Name: Nooreldeen Ayman Mohammed Elmobashar
Track: Open Source
Branch: ITI Mansoura

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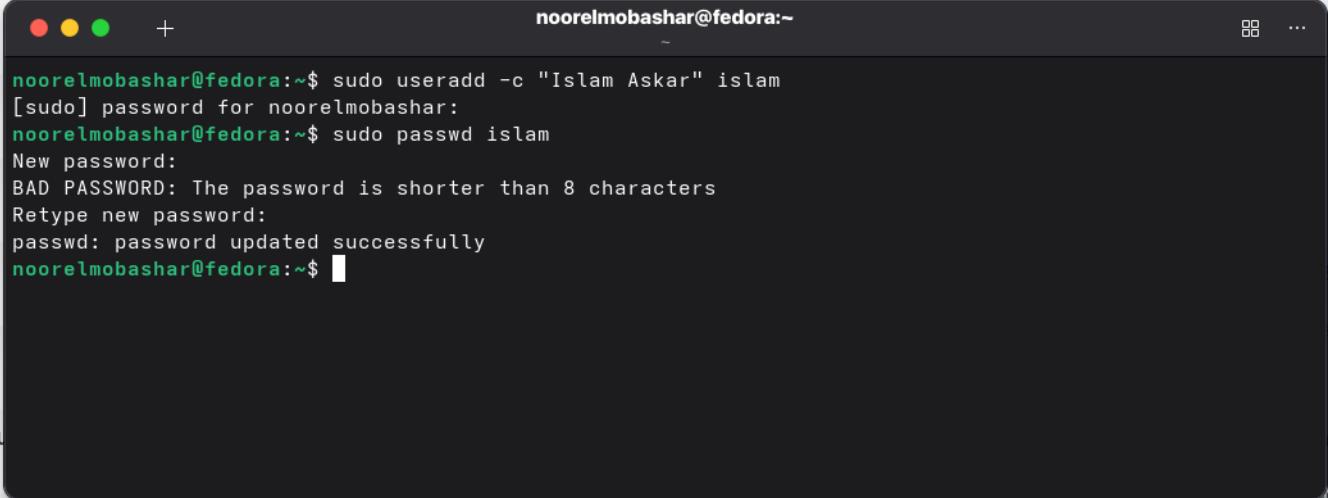
1. Create a user account with the following attribute
   username: islam
   Fullname/comment: Islam Askar
   Password:

