Name : Gamal Sobhy Gamal Thabet

Group1 –PHP Q 2

Lab2

1. Create a user account with the following attribute

⬜ username: islam

⬜ Fullname/comment: Islam Askar

⬜ Password: islam

```
gamal@gamal-virtual-machine:~/Desktop$ sudo adduser islam
Adding user `islam' ...
Adding new group `islam' (1002) ...
Adding new user `islam' (1001) with group `islam' ...
Creating home directory `/home/islam' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for islam
Enter the new value, or press ENTER for the default
        Full Name []: Islam Askar
        Room Number []: 1050
        Work Phone []: 01245025600
        Home Phone []: 25654
        Other []:
Is the information correct? [Y/n] y
gamal@gamal-virtual-machine:~/Desktop$
```

2-Create a user account with the following attribute

☐ Username: baduser

☐ Full name/comment: Bad User

☐ Password: baduser

```
        Room Number []: 1050
        Work Phone []: 01245025600
        Home Phone []: 25654
        Other []:
Is the information correct? [Y/n] y
gamal@gamal-virtual-machine:~/Desktop$ sudo adduser baduser
Adding user `baduser' ...
Adding new group `baduser' (1003) ...
Adding new user `baduser' (1002) with group `baduser' ...
Creating home directory `/home/baduser' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for baduser
Enter the new value, or press ENTER for the default
        Full Name []: Bad User
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
gamal@gamal virtual machine: /Desktop$
```

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

```
gamal@gamal-virtual-machine:~/Desktop$ sudo groupadd -g 30000 pgroup
gamal@gamal-virtual-machine:~/Desktop$
```

4. Create a supplementary group called badgroup

```
gamal@gamal-virtual-machine:~/Desktop$ sudo groupadd badgroup
gamal@gamal-virtual-machine:~/Desktop$
```

5. Add islam user to the pgroup group as a supplementary group

```
gamal@gamal-virtual-machine:~/Desktop$ sudo groupadd pgroup
gamal@gamal-virtual-machine:~/Desktop$ sudo usermod -aG pgroup islam
gamal@gamal-virtual-machine:~/Desktop$
```

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

```
gamal@gamal-virtual-machine:~/Desktop$ sudo passwd islam
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a diction
ary word
Retype new password:
passwd: password updated successfully
gamal@gamal-virtual-machine:~/Desktop$
```

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

```
gamal@gamal-virtual-machine:~/Desktop$ sudo chage -E 30  islam
gamal@gamal-virtual-machine:~/Desktop$
```

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

```
gamal@gamal-virtual-machine:~/Desktop$ sudo passwd -l baduser
passwd: password expiry information changed.
gamal@gamal-virtual-machine:~/Desktop$
```

9. Delete bad user account

```
gamal@gamal-virtual-machine:~/Desktop$ sudo userdel -r baduser
userdel: baduser mail spool (/var/mail/baduser) not found
gamal@gamal-virtual-machine:~/Desktop$
```

10. Delete the supplementary group called badgroup.

```
gamal@gamal-virtual-machine:~/Desktop$ sudo groupdel badgroup
gamal@gamal-virtual-machine:~/Desktop$
```

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

```
gamal@gamal-virtual-machine:~/Desktop$ mkdir myteam
gamal@gamal-virtual-machine:~/Desktop$ chmod 477 myteam
gamal@gamal-virtual-machine:~/Desktop$
```

14. Log out and log in by another user

```
gamal@gamal-virtual-machine:~/Desktop$ su user12
Password:
user12@gamal-virtual-machine:/home/gamal/Desktop$ pwd
/home/gamal/Desktop
user12@gamal-virtual-machine:/home/gamal/Desktop$
```

--for logging in:

1- we use command su + username

2- enter password

**a-for logging out there is two ways
switching into another account**

```
Activities        Terminal                                         09:25  17 ديس

[+]                    gamal@gamal-virtual-machine: ~          Q  =  —  □

gamal@gamal-virtual-machine:~/Desktop$ su user12
Password:
user12@gamal-virtual-machine:/home/gamal/Desktop$ pwd
/home/gamal/Desktop
user12@gamal-virtual-machine:/home/gamal/Desktop$ su - gamal
Password:
gamal@gamal-virtual-machine:~$
```

b- using gnome-session-quit --logout

```
gamal@gamal-virtual-machine:~$ sudo su gnome-session-quit --logout
[sudo] password for gamal: █
```

