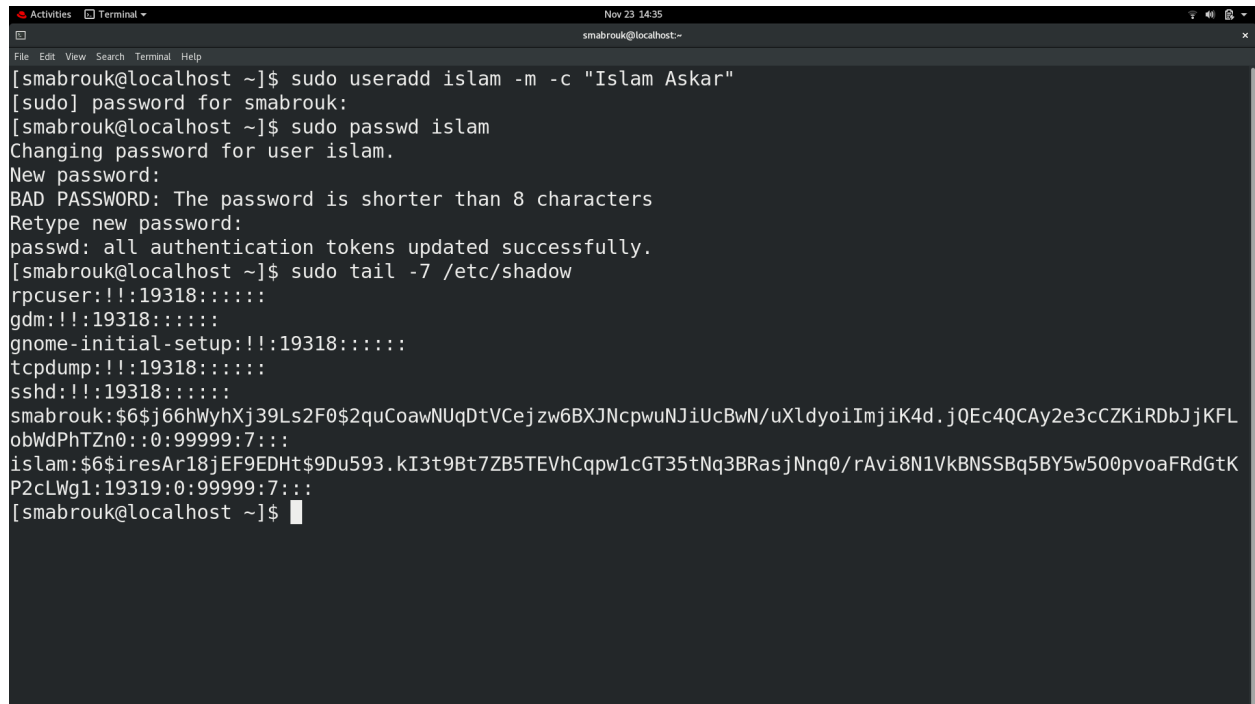# RHSA1 - Lab 2

1. Create a user account with the following attribute
- username: islam
- Fullname/comment: Islam Askar
- Password: islam

```
                                              smabrouk@localhost:~                                      ×
File  Edit  View  Search  Terminal  Help
[smabrouk@localhost ~]$ sudo useradd islam -m -c "Islam Askar"
[sudo] password for smabrouk:
[smabrouk@localhost ~]$ sudo passwd islam
Changing password for user islam.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[smabrouk@localhost ~]$ sudo tail -7 /etc/shadow
rpcuser:!!:19318::::::
gdm:!!:19318::::::
gnome-initial-setup:!!:19318::::::
tcpdump:!!:19318::::::
sshd:!!:19318::::::
smabrouk:$6$j66hWyhXj39Ls2F0$2quCoawNUqDtVCejzw6BXJNcpwuNJiUcBwN/uXldyoiImjiK4d.jQEc4QCAy2e3cCZKiRDbJjKFL
obWdPhTZn0::0:99999:7:::
islam:$6$iresAr18jEF9EDHt$9Du593.kI3t9Bt7ZB5TEVhCqpw1cGT35tNq3BRasjNnq0/rAvi8N1VkBNSSBq5BY5w5O0pvoaFRdGtK
P2cLWg1:19319:0:99999:7:::
[smabrouk@localhost ~]$
```
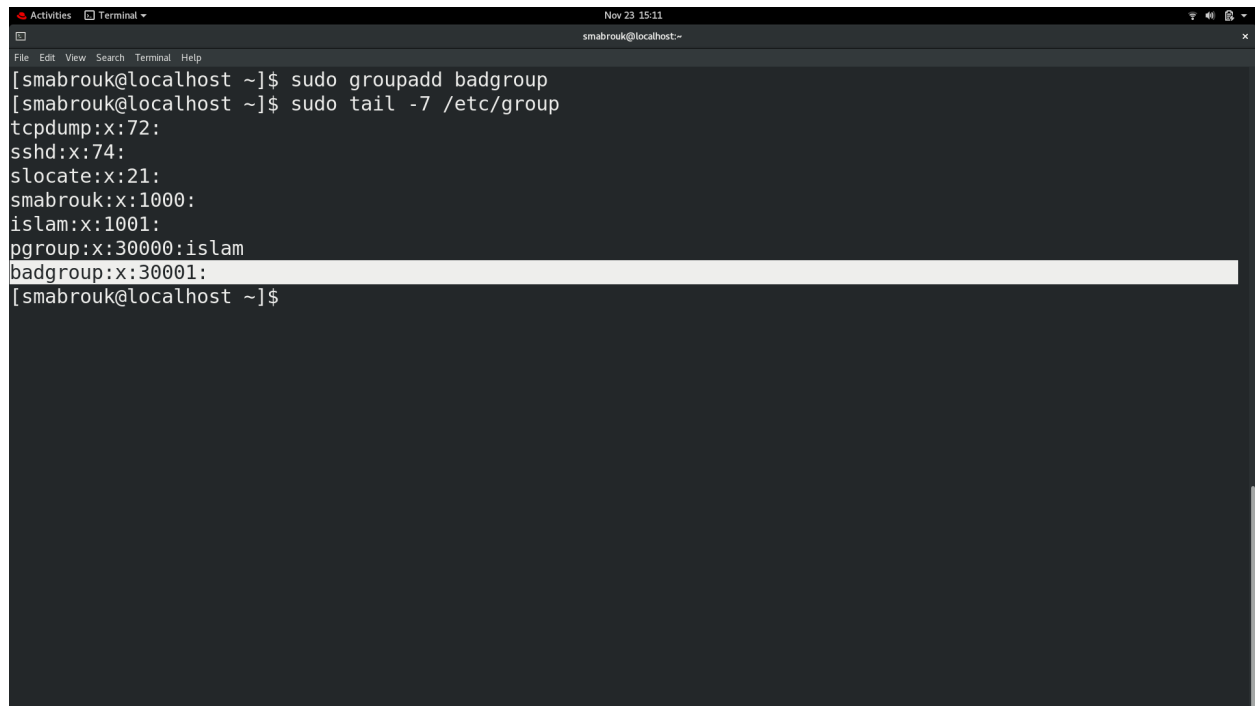
2. Create a user account with the following attribute
- Username: baduser
- Full name/comment: Bad User
- Password: baduser

