

Assignment 2

Part A

What will the following commands do?

1. `echo "Hello, World!"`

Print "Hello, World!"

2. `name="Productive"`

When we add command `echo $` then name will print

3. `touch file.txt`

`touch` command is used for create and update empty txt file.

4. `ls -a`

This command is used to list all directory and hidden files.

5. `rm file.txt`

Remove Existing file.

6. `cp file1.txt file2.txt`

Copy file1 content in file2.

7. `mv file.txt/path/to/directory`

Move file.txt into directory

8. `chmod 755 script.sh`

Change the permission for read , write, update script shell.

9. `grep "pattern" file.txt`

`Grep` command used for specific word in file.txt.

10. `kill PID`

Terminate Process

11. `mkdir mydir && cd mydir && touch file.txt && echo "Hello, World!" > file.txt && cat file.txt`

`mkdir` for create directory

Touch create file

Echo for display content in file

> : input of one file content is copy as another file

12. ls -l | grep ".txt"

.txt output is get

| (pipe) is used as input of right side command as output

13. cat file1.txt file2.txt | sort | uniq

```
cdac@LAPTOP-FTCDGA7N:~/mydir$ ls -l
total 4
-rw-r--r-- 1 cdac cdac 14 Aug 30 15:38 file.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ touch file2.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ nano file2.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ cat file2.txt
My name is pranita

cdac@LAPTOP-FTCDGA7N:~/mydir$ touch file1.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ cat file1.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ nano file1.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ ^C
cdac@LAPTOP-FTCDGA7N:~/mydir$ cat file1.txt file2.txt | sort | uniq

I love pune
My name is pranita
cdac@LAPTOP-FTCDGA7N:~/mydir$ nano file1.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ cat file1.txt file2.txt | sort | uniq

My name is pranita
cdac@LAPTOP-FTCDGA7N:~/mydir$ |
```

14. ls -l | grep "^d"

```
cdac@LAPTOP-FTCDGA7N:~/mydir$ mkdir directory
cdac@LAPTOP-FTCDGA7N:~/mydir$ ls
directory file.txt file1.txt file2.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ grep "^d"

^C
cdac@LAPTOP-FTCDGA7N:~/mydir$ ls -l | grep "^d"
drwxr-xr-x 2 cdac cdac 4096 Aug 30 21:42 directory
cdac@LAPTOP-FTCDGA7N:~/mydir$ |
```

15. chmod 644 file.txt

```
cdac@LAPTOP-FTCDGA7N:~/mydir$ chmod 644 file.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ ls -l
total 16
drwxr-xr-x 2 cdac cdac 4096 Aug 30 21:42 directory
-rw-r--r-- 1 cdac cdac 14 Aug 30 15:38 file.txt
-rw-r--r-- 1 cdac cdac 19 Aug 30 16:33 file1.txt
-rw-r--r-- 1 cdac cdac 20 Aug 30 16:25 file2.txt
cdac@LAPTOP-FTCDGA7N:~/mydir$ ^C
cdac@LAPTOP-FTCDGA7N:~/mydir$ |
```

16. cat file1.txt file2.txt | sort | uniq -d

```
cdac@LAPTOP-FTCDGA7N:~$ nano file1.txt
cdac@LAPTOP-FTCDGA7N:~$ nano file2.txt
cdac@LAPTOP-FTCDGA7N:~$ cat file1.txt file2.txt | sort | uniq -d

Bye
Hello
Hii
See you
all the best
good day
good luck
good moring
```

17. cp -r source_directory destination_directory

Copy Source directory content in destination directory

```
cdac@LAPTOP-FTCDGA7N:~$ ls
LinuxAssignment abc.txt d destination_directory directory file.txt file1.txt file2.txt file3.txt file4.txt mydir mydire p2 source_directory
cdac@LAPTOP-FTCDGA7N:~$ cp -r source_directory destination_directory
cdac@LAPTOP-FTCDGA7N:~$ nano source_directory
cdac@LAPTOP-FTCDGA7N:~$ cp -r source_directory destination_directory
cdac@LAPTOP-FTCDGA7N:~$ echo destination_directory
destination_directory
cdac@LAPTOP-FTCDGA7N:~$ cat destination_directory
hi
hello
pranita
mane
cdac@LAPTOP-FTCDGA7N:~$ |
```

