

## HOMWORK ASSIGNMENT 02

### 1.What does the id command do? What does it show?

Returns the uid of the specified username. User ID is 0 for root.

### 2. If I wanted to see the password information for users, where would I look?

etc/shadow

### 3.Explain the format of how passwords are stored.As an example, paste the password for your user on your Linux system (You may use a screenshot of your screen when you view your password information).

Hashed password are stored in /etc/shadow.

```
asliturkoglu:$6$6.1sxqQQGy81QSe6$5psAXQfyh5u/Y5GRXjWERib3aqEc6LHC7cySGzpAXyp150T7jlGlu0TisHZb0y4qf8g0noDjCNCJda  
lIWlbdN/:18915:0:99999:7:::  
systemd-coredump:!!:18915::::::  
vboxadd:!:18915::::::
```

### 4.What is the difference between a primary group and a supplementary group?

Each user has a primary group. Primary group has new files created by users. A new created user's primary group is a new created group with the same name as the user. Users can be members of 0 or more supplementary groups. supplementary group membership is used to allow users to have permissions to access files and resources on the system.

### 5.Draw a UML diagram representing how users and groups are related. For full credit you must include all necessary relationships between the User class and Group class and each class you create must have at least three (3) attributes defined.

### 6.Explain all ways that a user can gain superuser (root) access without logging into the root user directly from the login screen.

su: **su** - switches to root user. terminal prompts for root password. after entering this you can access all the privileges of root

sudo: For commands that start with the word **sudo**, you can only run that command as if you were root. however, the terminal prompts you for your own user password.

### 7.Write a list of commands to create a new user on your system with the user id “wanda” and the password “V!s!0n”. Then create a group named “marvel” and put the user you created into this group. Also put your own user into this group.

```
asliturkoglu@asli:~$ sudo useradd wanda  
[sudo] password for asliturkoglu:  
asliturkoglu@asli:~$ sudo passwd wanda  
New password:  
Retype new password:  
passwd: password updated successfully  
asliturkoglu@asli:~$ sudo groupadd -g 2021 marvel  
asliturkoglu@asli:~$ sudo usermod -G marvel wanda  
asliturkoglu@asli:~$ sudo usermod -G marvel asliturkoglu
```

```
asliturkoglu@asli:~$ id wanda
uid=1001(wanda) gid=1001(wanda) groups=1001(wanda),2021(marvel)
asliturkoglu@asli:~$ id asliturkoglu
uid=1000(asliturkoglu) gid=1000(asliturkoglu) groups=1000(asliturkoglu),2021(marvel)
asliturkoglu@asli:~$
```

**8.Remove the user “agatha” from the system and remove the home directory for this user.**

`sudo userdel agatha`

`sudo userdel -r agatha`

**9.Lock the account “pietro”.**

```
asliturkoglu@asli:~$ sudo passwd -l pietro
passwd: password expiry information changed.
asliturkoglu@asli:~$
```

**11.List the users that can view file “starktower”.**

thor and hulk

**12.List the users that can edit the file “evilPlans”.**

loki

**13.How could we change the permissions to allow anyone in the “villains” group to execute the “evilPlans” file?**

`chmod g+x evilplans`

**14.List the users that can view a list of all files in the “mcu” directory.**

All of them

**15.List users that can delete the file “evilPlans”**

Hulk and thor

**16.What command is used to show the default permissions? Explain the value that is shown when you view the default permissions. (i.e. run the command on your system, state what the value is and explain what the numbers shown mean).**

`Umask` show the default permissions

```
asliturkoglu@asli:~$ umask
0002
```

0 when all privileges are available

The default umask for normal user 002

The default umask for root user 022

For directories, the base permissions is 0777 and for files 0666.

For Directories 777-022=755-----> Pictures ()

drwxr-xr-x ; users read,write and execute.

groups read and execute.

others read and execute.

For files 666-002=664-----> myFile

-rw-rw-r-- ; users and groups read and write but can't execute. Others only read.

```
-rw-rw-r-- 1 asliturekglu asliturekglu 112 Kas  5 15:32 myFile
drwxr-xr-x 2 asliturekglu asliturekglu 4096 Eki 15 11:35 Pictures
```

### 17.What is a process?

a program is any executable file

### 18.What happens to a parent process when a child is executing?

Parent waits to children

### 19.What happens to a child process when it is completed executing and exits? What is the term used to describe this process?

Zombi process

### 20.What is the first thing a parent process does upon having control returned and “waking up”?

clean up whatever was from the child. the child cannot clean up its own stuff.