3. Create a supplementary (Secondary) group called pgroup with group ID of 30000.

4. Create a supplementary group called badgroup
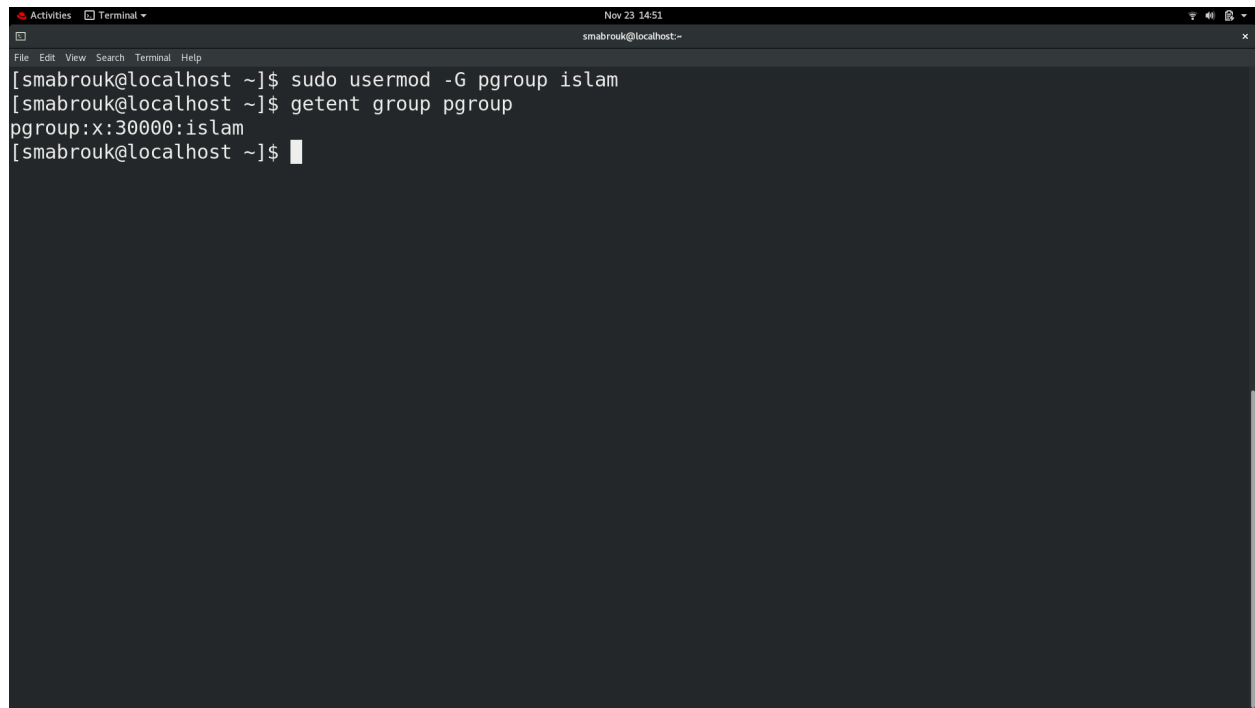
```
[smabrouk@localhost ~]$ sudo groupadd badgroup
[smabrouk@localhost ~]$ sudo tail -7 /etc/group
tcpdump:x:72:
sshd:x:74:
slocate:x:21:
smabrouk:x:1000:
islam:x:1001:
pgroup:x:30000:islam