2. Create a user account with the following attribute
   Username: baduser
   Full name/comment: Bad User
   Password: baduser
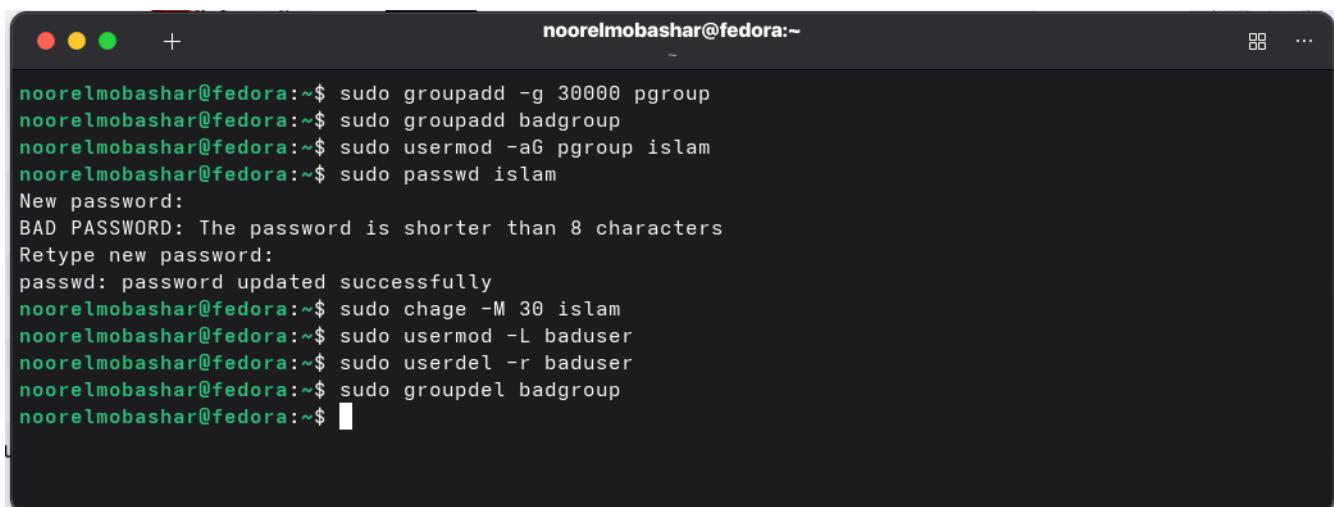
```
 ● ● ●    +                    noorelmobashar@fedora:~                              ⊞   ⋯
                                        ~

noorelmobashar@fedora:~$ sudo useradd -c "Bad User" baduser
noorelmobashar@fedora:~$ sudo passwd baduser
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
noorelmobashar@fedora:~$
```
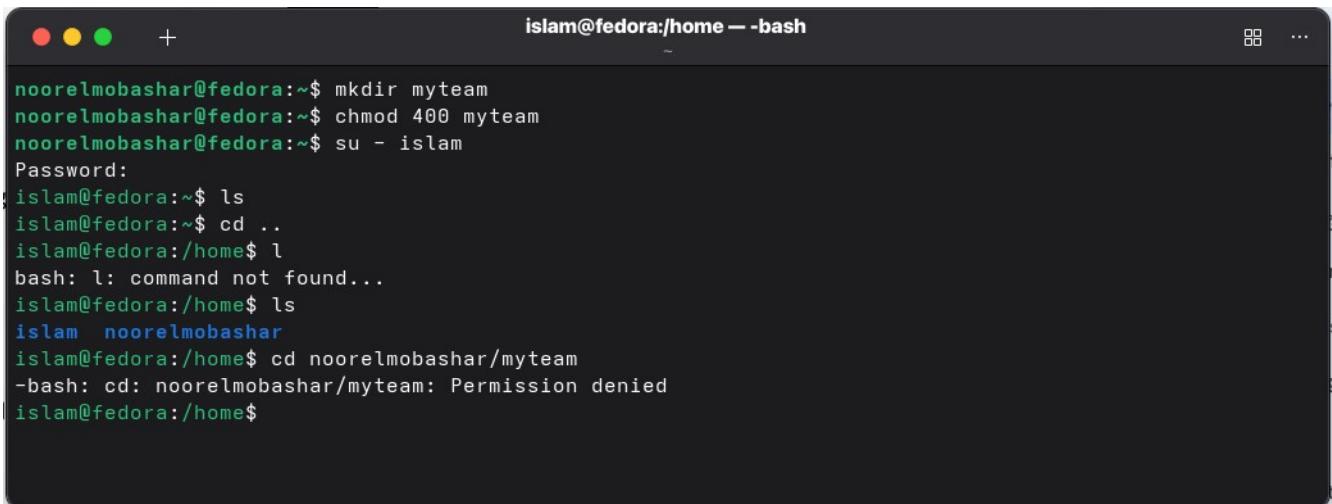
3. Create a supplementary (Secondary) group called pgroup with group ID of 30000
4. Create a supplementary group called badgroup
5. Add islam user to the pgroup group as a supplementary group
6. Modify the password of islam's account to password
7. Modify islam's account so the password expires after 30 days
8. Lock bad user account so he can't log in
9. Delete bad user account
10. Delete the supplementary group called badgroup.

```
 ● ● ●    +                    noorelmobashar@fedora:~                              ⊞   ⋯
                                        ~

noorelmobashar@fedora:~$ sudo groupadd -g 30000 pgroup
noorelmobashar@fedora:~$ sudo groupadd badgroup
noorelmobashar@fedora:~$ sudo usermod -aG pgroup islam
noorelmobashar@fedora:~$ sudo passwd islam
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
noorelmobashar@fedora:~$ sudo chage -M 30 islam
noorelmobashar@fedora:~$ sudo usermod -L baduser
noorelmobashar@fedora:~$ sudo userdel -r baduser
noorelmobashar@fedora:~$ sudo groupdel badgroup
noorelmobashar@fedora:~$ █
```

