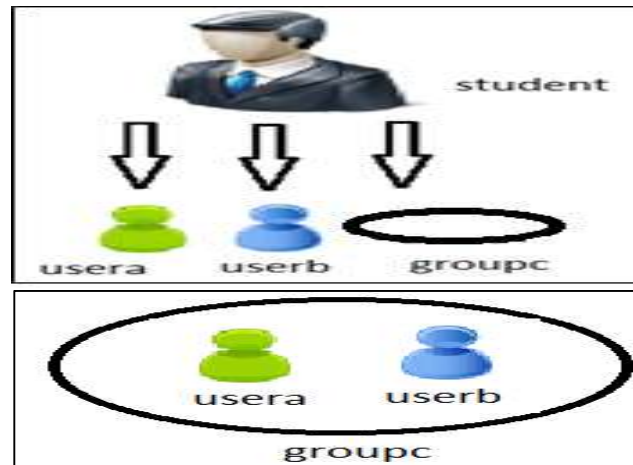


## Open Source OS - LAB 03 – Users, Groups and Permissions Management

**LAB Procedures:** Take screen shots that show all activities below:

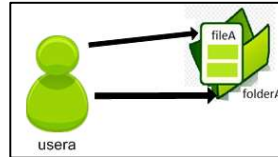
### Task 1

- 1- Login to Linux with the admin user (student)
- 2- Create user using adduser command and name it usera (password = 12345, and Full Name: usera)
- 3- Create user using adduser command and name it userb (password = 12345, and Full Name: userb)
- 4- Create a group using groupadd command and name it groupc
- 5- Add both users to groupC using the commands  
`sudo usermod -a -G groupc usera`  
`sudo usermod -a -G groupc userb`
- 6- Check that users are created and group is set by the command  
`cat /etc/group`
- 7- Logout from student



## Task 2

- 1- Login as usera
- 2- Create a folder folderA using mkdir command
- 3- list contents



- 4- usera is handling folderA (usera is the owner which is allowed by default for rwx)

Permission	command	Screen
Execute	cd folderA	
Write	touch fileA	
Read	ls -l	

Two screenshots showing usera (green icon) interacting with folderA. The first shows usera with a green arrow pointing to folderA. The second shows usera with a pencil icon pointing to fileA inside folderA.

- 5- usera is handling fileA (usera is the owner which is allowed by default for rw\_ only)

Permission	command	Screen
Write	cat > fileA	
Read	cat fileA	
Execute	(not applicable for text files)	

Two screenshots showing usera (green icon) interacting with fileA. The first shows usera with a green arrow pointing to fileA. The second shows usera with a pencil icon pointing to fileA.

- 6- Logout from usera

## Task 3

- 1- Login as userb
- 2- userb is handling folderA (userb is not the owner which is allowed by default for r\_x only)

Permission	command	Screen
Execute	cd /home/usera/folderA	
Write	cp fileA fileA2	
Read	ls -l	

Two screenshots showing userb (blue icon) interacting with folderA. The first shows userb with a green arrow pointing to folderA. The second shows userb with a pencil icon pointing to fileA inside folderA.

- 3- userb is handling fileA (userb is not the owner which is allowed by default for read only)

Permission	command	Screen
Write	cat > fileA	
Read	cat fileA	
Execute	(not applicable for text files)	

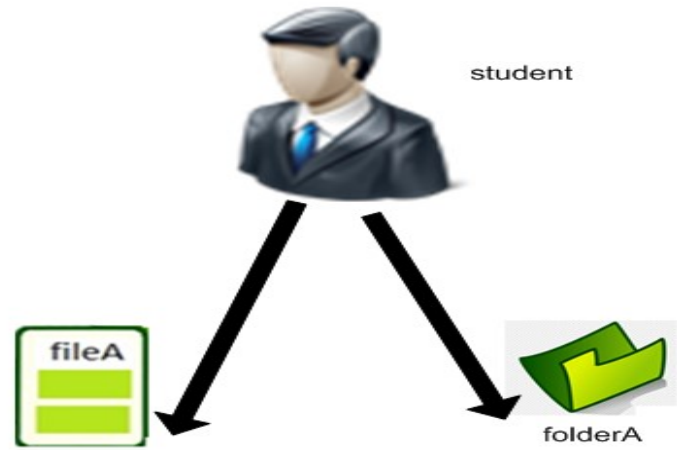
Two screenshots showing userb (blue icon) interacting with fileA. The first shows userb with a green arrow pointing to fileA. The second shows userb with a pencil icon pointing to fileA.

- 4- Logout from userb

## Task 4

- 1- Login as student
- 2- Change the group owner of fileA and folderA to be groupc using chgrp command
- 3- Change permissions as below for both fileA and folderA using chmod command (you need to evaluate the octal number)

owner permissions	group owner permissions	others permissions
rwX	rwX	r--

<pre>cd /home/usera  sudo chgrp groupc folderA  sudo chmod _____ folderA  ls -l sudo chgrp groupc folderA/fileA1  sudo chmod _____ folderA/fileA1</pre>	 <p>student</p> <p>fileA</p> <p>folderA</p> <p>group owner= groupc owner permissions =rwX group owner permissions =rwX other permissions =r--</p> <p>group owner= groupc owner permissions =rwX group owner permissions =rwX other permissions =r--</p>
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- 4- Logout from student

## Task 5

- 1- Login as userb
- 2- userb is handling folderA (userb is not the owner which is allowed by default for r\_x only)

Permission	command	Screen
Execute	cd /home/usera/folderA	
Write	cp fileA fileA2	
Read	ls -l	

- 3- userb is handling fileA (userb is not the owner which is allowed by default for read only)

Permission	command	Screen
Write	cat > fileA	
Read	cat fileA	
Execute	(not applicable for text files)	

- 4- Logout from userb

## Task 6

- 1- Make sure to take all screen shots and then delete both users and group:
- 2- Login as student
  - groupdel groupc
  - userdel -r usera
  - userdel -r userb