## 

## 2:1 Executing basic commands:

1. To display the current working directory, the command is:

**pwd**

The output is as follows.

/home/trg1

1. Display the path to and name of your HOME directory**.**

**->$logname**

1. Display the login name using which you have logged into the system-

**who am i**

1. Display the hidden files of your current directory.-

**ls -a**

1. List the names of all the files in your home directory.-

**ls**

1. Using the long listing format to display the files in your directory.

**Ls -l**

1. List the files beginning with chap followed by any number or any lower case alphabet. (Example, it should display all files whose names are like chap1, chap2, chap3 ……., chapa,ahapb,chapc,……..)-

**ls chap\*.txt**

1. Give appropriate command to create a directory called C\_prog under your home directory. (Note: Check the directory using ls)-

**mkdir C-prog**

1. Create the following directories under your home directory. (Note: Check using ls)

newdir- mkdir –

**mkdir newdir**

newdirectory –

**mkdir newdirectory**

1. List the names of all the files, including the contents of the sub directories under your home directory.-

**ls -R**

1. Remove the directory called newdirectory from your working directory.-

**rmdir –r newdirectory**

1. Create a directory called temp under your home directory. –

**mkdir temp**

1. Remove the directory called newdir under your home directory and verify the above with the help of the directory listing command

.- **rmdir –r newdir, ls**

1. Create another directory directorynew under the temp directory.-

**cd temp, mkdir directorynew**

1. Change the directory to your home directory.

--> **cd \**

1. From your home directory, change the directory to directorynew using relative and absolute path.

-->**cd temp**,**cd directorynew**

1. Remove the directory called c\_prog, which is in your home directory**.-**

**->rmdir –r c\_prog**

1. Change to the directory /etc and display the files present in it.

--**>cd /etc. ls**

1. List the names of all the files that begin with a dot in the /usr/bin directory.--->
2. Create a file first.unix with the following contents.

**-->cat>first.unix**

Hi! Good Morning everybody.

Welcome to the First exercise on UNIX.

Hope you enjoy doing the assignments.

1. Copy the file first.unix in your home directory to first.unics.

-->**cp first.unics first.unix**

(Note: checked using ls, first.unix file also should exist along with first.unics)

1. List the contents of first.unix and first.unics with a single command

.--**> cat first.unix first.unics**

1. Create a new directory under the temp directory

--> **mkdir tempsub**

1. From your home directory, copy all the files to the directory created under the temp sub directory

.- cp

1. Move the file first.unix to the directory temp as second.unix

- **mv first.unix temp/directorynew/secound.unix**

1. Remove the file called first.unics from the home directory

.- **rm first.unics**

1. Change your directory to temp and issue the command rm \*. What do you observe? **rm \*.**

**rm: cannot remove `\*.': No such file or directory**

1. Move all files whose names end with a, c and o to the HOME directory.
2. Copy all files that end with a ‘UNIX’ to the temp directory.

**mv \*.unix /home/Lab7\_bi12/cap/computer**

1. Issuing a single command, remove all the files from the directory temp and the directory itself.-

**rmdir –r temp**

1. Try commands cp and mv with invalid number of arguments and note the results.

ANS: **cp f1 f2 f3**

**cp: target `f3' is not a directory**

**mv f1 f2 f3**

**mv: target `f3' is not a directory**

1. Use the cat command to create a file friends, with the following data:

Madhu 6966456 09/07/68

Jamil 2345215 08/09/67

Ajay 5546785 01/04/66

Mano 7820022 09/07/68

David 8281292 09/09/60

Simmi 7864563 12/12/70

Navin 2224311 30/05/68

The fields should be separated by a tab.