badgroup:x:30001:
[smabrouk@localhost ~]$
```
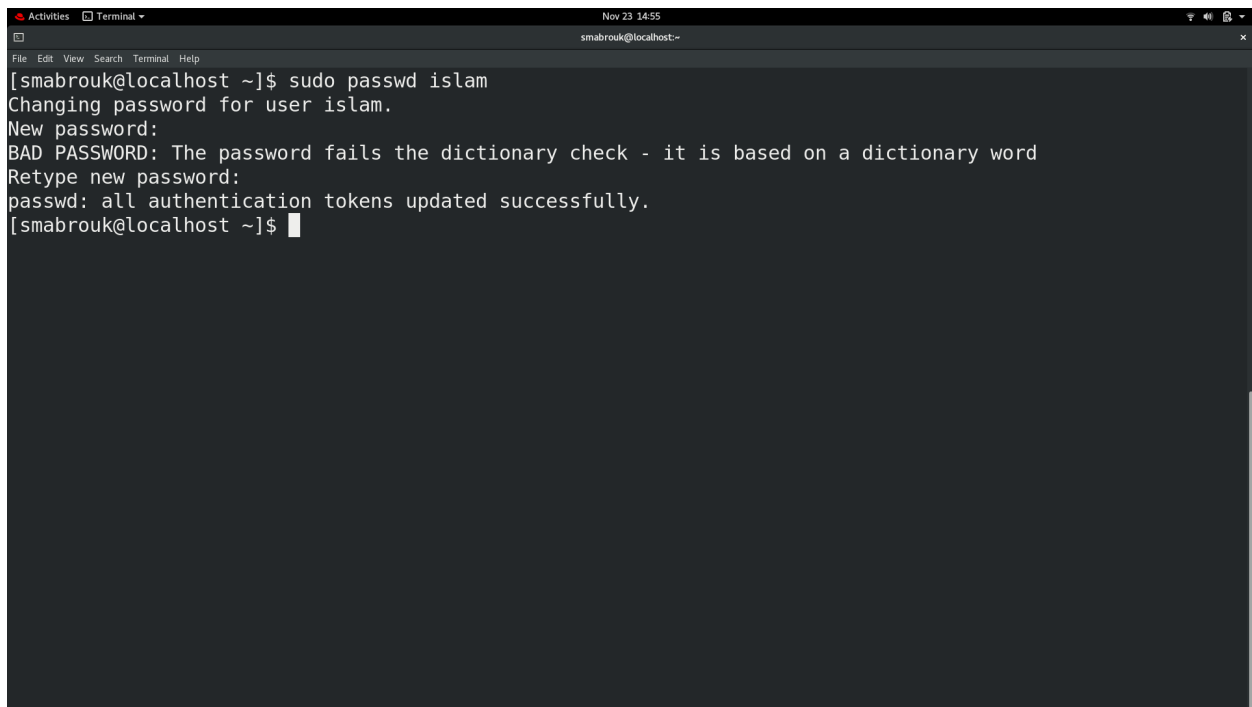
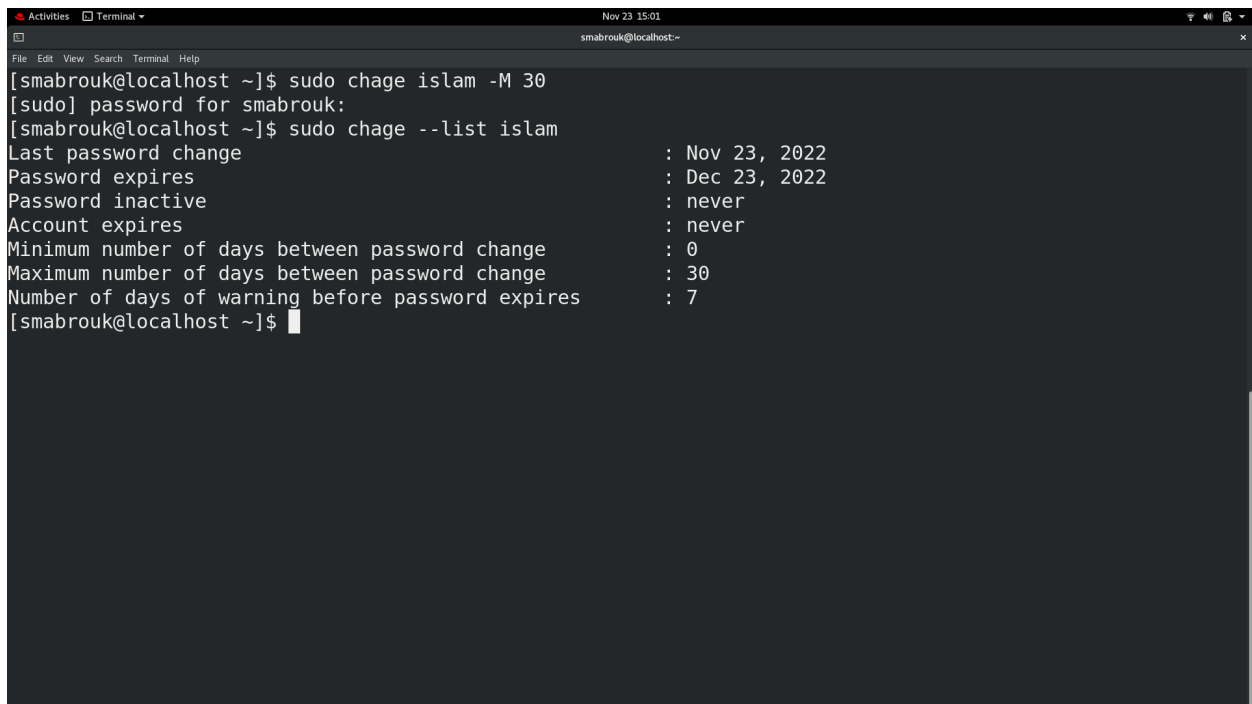5. Add islam user to the pgroup group as a supplementary group

```
[smabrouk@localhost ~]$ sudo usermod -G pgroup islam
[smabrouk@localhost ~]$ getent group pgroup
pgroup:x:30000:islam
[smabrouk@localhost ~]$
```

