

1)

```
nada@nadakazamel:~$ pwd
/home/nada
nada@nadakazamel:~$ mkdir myteam
nada@nadakazamel:~$ chmod u=r myteam
nada@nadakazamel:~$
```

2)

```
nada@nadakazamel:~$ sudo useradd UserTrial
[sudo] password for nada:
nada@nadakazamel:~$ sudo passwd UserTrial
New password:
```

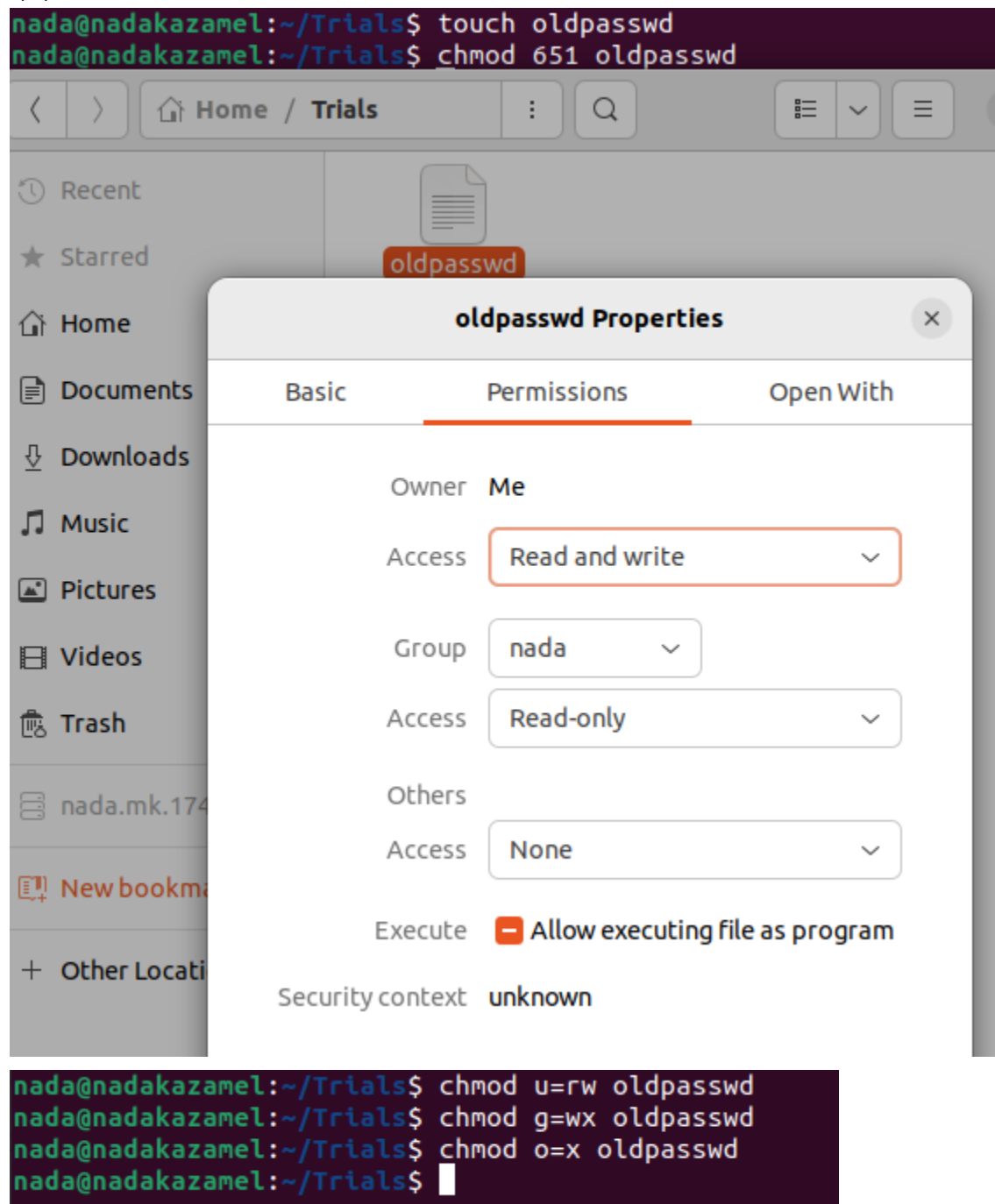
```
nada@nadakazamel:~$ su - UserTrial
Password:
```

```
$ whoami
UserTrial
$
```

3)

```
nada@nadakazamel:~$ cd myteam
bash: cd: myteam: Permission denied
nada@nadakazamel:~$
```

4)a)



4)b)

```
nada@nadakazamel:~/Trials$ umask u=rw,g=wx,o=x
nada@nadakazamel:~/Trials$ mkdir yara
nada@nadakazamel:~/Trials$ ls -lh
total 4.0K
drw--wx--x 2 nada nada 4.0K Dec 13 11:41 yara
nada@nadakazamel:~/Trials$
```

```
nada@nadakazamel:~/Trials$ mkdir yaryura
nada@nadakazamel:~/Trials$ ls -lh
total 4.0K
drw--wx--x 2 nada nada 4.0K Dec 13 11:43 yaryura
nada@nadakazamel:~/Trials$
```

Umask command by default = 0002, we can change the default by calculating it:

- rw- -wx -x = 0631

For files = 0666 - 0631 = 0035 (however it doesn't work, can't make files executable by default)

For dirs = 0777 - 0631 = 0146 (and it works very well, another way setting it with letters)

4)c)

```
nada@nadakazamel:~/Trials$ umask 0000
nada@nadakazamel:~/Trials$ touch file
nada@nadakazamel:~/Trials$ mkdir dir
nada@nadakazamel:~/Trials$ ls -lh
total 4.0K
drwxrwxrwx 2 nada nada 4.0K Dec 13 11:49 dir
-rw-rw-rw- 1 nada nada 0 Dec 13 11:49 file
nada@nadakazamel:~/Trials$
```

Max for files 666 (rw- rw- rw-)

Max for dirs 777 (rwx rwx rwx)

4)d)

```
nada@nadakazamel:~/Trials$ umask 0666
nada@nadakazamel:~/Trials$ touch yura
nada@nadakazamel:~/Trials$ umask 0777
nada@nadakazamel:~/Trials$ mkdir yar
nada@nadakazamel:~/Trials$ ls -lh
total 4.0K
d----- 2 nada nada 4.0K Dec 13 12:08 yar
----- 1 nada nada 0 Dec 13 12:07 yura
```

e) no one can access both file and directory

5)

```
nada@nadakazamel:~/Trials$ umask 444
nada@nadakazamel:~/Trials$ umask
0444
nada@nadakazamel:~/Trials$ touch yara
nada@nadakazamel:~/Trials$ ls -lh
total 0
--w--w--w- 1 nada nada 0 Dec 13 12:30 yara
nada@nadakazamel:~/Trials$ gedit yara
nada@nadakazamel:~/Trials$ rm yara
nada@nadakazamel:~/Trials$
```

You cannot edit it but you can remove it

6)

- For a file, the "x" permission allows the file to be executed as a program. If a user has execute permissions on a file, they can run the file as a command or executable program.
- For Directories: the "x" permission is crucial for accessing the contents of the directory. Without the "x" permission on a directory, users cannot navigate into the directory or access any of its contents, even if they have read permissions on the directory.

Create a new directory.

1)

```
nada@nadakazamel:~/Trial$ mkdir Yara
nada@nadakazamel:~/Trial$ chmod +t Yara
nada@nadakazamel:~/Trial$ ls -lh
total 4.0K
drwxrwxr-t 2 nada nada 4.0K Dec 13 12:45 Yara
nada@nadakazamel:~/Trial$
```

2)

```
nada@nadakazamel:~/Trial$ chmod g+s Yara
nada@nadakazamel:~/Trial$ ls -lh
total 4.0K
drwxrwsr-t 2 nada nada 4.0K Dec 13 12:45 Yara
nada@nadakazamel:~/Trial$ cd Yara
nada@nadakazamel:~/Trial/Yara$ mkdir Yarura
nada@nadakazamel:~/Trial/Yara$ ls -lh
total 4.0K
drwxrwsr-x 2 nada nada 4.0K Dec 13 12:49 Yarura
```

3)

```
nada@nadakazamel:~/Trial$ sudo useradd User11
[sudo] password for nada:
nada@nadakazamel:~/Trial$ sudo passwd User11
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
nada@nadakazamel:~/Trial$ sudo useradd User12
nada@nadakazamel:~/Trial$ sudo passwd User11
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
nada@nadakazamel:~/Trial$
```

4)

First way:

```
nada@nadakazamel:~$ ls -ld /home/nada/Trial
drwxrwxr-x 4 nada nada 4096 Dec 13 12:51 /home/nada/Trial
nada@nadakazamel:~$ chmod o=rwx /home/nada/Trial
nada@nadakazamel:~$ ls -ld /home/nada/Trial
drwxrwxrwx 4 nada nada 4096 Dec 13 12:51 /home/nada/Trial
nada@nadakazamel:~$
```

Second way:

```
nada@nadakazamel:~/Trial$ sudo usermod -aG root User11
[sudo] password for nada:
nada@nadakazamel:~/Trial$ sudo usermod -aG root User12
```

5) 6)

```
nada@nadakazamel:~/Trial$ mkdir Test
nada@nadakazamel:~/Trial$ chmod +t Test
nada@nadakazamel:~/Trial$ ls -ld Test
drwxrwxr-t 2 nada nada 4096 Dec 13 13:18 Test
```

```
nada@nadakazamel:~/Trial$ cd Test
nada@nadakazamel:~/Trial/Test$ touch Yaryura
nada@nadakazamel:~/Trial/Test$ chmod 777 Yaryura
```

```
nada@nadakazamel:~/Trial/Test$ su User11
Password:
$ rm Yaryura
rm: cannot remove 'Yaryura': Permission denied
$
```

7)

```
nada@nadakazamel:~/Trial$ ls -ld Test/  
drwxrwsr-t 3 nada nada 4096 Dec 13 13:25 Test/  
nada@nadakazamel:~/Trial$
```

List the permission passwd command has and explain why it has S

```
nada@nadakazamel:/etc$ ls -lh passwd  
-rw-r--r-- 1 root root 2.9K Dec 13 12:59 passwd  
nada@nadakazamel:/etc$
```