Lab 4

10. Create a folder called /tmp/myteam and change its permissions to read only for the owner, and Group and Other didn't have permission on it.

```
diana@diana:~/Desktop$ mkdir /tmp/myteam
diana@diana:~/Desktop$ chmod u=r,og=  /tmp/myteam
```

11. Log out and log in by another user

```
diana@diana:~$ su - poo
Password:
poo@diana:~$
```

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

```
poo@diana:~$ cd /tmp/myteam
-bash: cd: /tmp/myteam: Permission denied
poo@diana:~$
```

13. Change the permissions of /tmp/mycv 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)

```
poo@diana:~$ mkdir /tmp/mycv
poo@diana:~$ chmod u=rw,g=wx,o=x /tmp/mycv
poo@diana:~$ chmod 631 /tmp/mycv
poo@diana:~$
```

14. What are the minimum permission needed for :

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

source file: r

target parent directory: w

b. Delete a file

directory containing the file: w

c. Change to a directory

directory: x

d. List a directory content (ls command)

directory: x

e. View a file content (more/cat command)

file: r

f. Modify a file content file: w

15. Create a file with permission 444 in /tmp directory. Try to edit in it and to remove it? Note what happened.

```
diana@diana:~$ touch /tmp/justfile
diana@diana:~$ chmod 444 /tmp/justfile
diana@diana:~$ vi /tmp/justfile
```

```
ff
~
~
~
~
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~
W10: Warning: Changing a readonly file
```
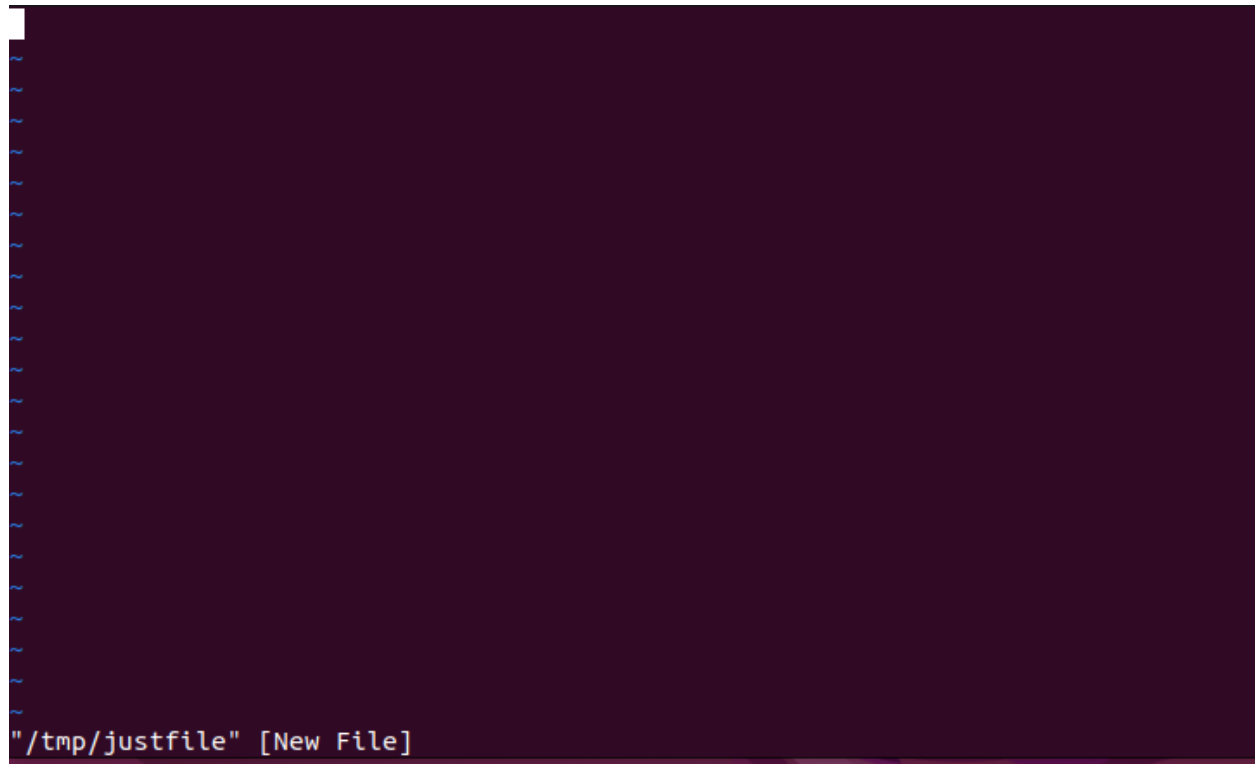
```
diana@diana:~$ rm /tmp/justfile
rm: remove write-protected regular empty file '/tmp/justfile'?
diana@diana:~$ rm /tmp/justfile
rm: remove write-protected regular empty file '/tmp/justfile'? yes
diana@diana:~$ vi /tmp/justfile
diana@diana:~$
```

```
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
"/tmp/justfile" [New File]
```

It is removed!

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

For a file: it executes the file as an application

For a directory: it navigate in the directory

17. List the All environment variables in your current shell.


```
diana@diana:~$ env
SHELL=/bin/bash
SESSION_MANAGER=local/diana:@/tmp/.ICE-unix/1474,unix/diana:/tmp/.ICE-unix/1474
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
SSH_AGENT_LAUNCHER=gnome-keyring
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LC_ADDRESS=ar_EG.UTF-8
GNOME_SHELL_SESSION_MODE=ubuntu
LC_NAME=ar_EG.UTF-8
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
XMODIFIERS=@im=ibus
DESKTOP_SESSION=ubuntu
LC_MONETARY=ar_EG.UTF-8
GTK_MODULES=gail:atk-bridge
PWD=/home/diana
LOGNAME=diana
XDG_SESSION_DESKTOP=ubuntu
```

18. What are the commands that list the value of a specific variable?

```
diana@diana:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/loc
al/games:/snap/bin:/snap/bin
```

```
diana@diana:~$ printf "%s" $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/loc
al/games:/snap/bin:/snap/bindiana@diana:~$
```

19. Display your current User name using Environment Variables.

```
diana@diana:~$ echo $USER
diana
```

20. Create a Bash shell alias named ls for the "ls –l" command, How to bypass this alias?

```
diana@diana:~$ alias ls="ls -l"
```

To bypass it: \ls

21. How to check if your internet connection is work?

```
diana@diana:~$ ping www.google.com
ping: www.google.com: Temporary failure in name resolution
diana@diana:~$
```

22. By editing /etc/hosts, make the URL www.iti-project-dep.com forward you to 195.10.10.2

```
195.10.10.2 www.iti-project-dep.com
# The following lines are desirable for IPv6 capable hosts
::1     ip6-localhost ip6-loopback
```

Lab 5

1. Count the number of users at your Machine

```
diana@diana:~$ wc -l  /etc/passwd
52 /etc/passwd
```

2. Search on user name "games" at your machine

```
diana@diana:~$ grep games /etc/passwd
games:x:5:60:games:/usr/games:/usr/sbin/nologin
```

3. Get the logins names of Users.

```
diana@diana:~$ cut -d: -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
```

4. Get the full names (comment) of Users.

```
diana@diana:~$ cut -d: -f5 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
Mailing List Manager
ircd
Gnats Bug-Reporting System (admin)
nobody
systemd Network Management,,,
systemd Resolver,,,
```