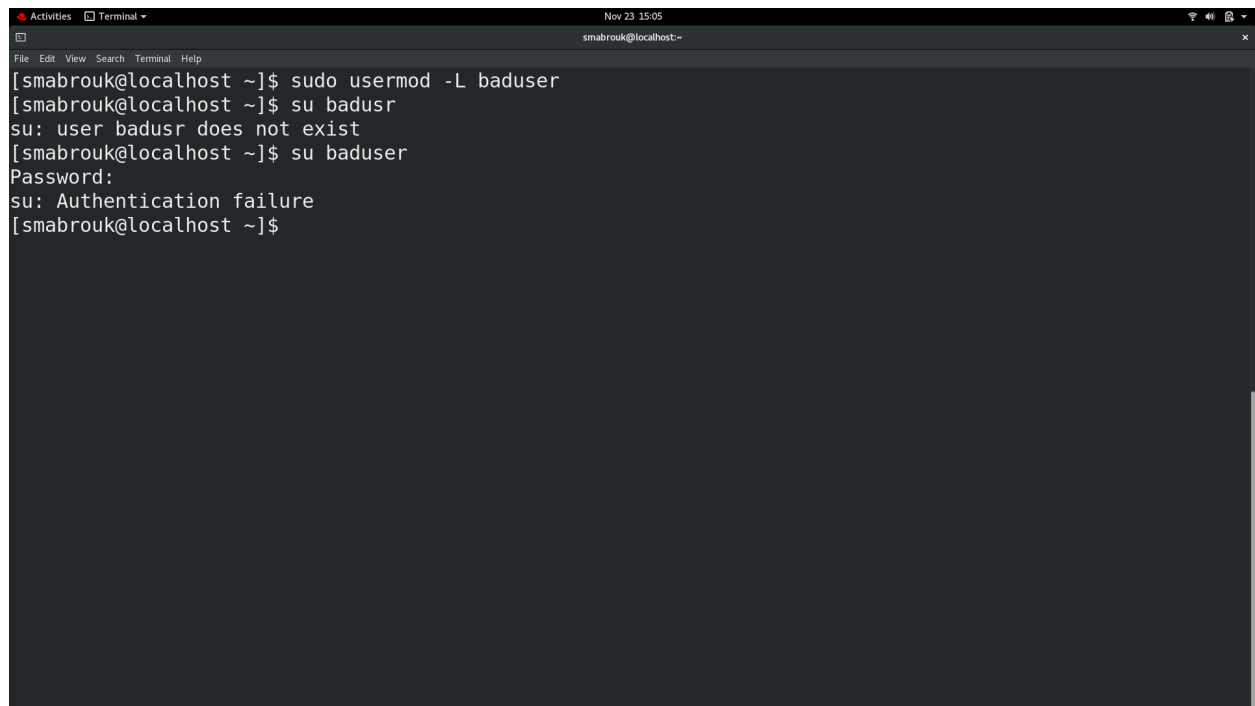## 6. Modify the password of islam's account to password


```
[smabrouk@localhost ~]$ sudo passwd islam
Changing password for user islam.
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a dictionary word
Retype new password:
passwd: all authentication tokens updated successfully.
[smabrouk@localhost ~]$
```

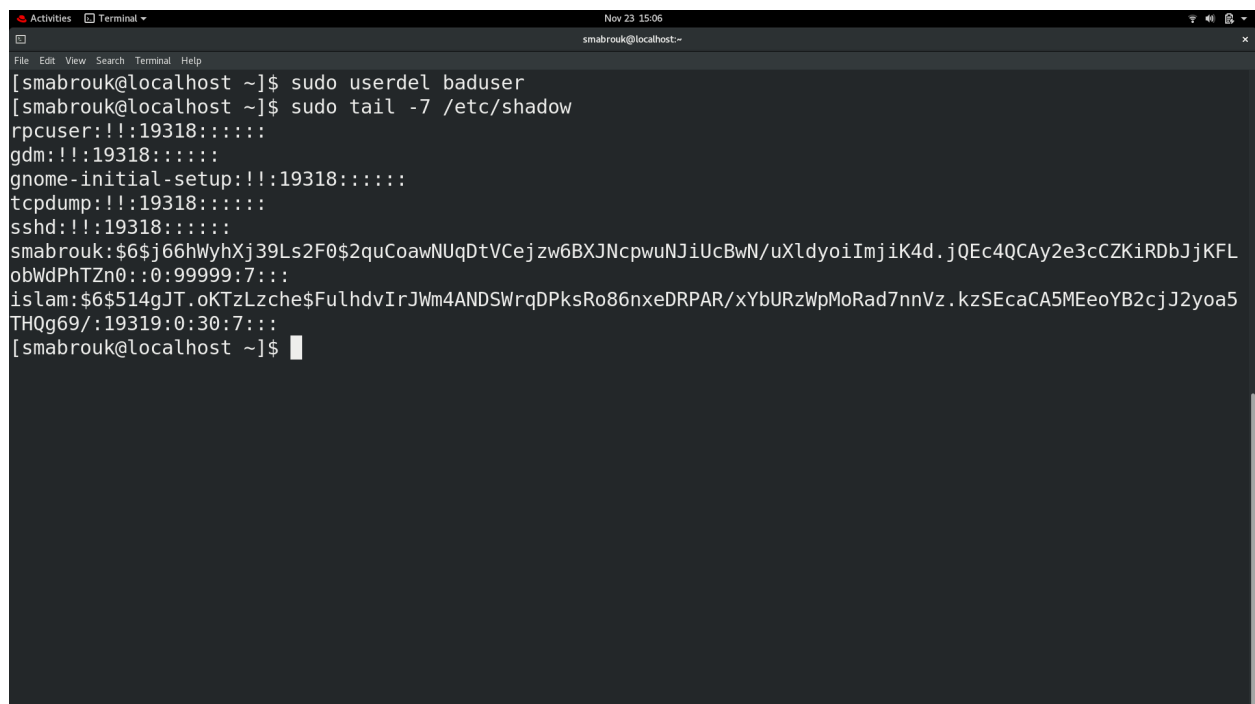## 7. Modify islam's account so the password expires after 30 days


```
[smabrouk@localhost ~]$ sudo chage islam -M 30
[sudo] password for smabrouk:
[smabrouk@localhost ~]$ sudo chage --list islam
Last password change                                : Nov 23, 2022
Password expires                                    : Dec 23, 2022
Password inactive                                   : never
Account expires                                     : never
Minimum number of days between password change      : 0
Maximum number of days between password change      : 30
Number of days of warning before password expires   : 7
[smabrouk@localhost ~]$
```

