

# OPERATING SYSTEM - CS23431

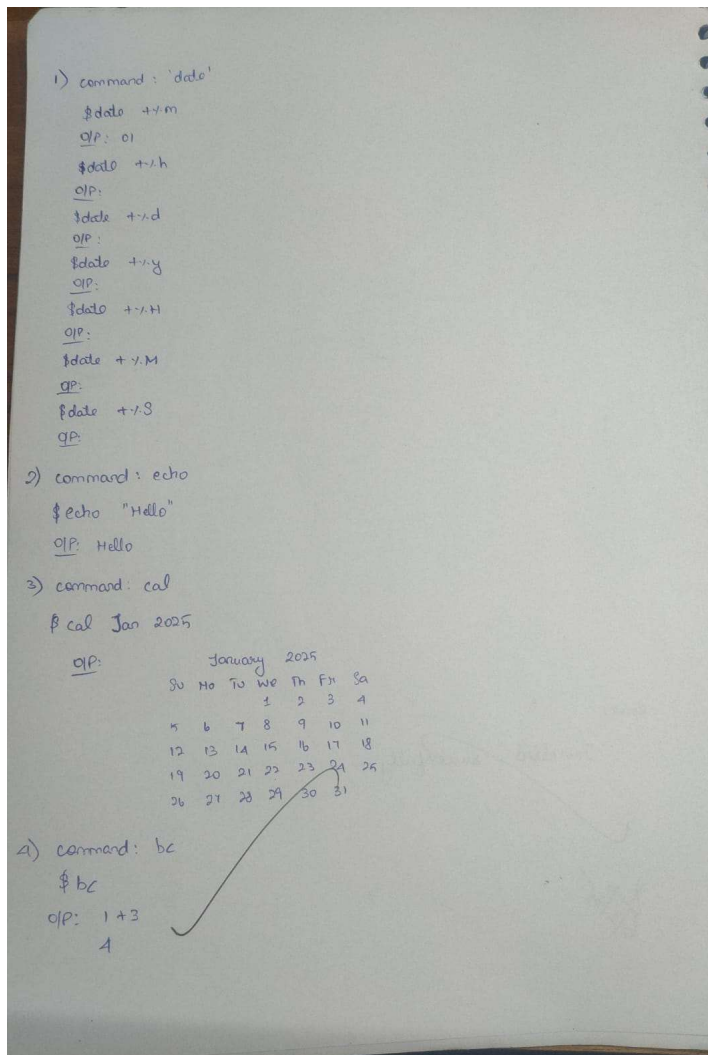
## EXP 1(B)

### BASIC LINUX COMMANDS

NAME: KARTHIKHA SRE M

ROLL NO: 230701143

#### GENERAL PURPOSE COMMANDS:



5) command: who

\$ who

OP: root tty 2025-02-01 13:35 (tty)  
csel43 pts/10 2025-02-01 13:37 (172.16.52.194)

6) command: who am i

\$ who am i

OP: csel43 pts/10 2025-02-01 13:37 (172.16.52.194)

7) command: id

uid=1146(csel43) gid=1146(csel43) groups=1146(csel43)

context=unconfined\_u:confined\_t:unconfined\_t:s0-s0:c0-c1003

8) command: tty

/dev/pts/10

9) command: clear

clears the screen

10) command: man man

gives complete access to unix commands.

