G. H. Raisoni College Of Engineering And Management, Wagholi Pune

2021- 2022

Assignment no :- 1

Department	CE [SUMMER 2022]		
Term / Section	III/B	Date Of **submission**	15-02-2022
Subject Name /Code	Operating System / UITP203		
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Registration Number	2020AC0E1100107		

Practical No 1

* **Aim** :→ Study of Unix / Linux general purpose utility commands list obtained from (man, who, cat, cd, cp, ps, ls, mv, rm, mkdir, rmdir, echo, more, data, time, kill, history, chmod, chown, finger, pwd, cal, logout, Shutdown) commands

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* **Theory:→**

The followings are the commands :→

(1) **pwd** :→ The pwd command is used to display the location of current working directory

2) **mkdir** :→ The mkdir command is used to create a new directory under any directory

3) **rmdir** :→ The rmdir comand is used to remove the directory

4) **ls** :→ display list of content of a directory

(5) **cd** :→ The cd command is used to change the current directory

(6) **man** :→ We can use this command after any command to get the official documentation written for that perticular command.

7) **who** → To check the user we use the who command

(8) **touch** → To create empty files

(9) **rm** → To Remove files

(10) cat :→ Display files contents on the terminal

(11) echo :→ print any text that follows the command

(12) data :→ displays date

(13) time :→ determine how long a given command takes to run

(14) history :→ To view the previously executed commands

(15) shutdown :→ Shutdown system in a safe way

(16) logout :→ logout from our session

(17) ipconfig / ifconfig :→ To configure the kernal-resident network interfaces

(18) ping :→ To check network connectivity between host and server / host

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* Linux command →
is a utility of the Linux operating system. All basic and advanced tasks can be done by executing on the Linux terminal

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* Shell programming →
The shell is a layer of programming that understands and executes commands entered by user.
A shell script is designed to be run by the Unix shell, a command line interpreter.

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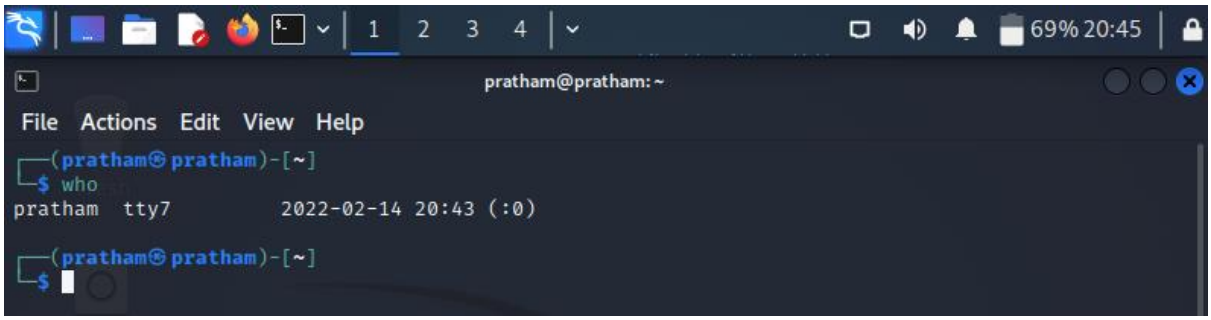
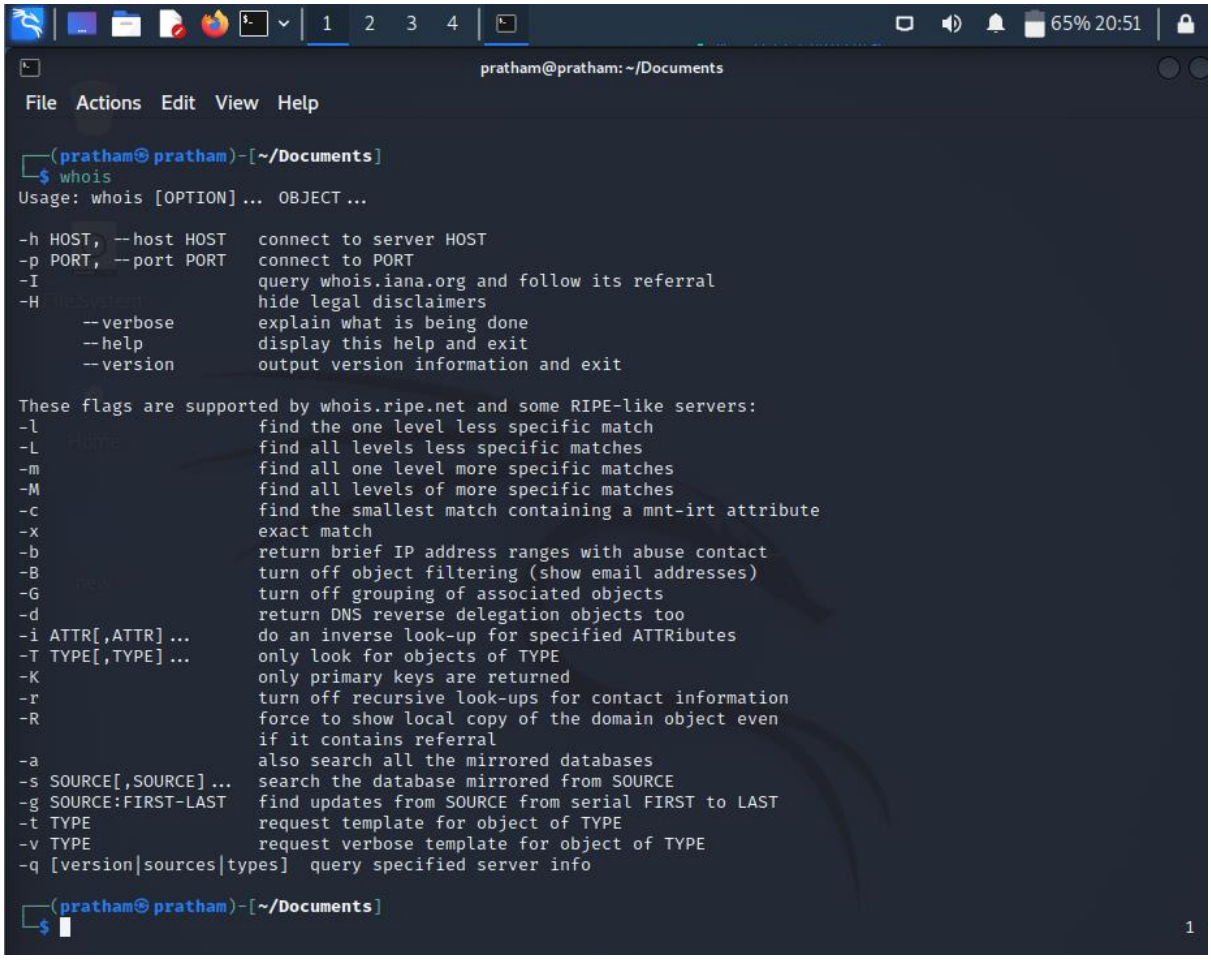
* Conclusion :→ Thus using different shell commands, we successfully operated the unix based terminals to understand the core behind OS.

