

## CERTIFICATE

*This is to certify that Mr./Ms. .... **Hemil...Chovatiya**..... with enrolment no. ....**200303108003**..... has successfully completed **his/her** laboratory experiments in the ....**Operating System Laboratory (203105203)**..... from the department of .....**Information Technology(4ITA1)**..... during the academic year .....**2021-2022**.....*



Date of Submission: .....

Staff In charge: .....

Head of Department: .....



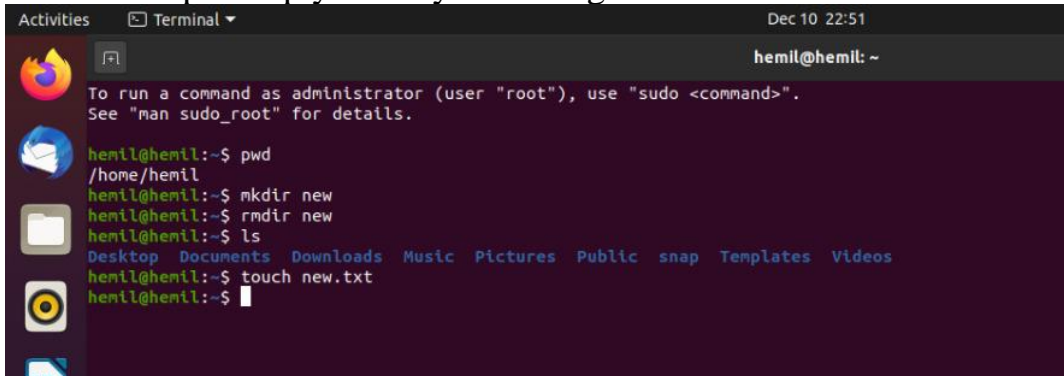
Faculty of Engineering & Technology  
Subject Name: Operating System laboratory  
Subject Code: 203105203  
B.Tech.: IT Year: 2021-22 Semester: 4

## **PRACTICE 1**

**AIM:** Study basics command of Linux.

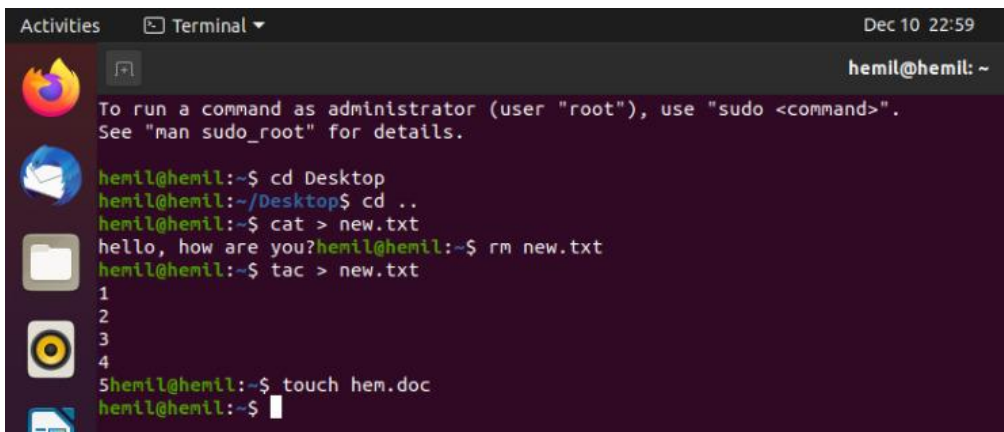
### **Linux Basic Commands:**

- 1. pwd Command:** The pwd command is used to display the location of the current working directory.
- 2. mkdir Command:** The mkdir command is used to create a new directory under any directory.
- 3. rmdir Command:** The rmdir command is used to delete a directory.
- 4. ls Command:** The ls command is used to display a list of content of a directory.
- 5. touch Command:** The touch command is used to create empty files. We can create multiple empty files by executing it once.



```
hemil@hemil: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
hemil@hemil:~$ pwd  
/home/hemil  
hemil@hemil:~$ mkdir new  
hemil@hemil:~$ rmdir new  
hemil@hemil:~$ ls  
Desktop Documents Downloads Music Pictures Public snap Templates Videos  
hemil@hemil:~$ touch new.txt  
hemil@hemil:~$
```