13. Create a folder called myteam in your home directory and change its permissions to read only for the owner.
14. Log out and log in by another user

15. Try to access (by cd command) the folder (myteam)
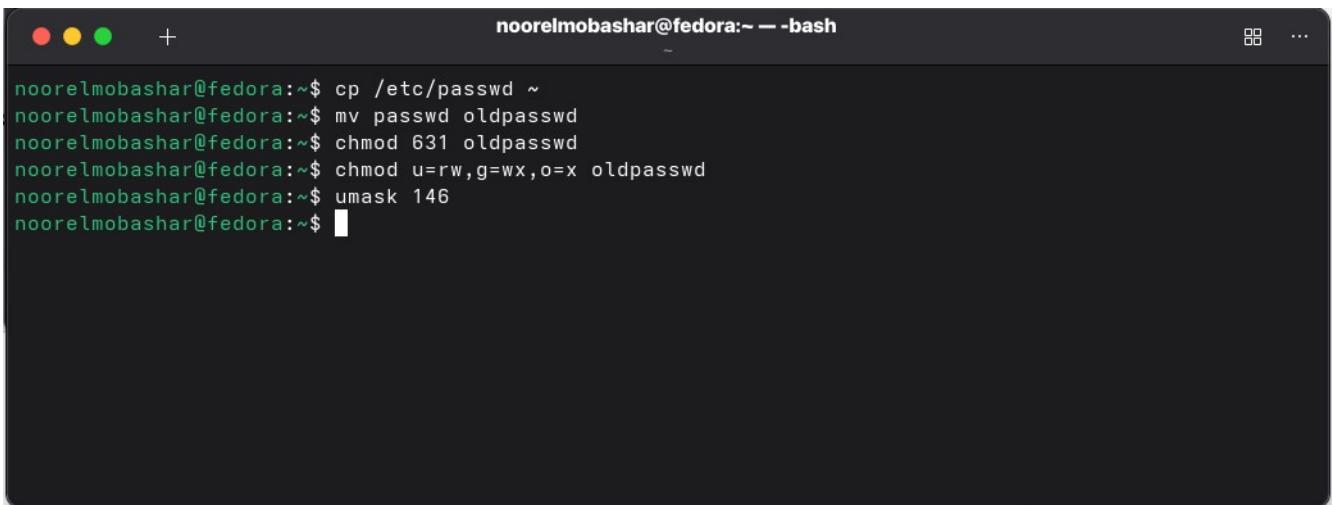
```
islam@fedora:/home — -bash

noorelmobashar@fedora:~$ mkdir myteam
noorelmobashar@fedora:~$ chmod 400 myteam
noorelmobashar@fedora:~$ su - islam
Password:
islam@fedora:~$ ls
islam@fedora:~$ cd ..
islam@fedora:/home$ l
bash: l: command not found...
islam@fedora:/home$ ls
islam   noorelmobashar
islam@fedora:/home$ cd noorelmobashar/myteam
-bash: cd: noorelmobashar/myteam: Permission denied
islam@fedora:/home$
```