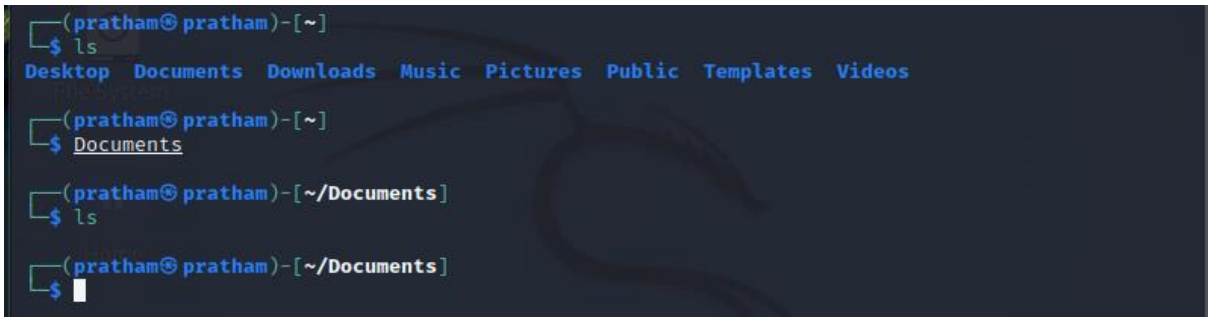
1) who



2)whois

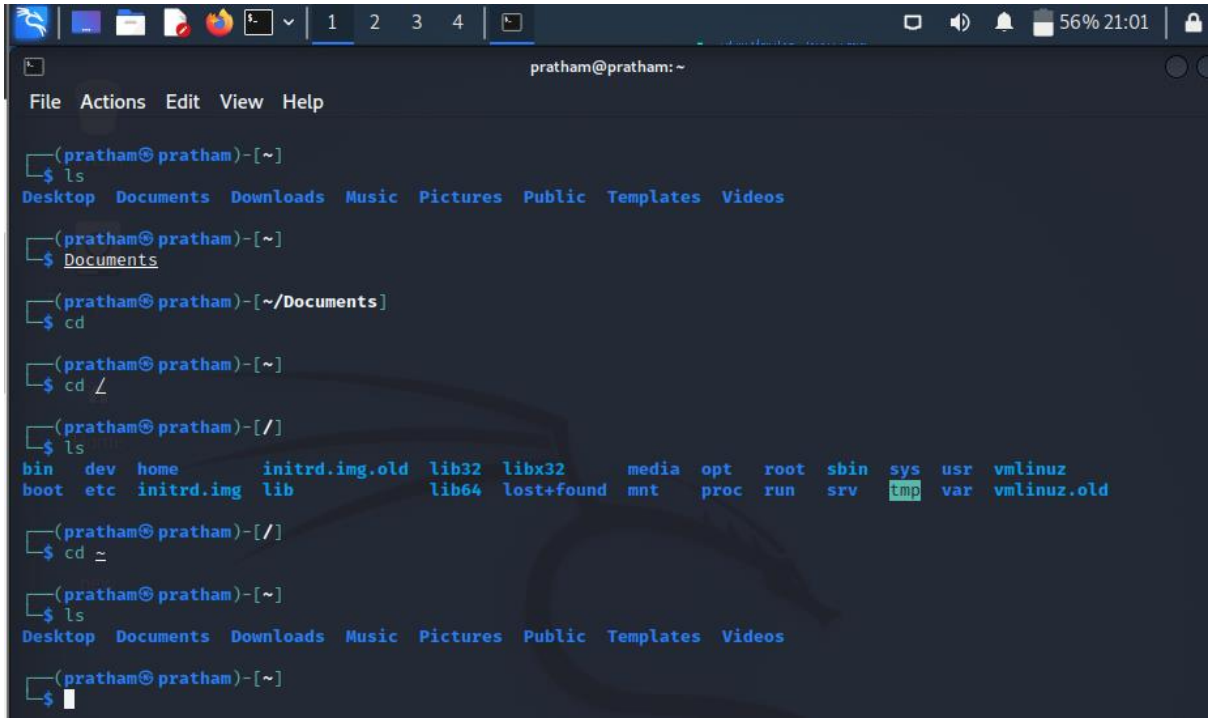


3) **ls** – The most frequently used command in Linux to list directories

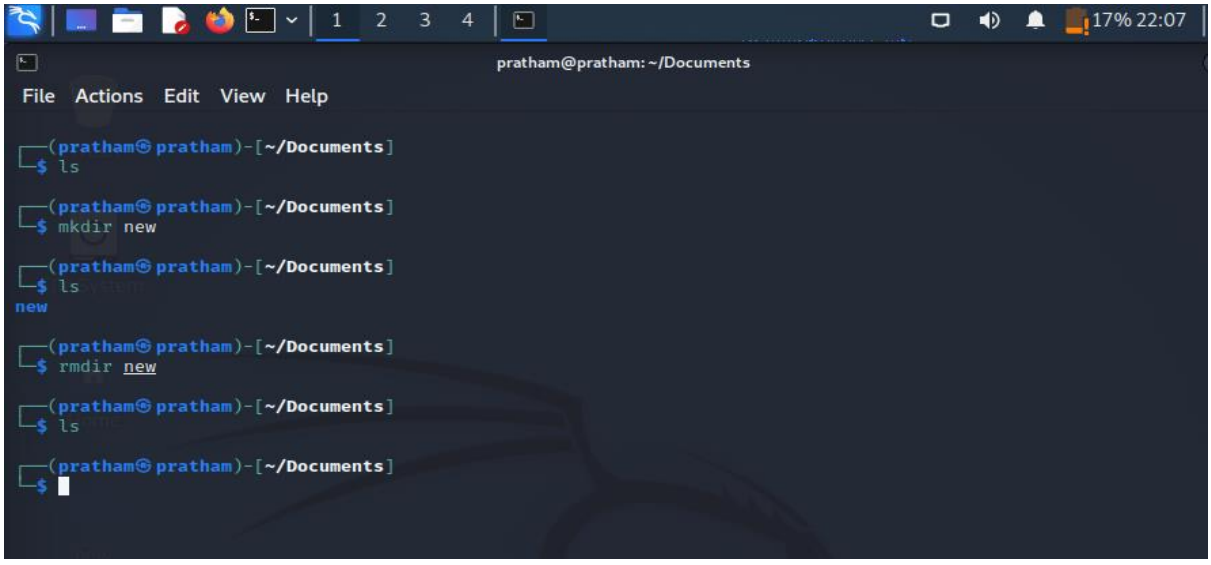


