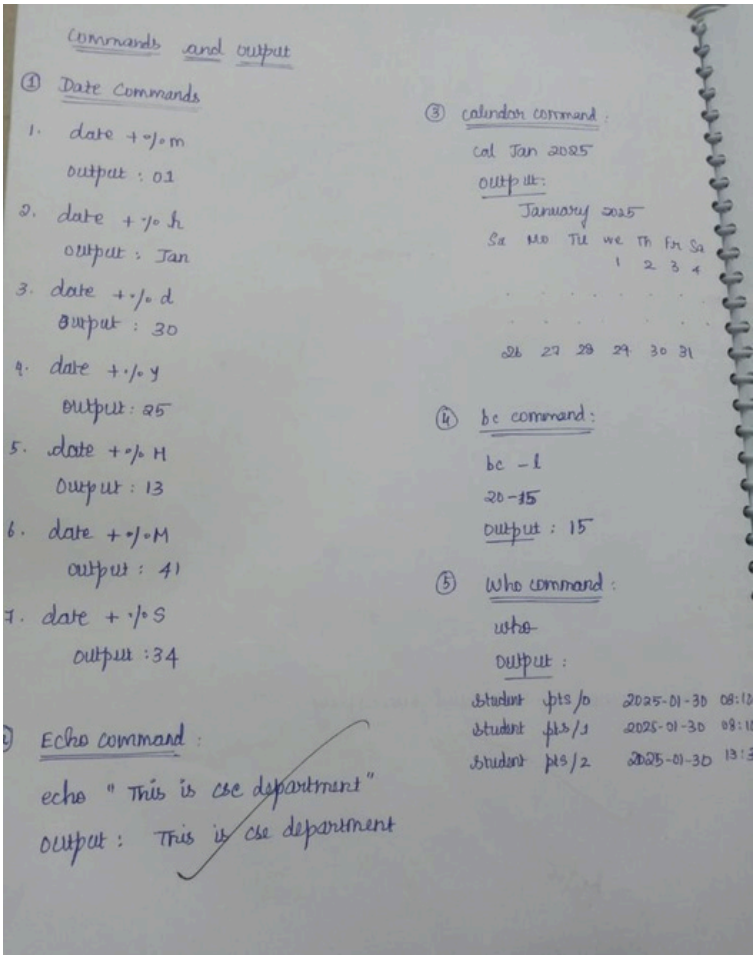
OPERATING SYSTEM - CS23431

EXP 1 BASIC LINUX

COMMANDS

NAME: Harini M ROLL NO: 230701101

GENERAL PURPOSE COMMANDS:



⑥ who am i command:

who am i

output : student pts/3 2025-01-30 13:34

⑦ id command :

id

output :

uid=1000(student) gid=1000(student) groups=1000(student)

context = unconfined_u : unconfined_r : unconfined_t : s0-s0 : c0.c1023

⑧ ttytype command :

tty

output : /dev/pts/3

⑨ clear command :

clear

output : Console screen is cleared

⑩ Man command :

man who

Output : Name

who - show who is logged on .....

⑪ Process status command :

ps

output :

PID	TTY	TIME	CMD
2627	pts/3	00:00:00	bash
2846	pts/3	00:00:00	ps

ps -e

⑫ Uname commands:

1. uname -m

output : i686

2. uname -n

output : localhost.localdomain

3. uname -r

output : 4.11.8-300.fc26.i686+PAE

4. uname -s

output : Linux

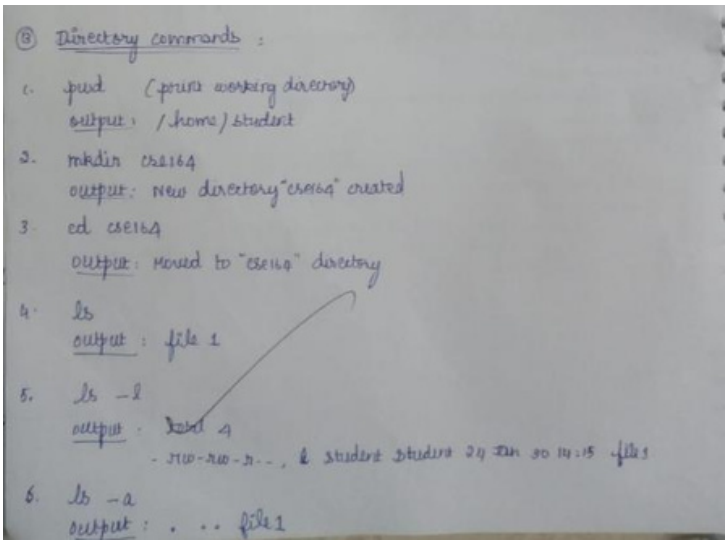
5. uname -v

output : #1 SMP Thu Jun 29 20:38:21 UTC 2017

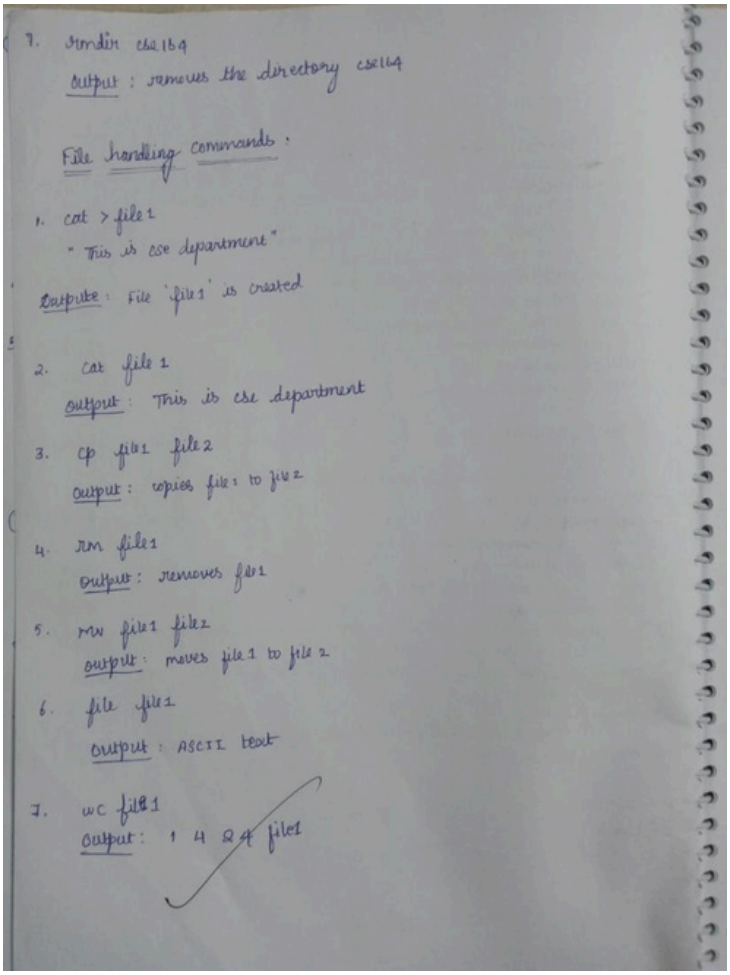
6. uname -a

Output : Linux localhost.localdomain 4.11.8-300.fc26.i686+PAE #1 SMP Thu Jun 29 20:38:21 UTC 2017 i686 i686 i386 GNU/Linux

DIRECTORY COMMANDS:



FILE HANDLING COMMANDS:



8. ls > file2

output : Direct list of files to file2

9. who | wc -l

output : 28

10. who | tee file1 | wc -l

output : 28

11. ls f*

output : file1

12. ls [a-m]*

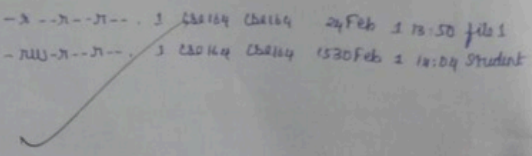
output : file1

13. ls [!a-m]*

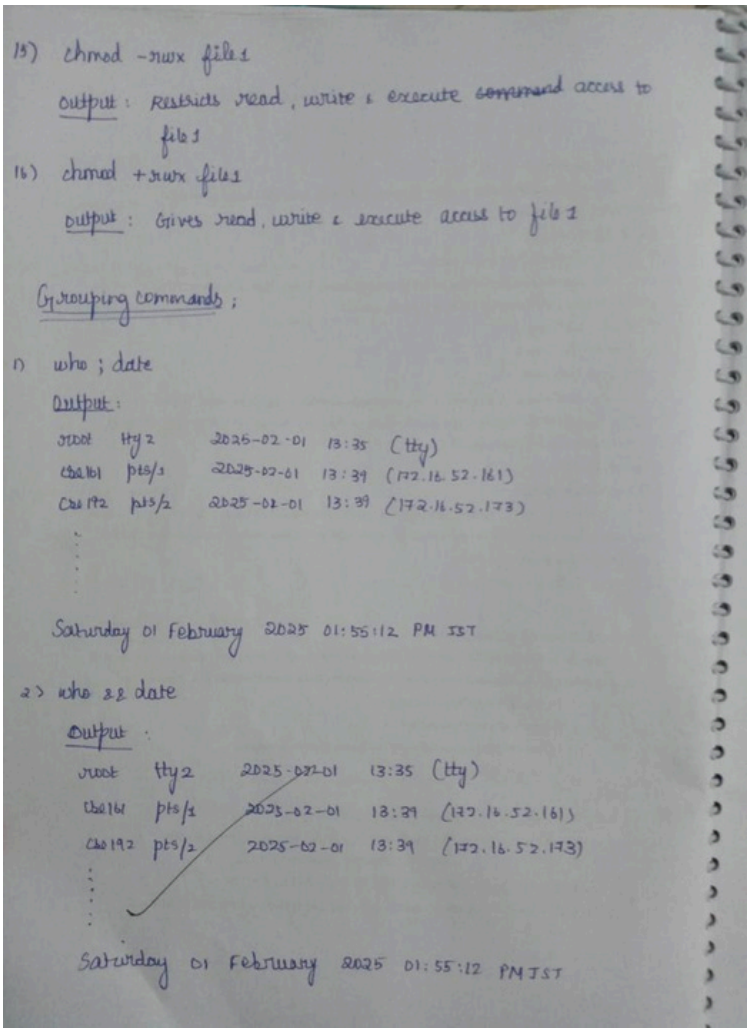
output : Student

14. ls -l

output : total 8



GROUPING COMMANDS:



15) chmod -rwx file1

output: Restricts read, write & execute ~~command~~ access to file1

16) chmod +rwx file1

output: Gives read, write & execute access to file1

Grouping commands:

1) who ; date

Output:

root tty2 2025-02-01 13:35 (tty)
cse161 pts/1 2025-02-01 13:39 (172.16.52.161)
cse172 pts/2 2025-02-01 13:39 (172.16.52.173)
:

Saturday 01 February 2025 01:55:12 PM IST

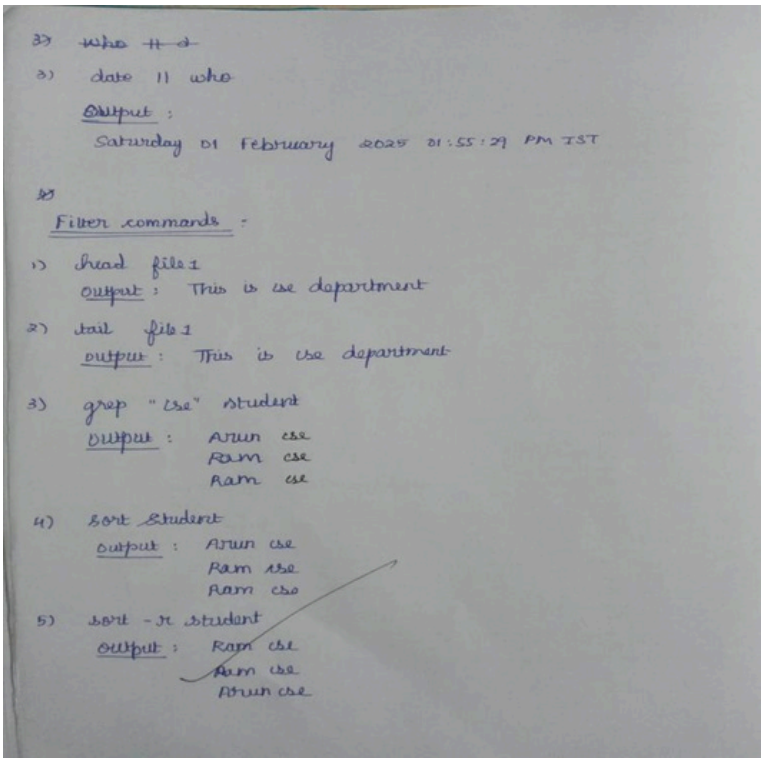
2) who && date

Output:

root tty2 2025-02-01 13:35 (tty)
cse161 pts/1 2025-02-01 13:39 (172.16.52.161)
cse172 pts/2 2025-02-01 13:39 (172.16.52.173)
:

Saturday 01 February 2025 01:55:12 PM IST

FILTER COMMANDS:



2) ~~who -H -d~~

3) date || who

Output :