8. Lock bad user account so he can't log in


```
Activities    Terminal ▾                              Nov 23 15:05
                                        smabrouk@localhost:~
File  Edit  View  Search  Terminal  Help
[smabrouk@localhost ~]$ sudo usermod -L baduser
[smabrouk@localhost ~]$ su badusr
su: user badusr does not exist
[smabrouk@localhost ~]$ su baduser
Password:
su: Authentication failure
[smabrouk@localhost ~]$
```
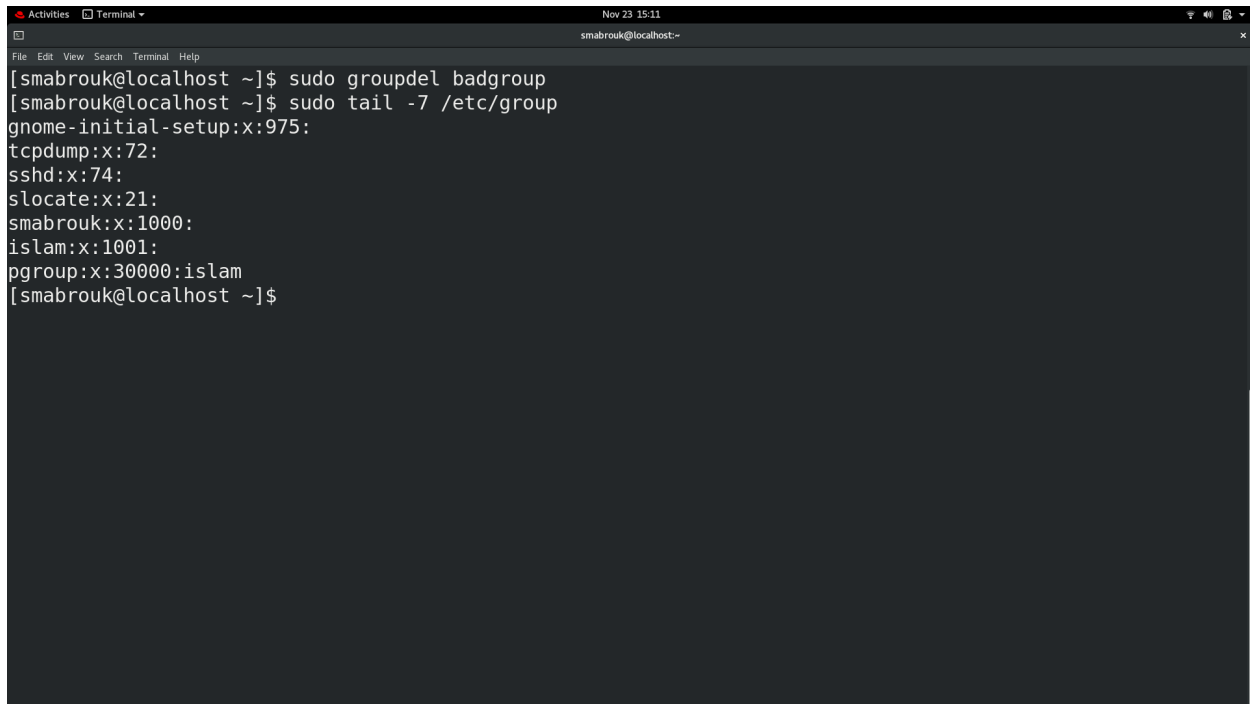
9. Delete bad user account


```
Activities    Terminal ▾                              Nov 23 15:06
                                        smabrouk@localhost:~
File  Edit  View  Search  Terminal  Help