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

```
/home/gamal/Desktop
gamal@gamal-virtual-machine:~/Desktop$ cd myteam
bash: cd: myteam: Permission denied
gamal@gamal-virtual-machine:~/Desktop$ █
```
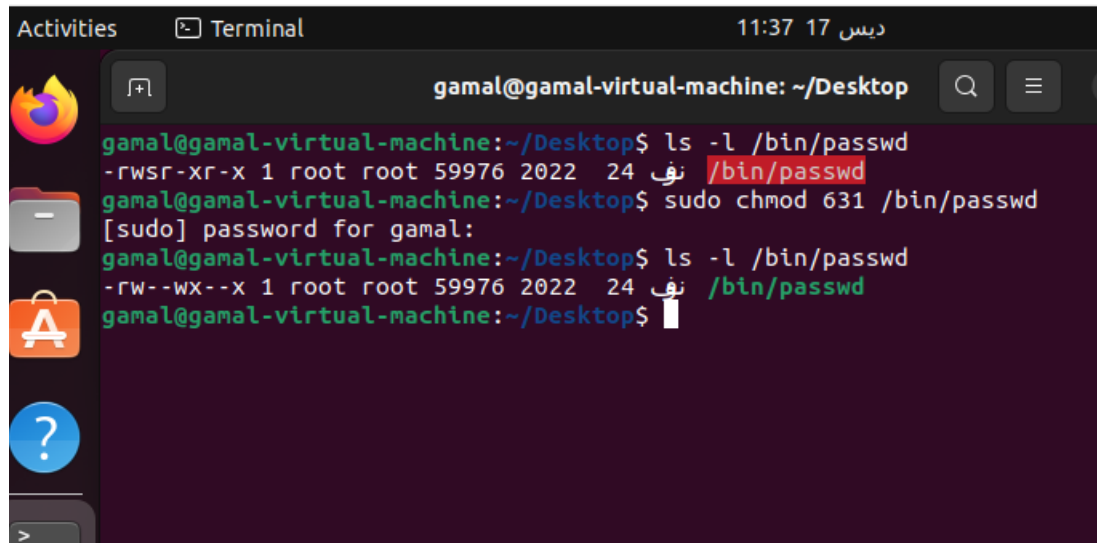
permission denied as I give the access to read only as in Q13

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)

1st way : octa mode


```
gamal@gamal-virtual-machine:~/Desktop$ ls -l /bin/passwd
-rwsr-xr-x 1 root root 59976 2022  24 نوف /bin/passwd
gamal@gamal-virtual-machine:~/Desktop$ sudo chmod 631 /bin/passwd
[sudo] password for gamal:
gamal@gamal-virtual-machine:~/Desktop$ ls -l /bin/passwd
-rw--wx--x 1 root root 59976 2022  24 نوف /bin/passwd
gamal@gamal-virtual-machine:~/Desktop$ █
```

2nd way : symbolic method :

1-(user already has read & write permissions

2-sudo chmod g+w , g-r /bin/passwd

3- (other already has execute permission only)

```
gamal@gamal-virtual-machine:~/Desktop$ sudo chmod u+w+r /bin/passwd
gamal@gamal-virtual-machine:~/Desktop$ sudo chmod g+w-r /bin/passwd
gamal@gamal-virtual-machine:~/Desktop$ sudo chmod o+x /bin/passwd
gamal@gamal-virtual-machine:~/Desktop$
```

- Change your default permissions to be as above.

```
-rw-rw-r-- 1 gamal dtp 0 03:23 17 سب file1
gamal@gamal-virtual-machine:~/Desktop$ umask 146
gamal@gamal-virtual-machine:~/Desktop$ touch file127 ; mkdir dir127
gamal@gamal-virtual-machine:~/Desktop$ ls -ld file127 dir127/
drw--wx--x 2 gamal gamal 4096 12:11 17 سب dir127/
-rw--w---- 1 gamal gamal    0 12:11 17 سب file127
gamal@gamal-virtual-machine:~/Desktop$
```

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

-for file : 666 rw /rw/rw

-for directory 777 rwx/rwx/rwx

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

```
-rw--w---- 1 gamal gamal    0 12:11 17 سب file127
gamal@gamal-virtual-machine:~/Desktop$ umask 777
gamal@gamal-virtual-machine:~/Desktop$ touch file130 ; mkdir dir130
gamal@gamal-virtual-machine:~/Desktop$ ls -ld file130 dir130/
d--------- 2 gamal gamal 4096 12:12 17 سب dir130/
---------- 1 gamal gamal    0 12:12 17 سب file130
gamal@gamal-virtual-machine:~/Desktop$
```

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)

Read permission

• Delete a file

Write Permission

 • Change to a directory

Execute permission

• List a directory content (ls command)

Read permission

• View a file content (more/cat command)

Read permission

• Modify a file content

Write Permession

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


```
gamal@gamal-virtual-machine:~/Desktop$ umask 333
gamal@gamal-virtual-machine:~/Desktop$ touch file135
gamal@gamal-virtual-machine:~/Desktop$ rm -r file135
rm: remove write-protected regular empty file 'file135'? y
```

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

The x permission for a file allows you to execute the file, while the x permission for a directory allows you to access files and folders within the directory