Saturday 01 February 2025 01:55:29 PM IST

4)

Filter commands :

1) head file1

output : This is cse department

2) tail file1

output : This is cse department

3) grep "cse" student

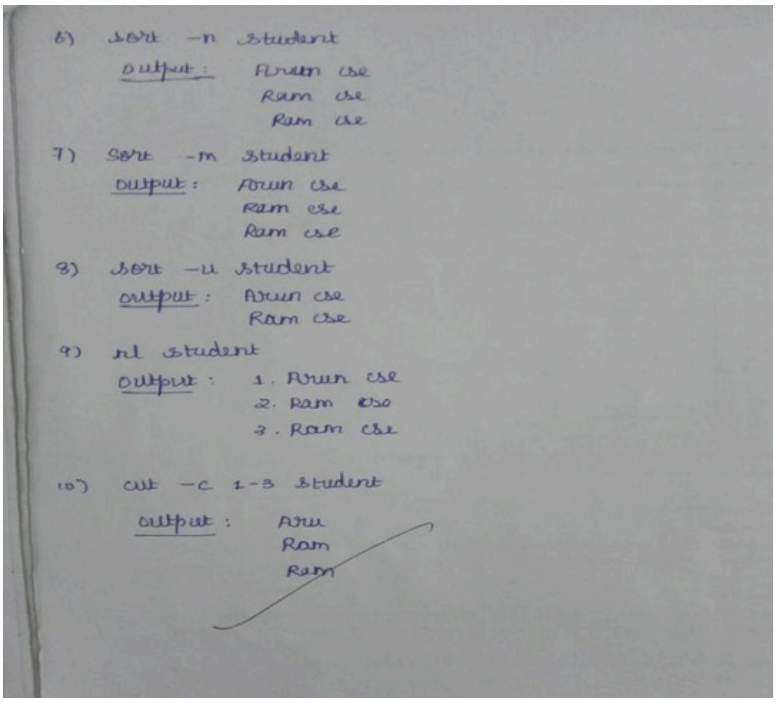
output : Arun cse
Ram cse
Ram cse

4) sort Student

output : Arun cse
Ram cse
Ram cse

5) sort -r student

output : Ram cse
Ram cse
Arun cse



OTHER COMMANDS:

other essential commands :

1) free command :

(i) free

output :

	total	used	free	shared	buff/cache
Mem :	16092656	1702248	10943764	277464	3514644
Swap :	8388604	0	8388604		

available
13810116

(ii) free -h

output :

	total	used	free	shared	buff/cache
Mem :	15Gi	1.6Gi	10Gi	270Mi	3.4Gi
Swap :	8.0Gi	0B	8.0Gi		

available
13Gi

2) top

output :

top -14:37:03 up 1:03, 26 users, load average : 0.06, 0.02, 0.00
Tasks : 468 total, 1 running, 466 sleeping, 1 stopped, 0 zombie
%Cpu(s) : 0.0 us, 0.0 sy, 0.0 ni, 99.9 id, 0.0 wa, 0.0 hi, 0.0 si
MiB Mem : 15715.5 total, 10332.0 free, 1820.9 used
MiB Swap : 8192.0 total, 8192.0 free, 0.0 used

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM
8247	cse164	20	0	226784	4608	3455	R	0.3	0.0

:

3) vmstat

output :

procs ------- memory ------- ---swap--- ---io---- --system-- cpu ----

r b swpd free buff cache si so bi bo in cs us sy id wa st

1 0 0 10575180 5060 3652196 0 0 40 23 40 43 0 0 99 1 0

4) df

output :

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
devtmpfs	4096	0	4096	0%	/dev
tmpfs	8046328	0	8046328	0%	/dev/shm
tmpfs	3218532	2332	3216200	1%	/run
⋮					

5) ping 172.16.4.1

output :

PING 172.16.4.1 (172.16.4.1) 56(84) bytes of data.

64 bytes from 172.16.4.1 : icmp_seq=1 ttl=64 time=0.272 ms

64 bytes from 172.16.4.1 : icmp_seq=2 ttl=64 time=0.350 ms

⋮

7. rmdir cse164

Output : removes the directory cse164

File handling commands :

1. cat > file1
   "This is cse department"

Output : File 'file1' is created

2. cat file1

Output : This is cse department

3. cp file1 file2

Output : copies file1 to file2

4. rm file1

Output : removes file1

5. mv file1 file2

Output : moves file1 to file2

6. file file1

Output : ASCII text

7. wc file1

Output : 1 4 24 file1