[smabrouk@localhost ~]$ sudo userdel baduser
[smabrouk@localhost ~]$ sudo tail -7 /etc/shadow
rpcuser:!!:19318::::::
gdm:!!:19318::::::
gnome-initial-setup:!!:19318::::::
tcpdump:!!:19318::::::
sshd:!!:19318::::::
smabrouk:$6$j66hWyhXj39Ls2F0$2quCoawNUqDtVCejzw6BXJNcpwuNJiUcBwN/uXldyoiImjiK4d.jQEc4QCAy2e3cCZKiRDbJjKFL
obWdPhTZn0::0:99999:7:::
islam:$6$514gJT.oKTzLzche$FulhdvIrJWm4ANDSWrqDPksRo86nxeDRPAR/xYbURzWpMoRad7nnVz.kzSEcaCA5MEeoYB2cjJ2yoa5
THQg69/:19319:0:30:7:::
[smabrouk@localhost ~]$
```
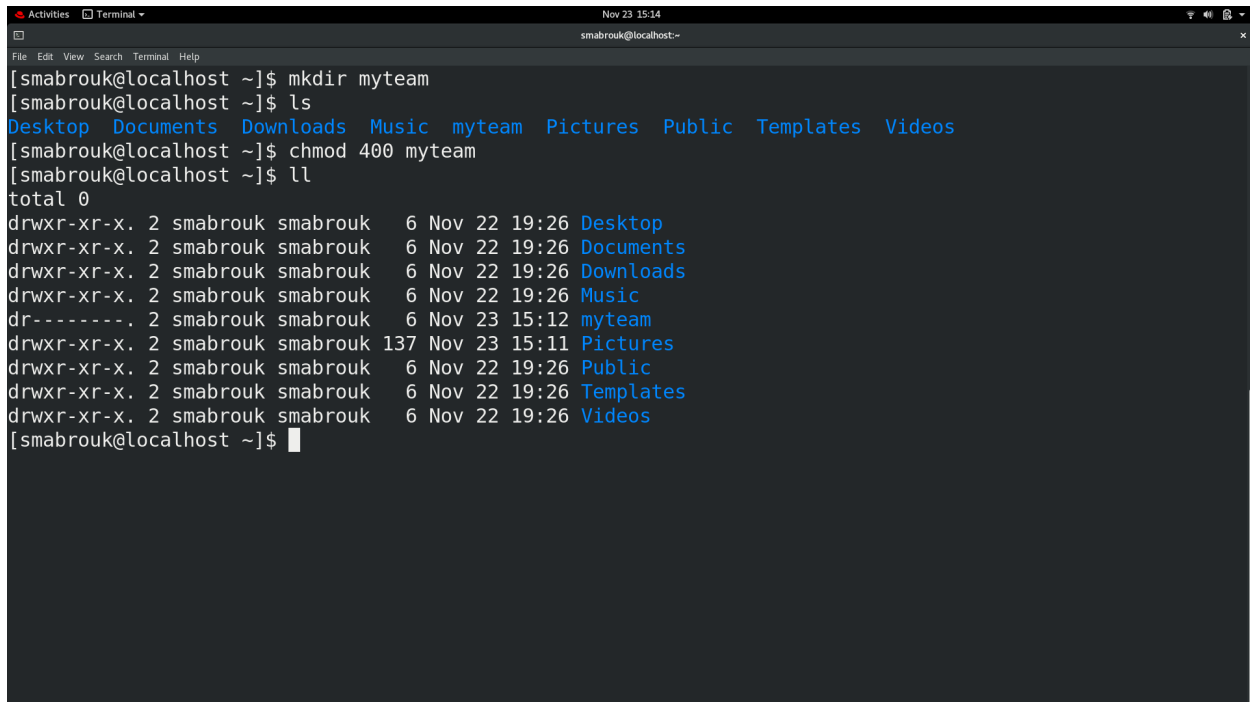
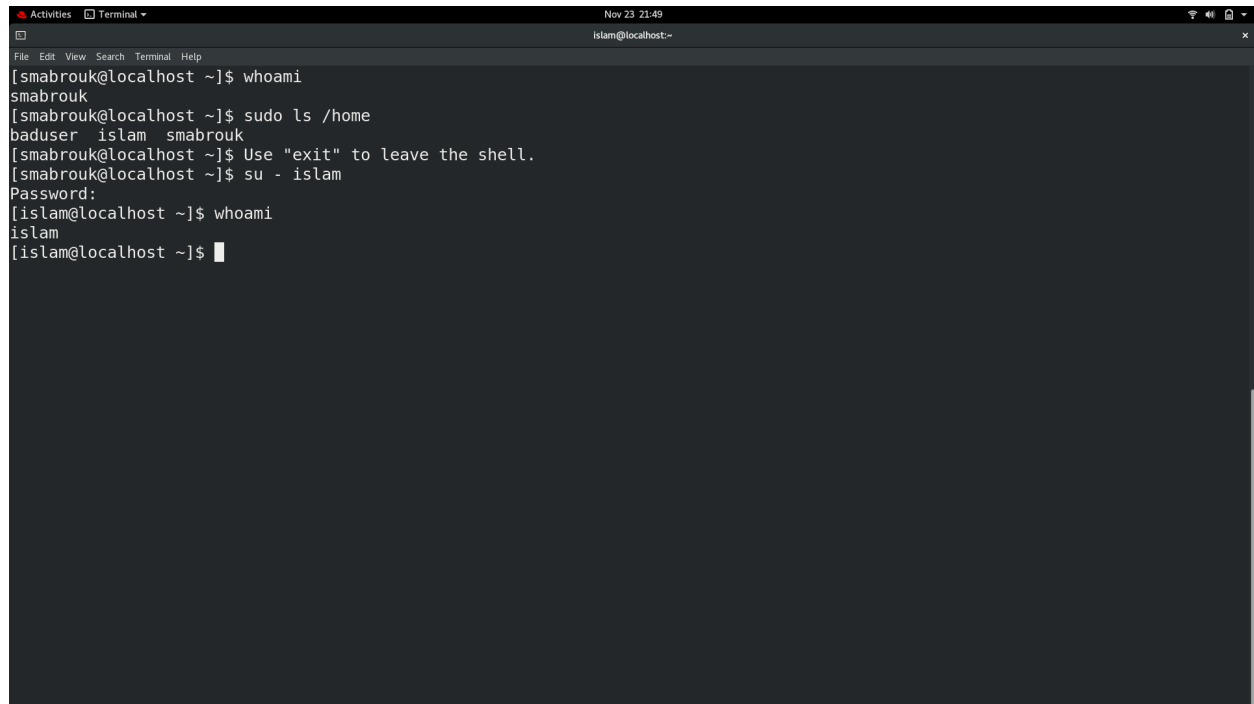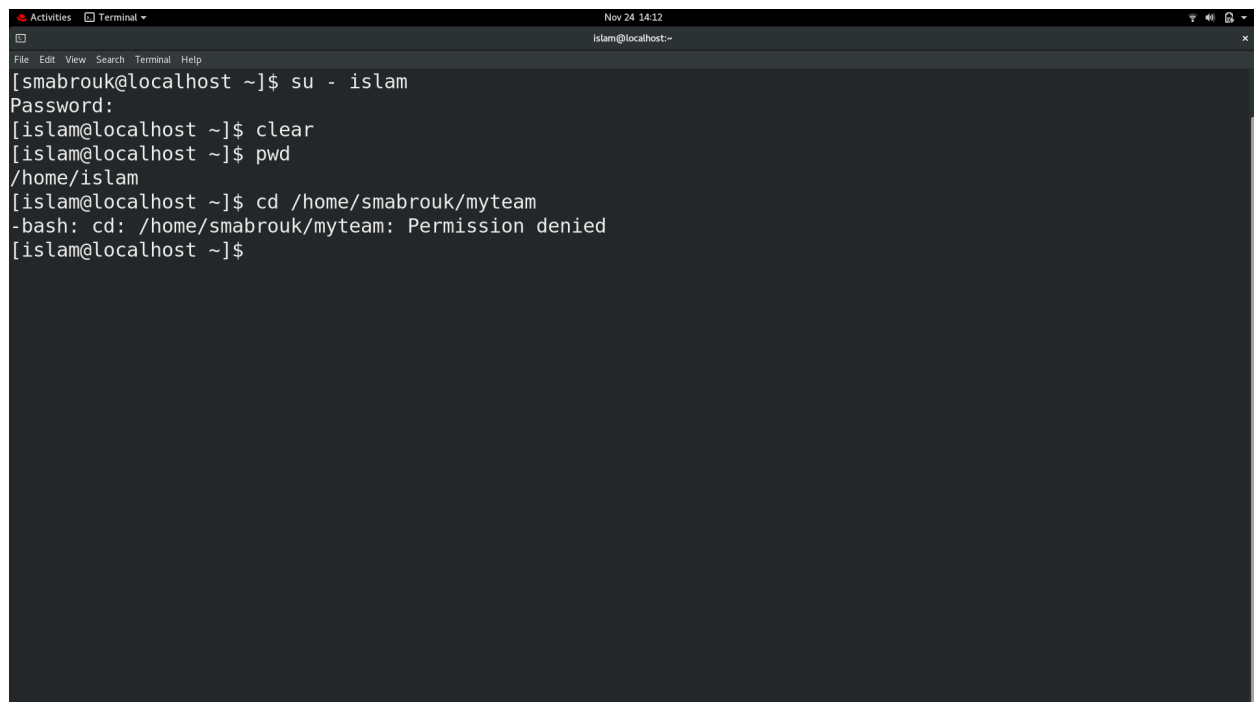10. Delete the supplementary group called badgroup.