- 6. cd Command:** The cd command is used to change the current directory.
- 7. cat Command:** The cat command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of one file to another file, and more.
- 8. rm Command:** The rm command is used to remove a file.
- 9. tac Command:** The tac command is the reverse of cat command, as its name specified. It displays the file content in reverse order (from the last line).
- 10. cd .. command:** This command is used to go Back to previous main folder.



```
hemil@hemil: ~  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
hemil@hemil:~$ cd Desktop  
hemil@hemil:~/Desktop$ cd ..  
hemil@hemil:~$ cat > new.txt  
hello, how are you?  
hemil@hemil:~$ rm new.txt  
hemil@hemil:~$ tac > new.txt  
1  
2  
3  
4  
5  
hemil@hemil:~$ touch hem.doc  
hemil@hemil:~$
```

**11. head Command:** The head command is used to display the content of a file. It displays the first 10 lines of a file.

**12. tail Command:** The tail command is similar to the head command. The difference between both commands is that it displays the last ten lines of the file content. It is useful for reading the error message.

**13. passwd Command:** The passwd command is used to create and change the password for a user.

**14. id Command:** The id command is used to display the user ID (UID) and group ID (GID).

**15. su Command:** The su command provides administrative access to another user. In other words, it allows access of the Linux shell to another user.



```
hemil@hemil:~$ cd Desktop
hemil@hemil:~/Desktop$ pwd
hemil@hemil:~$ passwd
Changing password for hemil.
Current password:
New password:
Retype new password:
passwd: password updated successfully
hemil@hemil:~$ head new1.txt
1
2
3
4
5
6
7
8
9
10
hemil@hemil:~$ tail new1.txt
11
12
13
14
15
16
17
18
19
20
hemil@hemil:~$ id
uid=1000(hemil) gid=1000(hemil) groups=1000(hemil),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),120(lpadmin),131(lxd),132(sambashare)
hemil@hemil:~$
```

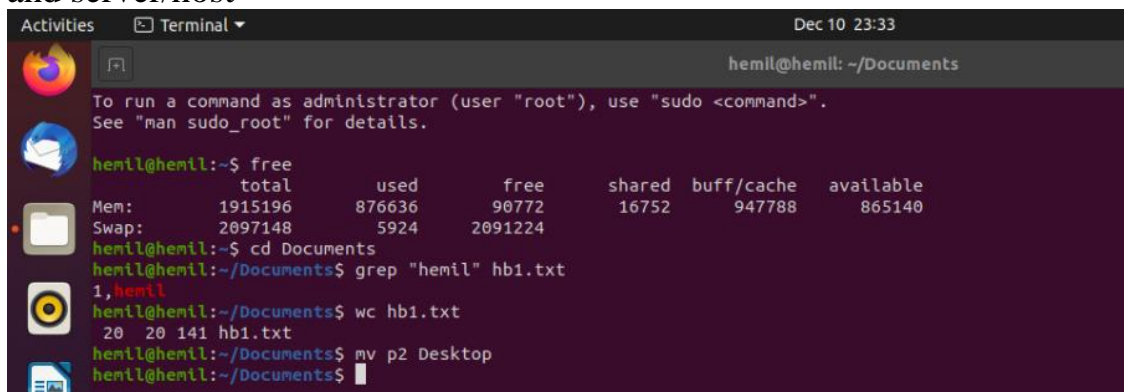
**16. Free command:** It gives information about used and unused memory usage and swap memory of a system

**17. grep command:** to perform text searches for a defined criteria of words or strings

**18. wc command:** It is used to find out number of lines, word count, byte and characters count in the files specified in the file arguments.

**19. mv command:** mv is used to move one or more files or directories from one place to another in a file system.

**20. PING command:** it is used to check the network connectivity between host and server/host



```
hemil@hemil:~$ free
              total        used        free      shared  buff/cache   available
Mem:           1915196       876636       90772        16752        947788        865140
Swap:          2097148           5924       2091224

hemil@hemil:~$ cd Documents
hemil@hemil:~/Documents$ grep "hemil" hb1.txt
1, hemil
hemil@hemil:~/Documents$ wc hb1.txt
 20  20 141 hb1.txt
hemil@hemil:~/Documents$ mv p2 Desktop
hemil@hemil:~/Documents$
```



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