16. Using the command Line
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)
Change your default permissions to be as above.
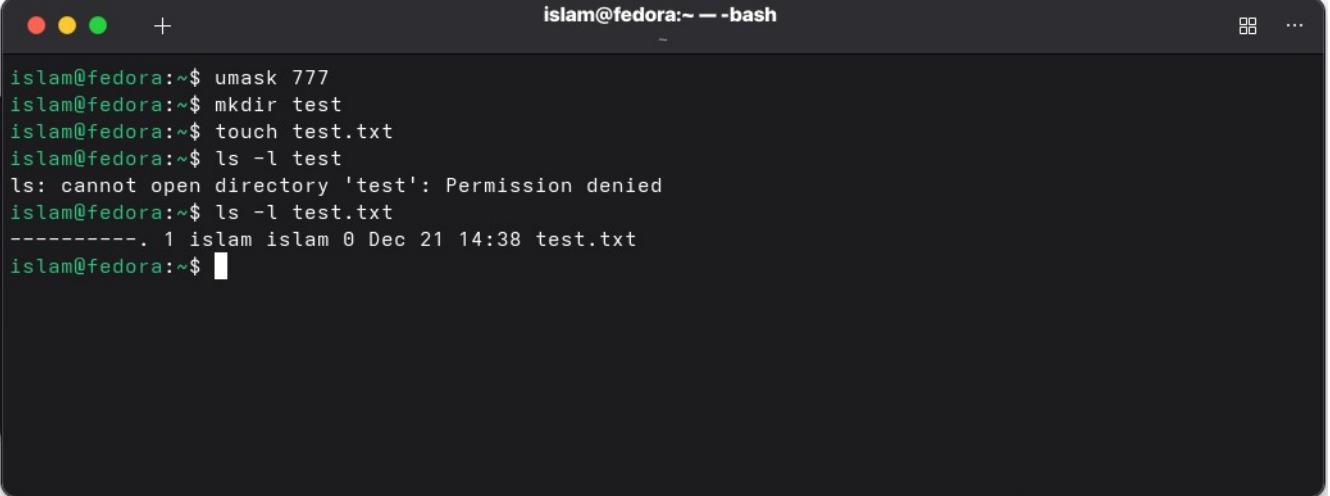
```
noorelmobashar@fedora:~ — -bash

noorelmobashar@fedora:~$ cp /etc/passwd ~
noorelmobashar@fedora:~$ mv passwd oldpasswd
noorelmobashar@fedora:~$ chmod 631 oldpasswd
noorelmobashar@fedora:~$ chmod u=rw,g=wx,o=x oldpasswd
noorelmobashar@fedora:~$ umask 146
noorelmobashar@fedora:~$
```

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

The maximum default is 666 for a file, as files are not created with execute permissions for security reasons. For Directories, the maximum is 777.

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

```
islam@fedora:~ — -bash

islam@fedora:~$ umask 777
islam@fedora:~$ mkdir test
islam@fedora:~$ touch test.txt
islam@fedora:~$ ls -l test
ls: cannot open directory 'test': Permission denied
islam@fedora:~$ ls -l test.txt
----------. 1 islam islam 0 Dec 21 14:38 test.txt
islam@fedora:~$
```

17. What are the minimum permission needed for:
   Copy a directory (permission for source directory and permissions for target parent directory)
   Copy a file (permission for source file and and permission for target parent directory)
   Delete a file
   Change to a directory
   List a directory content (ls command)
   View a file content (more/cat command)
   Modify a file content

Action	Source File/Dir Perms	Target/Parent Dir Perms
Copy Directory	Read (r) & Execute (x)	Write (w) & Execute (x)

Action	Source File/Dir Perms	Target/Parent Dir Perms
Copy File	Read (r)	Write (w) & Execute (x)
Delete File	N/A (File perms irrelevant)	Write (w) & Execute (x)
Change Dir (cd)	Execute (x)	N/A
List Dir (ls)	Read (r)	Execute (x) (to see metadata)
View File	Read (r)	Execute (x) on parent dir
Modify File	Write (w)	Execute (x) on parent dir

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

```
noorelmobashar@fedora:~ — — -bash

noorelmobashar@fedora:~$ touch test.txt
noorelmobashar@fedora:~$ chmod 444 test.txt
noorelmobashar@fedora:~$ nano test.txt
noorelmobashar@fedora:~$
```

cant write in this file.

A confirmation to delete a write-protected file appeared.

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

For a file it allows the OS to execute the file as a program.
For a Directory it allows you to enter or traverse the directory.