–**cat>friend.txt**

1. Display contents of the file friends.

**->cat friend.txt**

1. Copy contents of friends to newfriend without using the cp command

.- **cp friend.txt newfrnd.txt**

1. Display contents of the file friends and newfriends in a single command.

-**> cat newfrnd.txt**

1. Find all users currently working on the system and store the output in a file named as users.

- **who>users.txt**

1. Append contents of friends file to the file, users.
2. Display current system date and time and record your observations. How is the time displayed?- **date**
3. **Sat Jul 13 12:16:43 IST 2019**
4. Display calendar for the month and year of your birth.- **cal 8 98**

**August 98**

**Su Mo Tu We Th Fr Sa**

**1 2 3 4**

**5 6 7 8 9 10 11**

**12 13 14 15 16 17 18**

**19 20 21 22 23 24 25**

**26 27 28 29 30 31**

1. Try following commands and record your observations.

date “+ %”-**%**

date “+%m”-**07**

date “+%D” -07/13/19

date “+%/%Training Activity”- **date +%/%Training**

**%/12:26:36raining**

date “+%Training Activity”- **date +%Training**

**12:26:27raining**

date “+%r”- **12:27:58 PM**

## 3.1: Viewing the File System and Granting/Removing Permissions

## (Note: Create required files if doesn’t exists.)

1. Give the execute permission for the user for a file chap1

- **chmod o+x chap1**

**-rw-rw-r-x 1 Lab7\_bi12 Lab7\_bi12 0 Jul 13 12:32 chap1**

1. Give the execute permission for user, group and others for a file add.c

- **chmod a+x add.c**

**-rwxrwxr-x 1 Lab7\_bi12 Lab7\_bi12 0 Jul 13 12:34 add.c**

1. Remove the execute permission from user, give read permission to group and others for a file aa.c

- **chmod a+r-x aa.c**

1. Give execute permission for users for a.c, kk.c, nato and myfile using single **command- chmod a+x a.c kk.c nato my file**

**-rwxrwxr-x 1 Lab7\_bi12 Lab7\_bi12 0 Jul 13 12:37 a.c**

**-rwxrwxr-x 1 Lab7\_bi12 Lab7\_bi12 0 Jul 13 12:37 kk.c**

**-rwxrwxr-x 1 Lab7\_bi12 Lab7\_bi12 0 Jul 13 12:37 nato**

Change the directory to root directory. Check the system directories, like bin, etc, usr etc

## 4.1: Using Pipes and Filters:

1: Redirect the content of the help document ls, into a file called as lsdoc.

**$ls>>lsdoc**

2: Display the content of the lsdoc page wise.

**$cat lsdoc | less**

3: Display only the first 4 lines of the lsdoc file.

**$ head -4 lsdoc**

4: Display only the last 7 lines of the file lsdoc**.**

**$ tail -7 lsdoc**

5: Remove the file lsdoc.

**$ rm lsdoc**

6: There will be B’day celebration from the friends file, find how many B’day parties will be held. If two of the friends have the B’date on the same day, then we will be having one party on that day.

7: Display the lines starting with Ma, in the file friends.

**]$ grep "^Ma" friends.txt**

8: Display the lines starting with Ma, ending with i or ending with id, in the file friends.

**$ grep "^Ma" friends.txt | grep "id$"**

9: Print all the files and the directory files from the current directory across all the sub directories, along with its path.

$find $(pwd) -type f

10: Print only the Directory files.

**$ ls -l | grep "^d"**

11: Display the files starting with chap, along with its path.

**$ ls -l | grep "^chap"**

12: Sort the file friends in ascending order of names.

**$ sort friends.txt**

13: Display the contents of the file friends in uppercase letters.

**$ tr "[a-z]" "[A-Z]"< friends.txt**

14: Store the contents of your home directory in a file called dir.

**]$ ls -l>>dir**

15: From the above file dir, display the file permissions and the name of the file only.

**]$ cut -c1-10,52-62 dir**

16: From the same dir file, store only the file names in a file called files.

**]$ cut -c52-62 dir>files.txt**

17: From the same dir file, store only the permissions of files in a file called perms.

**]$ cut -c1-10 dir>permission.txt**

18: From the same dir file, store only the file sizes in a file called sizes.

**]$ cut -c34-38 dir>size.txt**

19: Display the file names, sizes and permissions from your directory in that order.

**$ cut -c52-62,34-38,1-10 dir**

20: Display the number of users working on the system.

**$ who**

21: Find out the smallest file in your directory.

**]$ ls -lSr | head -2**

22: Display the total number of lines present in the file friends.

**$ wc –l friends.txt**