11) command: ps

PID	TTY	TIME	CMD
3083	pts/10	00:00:00	bash
3642	pts/10	00:00:00	ps

12) command: uname

OP: Linux

\$ uname -m

OP: x86\_64

\$ uname -n

OP: fedora

\$ uname -r

OP: 6.5.15-100.fc36.x86\_64

\$ uname -s

OP: Linux

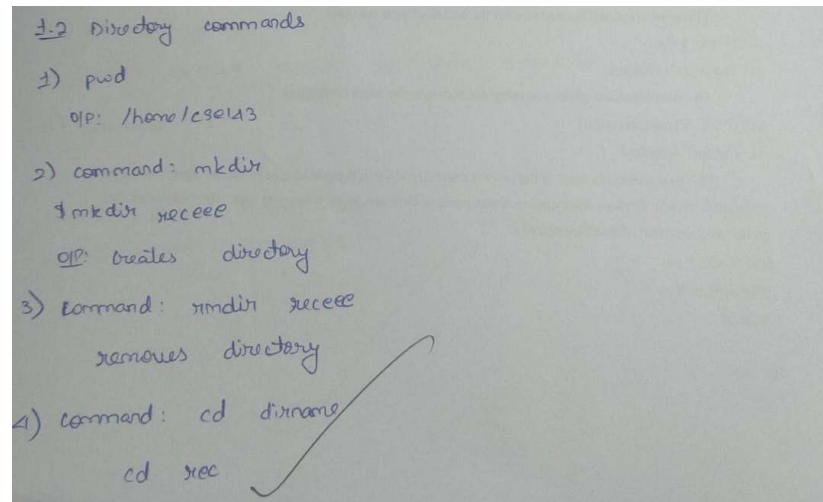
\$ uname -v

OP: #1 SMP PREEMPT\_DYNAMIC Thu May 11 16:51:53 UTC 2023

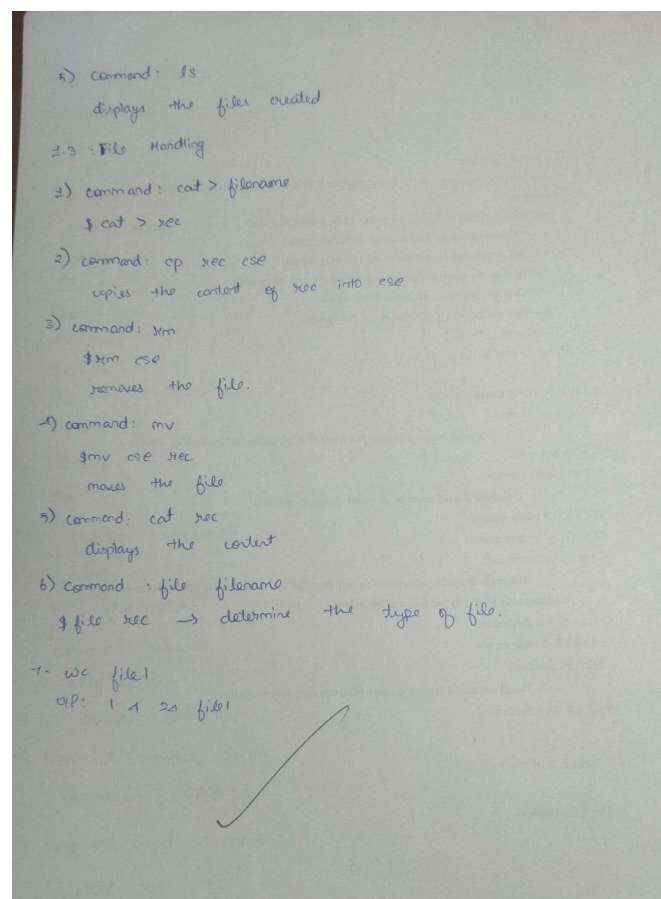
\$ uname -a

OP: Linux fedora 6.5.15-100.fc36.x86\_64 #1 SMP PREEMPT\_DYNAMIC  
Thu May 16:51:53 UTC 2023 x86\_64 x86\_64 x86\_64 GNU/Linux

## DIRECTORY COMMANDS:



## FILE HANDLING COMMANDS:



8. `ls > file2`  
OP: Directs list of files to file2

9. `who wc -l`  
OP: 28

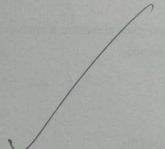
10. `who | tee file1 | wc -l`  
OP: 28

11. `ls f*`  
OP: file1

12. `ls [a-m]*`  
OP: file1

13. `ls [!a-m]*`  
OP: student

14. `ls -l`  
OP: : total 8  
 -r--r--r-- 1 cse143 cse143 21Feb 13:50 file1



## GROUPING COMMANDS:

15. `chmod -rwx file1`  
OP: Restricts read, write & execute access to file1

16. `chmod +rwx file1`  
OP: Gives read, write & execute access to file1

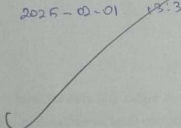
Grouping commands:

1. `who; date`  
OP:

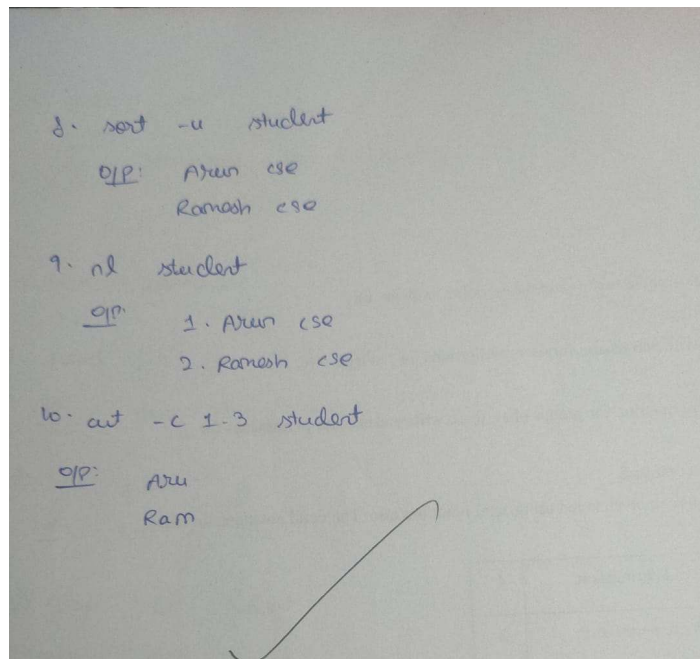
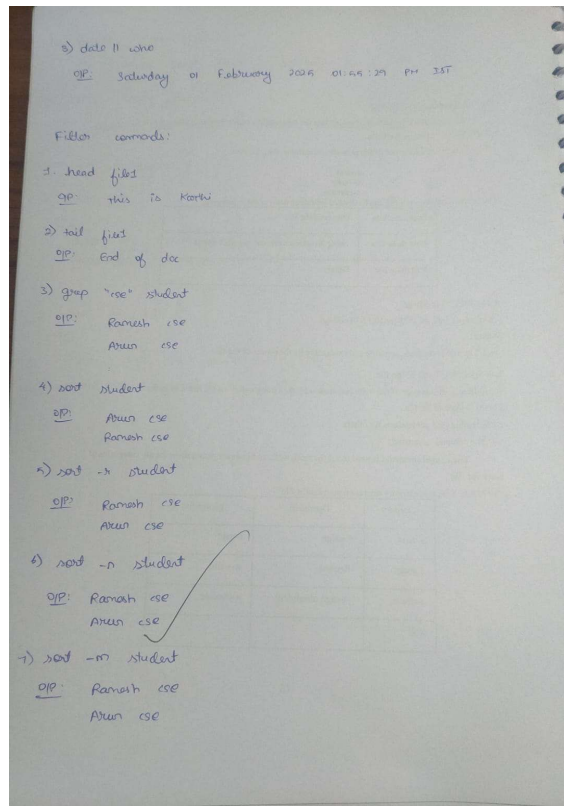
root	tty	2025-02-01	13:35	(tty)
cse161	pts/1	2025-02-01	13:39	(172.16.52.161)

2. `who && date`  
OP:

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



## FILTER COMMANDS:





## OTHER COMMANDS:

3. free command:

i) free

OP:	total	used	free	shared	buff/cache
Mem:	16092656	1702248	10664764	277644	3541644
Swap:	838604	0	838604		

ii) free -h

OP:	total	used	free	shared	buff/cache
Mem:	15 Gi	1.6 Gi	10Gi	270Mi	3468016
Swap:	8.0Gi	0B	8.0Gi		

2. top

OP:	PID	USER	PR	NI	VIRT	RES	SHRS	%CPU	%MEM	TIME	COMMAND
	1	root	20	0	0	0	0	0.0	0.1	0:0:0.1	top

1) vmstat

OP:	procs	memory	swap	io	system	cpu
	r b	swpd free buff cache si so	bi bo	in as	us sy id wa	
	1 0	0 108526 608 35360	0 0	17 23	12 15 0 0 99 1	

5) df

OP:	Filesystem	1K-blocks	Used	Available	Use %	Mounted on
	devtmpfs	1096	0	1096	0%	/dev
	/dev/sda1	98304	49302	49002	51%	/boot/efi

6) ping

ping 172.16.1.1

OP: PING 172.16.1.1 (172.16.1.1) 56(84) bytes of data:

64 bytes from 172.16.1.1: icmp\_seq=1 ttl=64 time=0.328 ms

7) ifconfig

OP: ip netns exec ns1 ip netns exec ns2 ifconfig eth0 172.16.1.1 netmask 255.255.255.0 broadcast 172.16.1.255

8) traceoute

traceoute www.rajalakshmi.org

OP: traceoute to www.rajalakshmi.org (14.99.10.232), 30 hops max,

60 byte packets

1. rajalakshmi.org (14.99.10.232) 0.235 ms 0.199 ms 0.193 ms

2. \* rajalakshmi.org (14.99.10.232) 0.681 ms