

Part A

What will the following commands do?

1) `echo "Hello, World!"`

Answer - These Command will give output as “Hello, World!” to a user.

2) `name="Productive"`

Answer -

3) `touch file.txt`

Answer - These Command will create a file (file.txt)

4) `ls -a`

Answer - These command will list all the files

5) `rm file.txt`

Answer - It will remove the file.txt

6) `cp file1.txt file2.txt`

Answer - It will Copy the file1.txt in new file2.txt

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

Answer - These command will move the file.txt to the another directory

8) `chmod 755 script.sh`

Answer - It will read and execute the file

9) `grep "pattern" file.txt`

Answer - It will show the pattern in file.txt

10) `kill PID`

Answer - These command is used to Kills single process at time with given PID

11) `ls -l | grep ".txt"`

Answer – These command pass the list of files in the current directory to grep which will remove all file names that have a .txt

12) `cat file1.txt file2.txt | sort | uniq`

Answer - These command combines the content of file1.txt and file2.txt sort the file records and uniq words will shown

13) `s -l | grep "^d"`

Answer - It will lists only directories in the current directory

14) `chmod 644 file.txt`

Answer - Gives the permission to owner to read and write file

15) `echo $PATH`

Answer - It will show current value of \$PATH variable

Part B

Q1) `ls` is used to list files and directories in a directory.

Answer - True

Q2) `mv` is used to move files and directories.

Answer - True

Q3) `cd` is used to copy files and directories.

Answer - False

Q4) `pwd` stands for "print working directory" and displays the current directory.

Answer - True

Q5) `grep` is used to search for patterns in files.

Answer - True

Q6) `chmod 755 file.txt` gives read, write, and execute permissions to the owner, and read and execute permissions to group and others.

Answer - True

Q7) `mkdir -p directory1/directory2` creates nested directories, creating directory2 inside directory1 if directory1 does not exist.

Answer - True

Q8) `rm -rf file.txt` deletes a file forcefully without confirmation.

Answer - True

Identify the Incorrect Commands:

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

Answer - 3. `mkfile` is used to create a new file.

Part C

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

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano hello.sh  
shrutib@DESKTOP-PALEV1C:~$ bash hello.sh  
Hello World  
shrutib@DESKTOP-PALEV1C:~$
```

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

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano name.sh  
shrutib@DESKTOP-PALEV1C:~$ bash name.sh  
CDAC Mumbai  
shrutib@DESKTOP-PALEV1C:~$
```

Q3) Write a shell script that takes a number as input from the user and prints it.

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano number.sh  
shrutib@DESKTOP-PALEV1C:~$ bash number.sh  
1  
2  
3  
shrutib@DESKTOP-PALEV1C:~$  
shrutib@DESKTOP-PALEV1C:~$
```

Q4) Write a shell script that performs addition of two numbers (e.g., 5 and 3) and prints the result.

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano add.sh  
shrutib@DESKTOP-PALEV1C:~$ bash add.sh  
Enter the first number:  
5  
Enter the second number:  
3  
The sum of 5 and 3 is 8  
shrutib@DESKTOP-PALEV1C:~$
```

Q5) Write a shell script that takes a number as input and prints "Even" if it is even, otherwise prints "Odd".

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano oddeven.sh  
shrutib@DESKTOP-PALEV1C:~$ bash oddeven.sh  
Enter a number:  
4  
4 is even number  
shrutib@DESKTOP-PALEV1C:~$ bash oddeven.sh  
Enter a number:  
6  
6 is even number  
shrutib@DESKTOP-PALEV1C:~$ bash oddeven.sh  
Enter a number:  
7  
7 is odd number  
shrutib@DESKTOP-PALEV1C:~$
```

Q6) Write a shell script that uses a for loop to print numbers from 1 to 5.

```
shrutib@DESKTOP-PALEV1C: ~  
shrutib@DESKTOP-PALEV1C:~$ nano loop.sh  
shrutib@DESKTOP-PALEV1C:~$ bash loop.sh  
1  
2  
3  
4  
5  
shrutib@DESKTOP-PALEV1C:~$
```