18. chmod u+x file.txt

```
cdac@LAPTOP-FTCDGA7N:~$ chmod u+x file.txt
cdac@LAPTOP-FTCDGA7N:~$ ls -l
total 48
drwxr-xr-x 5 cdac cdac 4096 Aug 29 20:40 LinuxAssignment
-rw-r--r-- 1 cdac cdac 0 Aug 28 11:50 abc.txt
drwxr-xr-x 2 cdac cdac 4096 Aug 30 22:16 d
-rw-r--r-- 1 cdac cdac 23 Aug 30 22:28 destination_directory
drwxr-xr-x 2 cdac cdac 4096 Aug 29 22:03 directory
-rwxr--r-- 1 cdac cdac 0 Aug 29 22:03 file.txt
-rw-r--r-- 1 cdac cdac 79 Aug 30 22:18 file1.txt
-rw-r--r-- 1 cdac cdac 70 Aug 30 22:19 file2.txt
-rw-r--r-- 1 cdac cdac 10 Aug 28 10:44 file3.txt
-rw-r--r-- 1 cdac cdac 32 Aug 28 10:52 file4.txt
drwxr-xr-x 4 cdac cdac 4096 Aug 30 22:10 mydir
drwxr-xr-x 2 cdac cdac 4096 Aug 30 15:37 mydire
-rw-r--r-- 1 cdac cdac 130 Aug 30 13:14 p2
-rw-r--r-- 1 cdac cdac 0 Aug 30 22:47 search
-rw-r--r-- 1 cdac cdac 23 Aug 30 22:28 source_directory
cdac@LAPTOP-FTCDGA7N:~$ |
```

19. echo \$PATH

```
cdac@LAPTOP-FTCDGA7N:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/mnt/c/MinGW/bin:/mnt/c/MinGW:/mnt/c/WINDOWS/system32:/mnt/c/WINDOWS:/mnt/c/WINDOWS/System32/Wbem:/mnt/c/WINDOWS/System32/WindowsPowerShell/v1.0:/mnt/c/WINDOWS/System32/OpenSSH:/mnt/c/Program Files/Common-Files/Oracle/Java/javapath:/mnt/c/Users/Pranita/AppData/Local/Microsoft/WindowsApps:/mnt/c/Users/Pranita/AppData/Local/Programs/Microsoft VS Code/bin:/snap/bin
cdac@LAPTOP-FTCDGA7N:~$ |
```

Part B

Identify True or False:

1. ls is used to list files and directories in a directory.

True

2. mv is used to move files and directories.

True

3. cd is used to copy files and directories.

False

4. pwd stands for "print working directory" and displays the current directory.

True

5. grep is used to search for patterns in files.

True

6. chmod 755 file.txt gives read, write, and execute permissions to the owner, and read and execute permissions to group and others.

True

7. mkdir -p directory1/directory2 creates nested directories, creating directory2 inside directory1 if directory1 does not exist.

False

8. rm -rf file.txt deletes a file forcefully without confirmat

True

Identify the Incorrect Commands:

1. chmodx is used to change file permissions.
2. cpy is used to copy files and directories. incorrect
3. mkfile is used to create a new file. incorrect
4. catx is used to concatenate files.
5. rn is used to rename files.

Part C

Question 1: Write a shell script that prints "Hello, World!" to the terminal.

```
echo "Hello World!"
cdac@LAPTOP-FTCDGA7N:~$ echo "Hello World!"
Hello World!
cdac@LAPTOP-FTCDGA7N:~$ |
```

Question 2: Declare a variable named "name" and assign the value "CDAC Mumbai" to it. Print the value of the variable.

```
cdac@LAPTOP-FTCDGA7N:~$ nano program1.sh
cdac@LAPTOP-FTCDGA7N:~$ bash program1.sh
CDAC Mumbai
cdac@LAPTOP-FTCDGA7N:~$ |
```

Question 3: Write a shell script that takes a number as input from the user and prints it.

```
cdac@LAPTOP-FTCDGA7N:~$ nano s1
cdac@LAPTOP-FTCDGA7N:~$ bash s1
Enter number1
8
cdac@LAPTOP-FTCDGA7N:~$ |
```

Question 4: Write a shell script that performs addition of two numbers (e.g., 5 and 3) and prints the result.

```
cdac@LAPTOP-FTCDGA7N:~$ nano s1
cdac@LAPTOP-FTCDGA7N:~$ bash s1
12
-2
35
0
cdac@LAPTOP-FTCDGA7N:~$ |
```

Question 5: Write a shell script that takes a number as input and prints "Even" if it is even, otherwise prints "Odd".

```
cdac@LAPTOP-FTCDGA7N:~$ nano s2
cdac@LAPTOP-FTCDGA7N:~$ nano s2
cdac@LAPTOP-FTCDGA7N:~$ bash s2
Enter a number
9
9 is odd.
cdac@LAPTOP-FTCDGA7N:~$ nano s2
cdac@LAPTOP-FTCDGA7N:~$ |
```

Question 6: Write a shell script that uses a for loop to print numbers from 1 to 5.

```
cdac@LAPTOP-FTCDGA7N:~$ nano s3
cdac@LAPTOP-FTCDGA7N:~$ bash s3
0
1
2
3
4
5
cdac@LAPTOP-FTCDGA7N:~$ |
```