11. Create a folder called myteam in your home directory and change its permissions to read only for the owner.

12. Log out and log in by another user


```
Activities    Terminal                                    Nov 23 21:49                                                    islam@localhost:~
File  Edit  View  Search  Terminal  Help
[smabrouk@localhost ~]$ whoami
smabrouk
[smabrouk@localhost ~]$ sudo ls /home
baduser   islam   smabrouk
[smabrouk@localhost ~]$ Use "exit" to leave the shell.
[smabrouk@localhost ~]$ su - islam
Password:
[islam@localhost ~]$ whoami
islam
[islam@localhost ~]$
```

13. Try to access (by cd command) the folder (myteam)


```
Activities    Terminal                                    Nov 24 14:12                                                    islam@localhost:~
File  Edit  View  Search  Terminal  Help
[smabrouk@localhost ~]$ su - islam
Password:
[islam@localhost ~]$ clear
[islam@localhost ~]$ pwd
/home/islam
[islam@localhost ~]$ cd /home/smabrouk/myteam
-bash: cd: /home/smabrouk/myteam: Permission denied
[islam@localhost ~]$
```

14. Change the permissions of oldpasswd file to give owner read and write permissions and for group write and execute and execute only for the others (using chmod in 2 different ways).

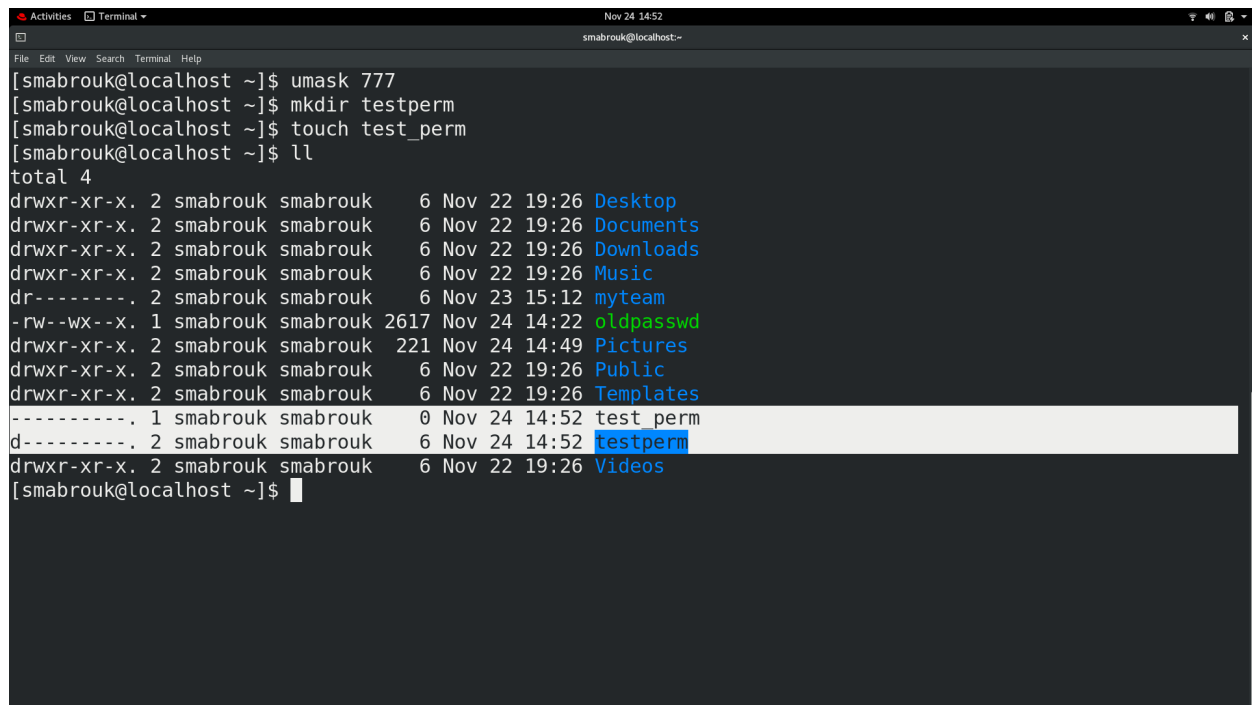15. Change your default permissions to be as above.

16. What is the maximum permission a file can have, by default when it is just created? And what is that for directory.

> *Max. permissions for a file are: read & write.*
> *Max. permissions for a directory are: read, write & execute.*

17. Change your default permissions to be no permission to everyone then create a directory and a file to verify.

18. What are the minimum permission needed for:
• Copy a directory (permission for source directory and permissions for target parent directory)

> *Source: r,x   Destination: w,x*

• Copy a file (permission for source file and and permission for target parent directory)

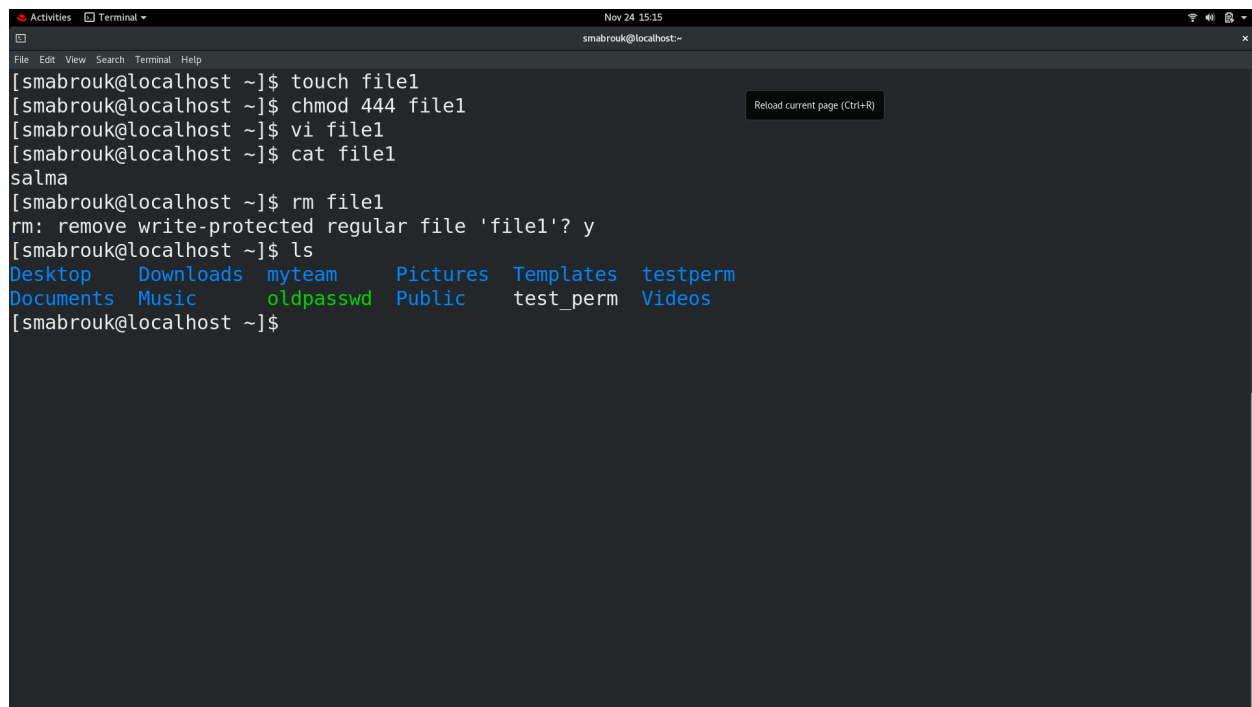> *Source: r,x   Destination: w,x*

• Delete a file

> *Source (parent): w,x*

• Change to a directory

> *w,x*

- List a directory content (ls command)

  r

- View a file content (more/cat command)

  r

- Modify a file content

  w

18. Create a file with permission 444. Try to edit in it and to remove it? Note what happened.

19. What is the difference between the "x" permission for a file and for a directory?

X permission is granted for directories by default and not granted to files by default.