4) **pwd** – Print working directory command in Linux

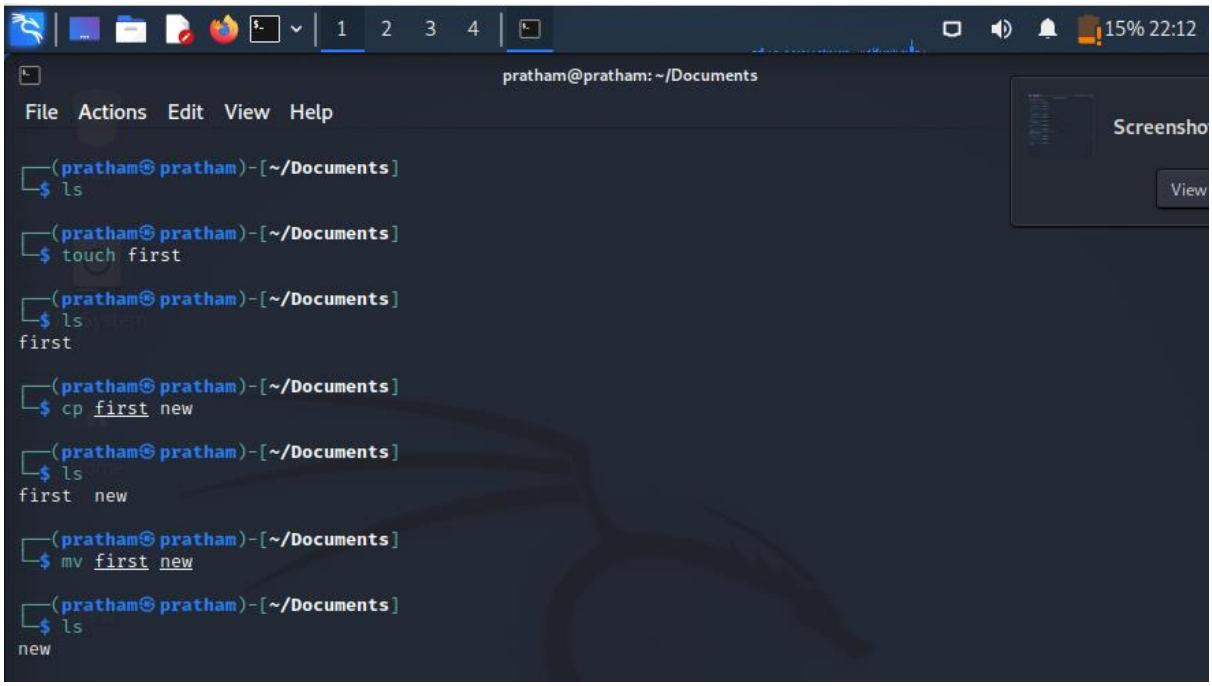
5) **cd** – Linux command to navigate through directories



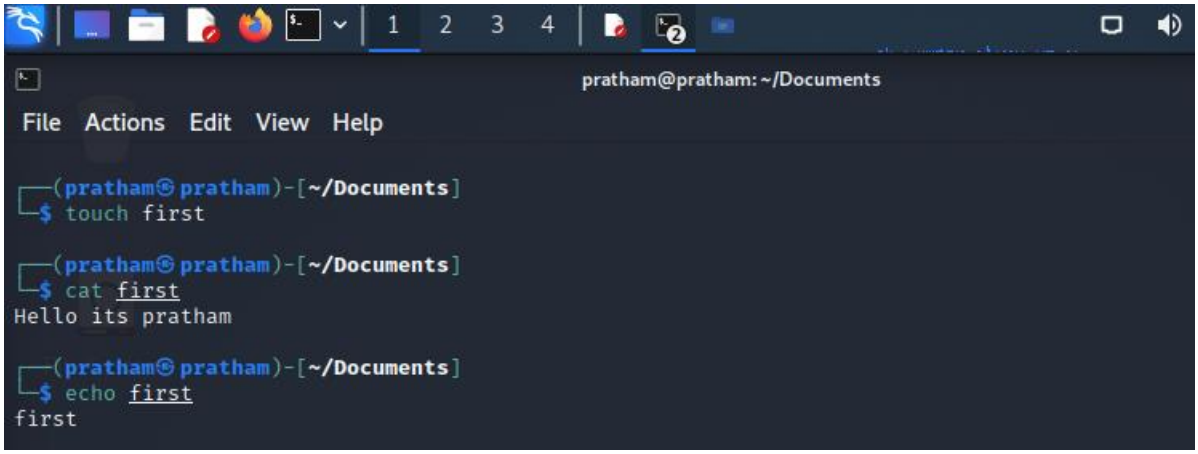
6) mkdir , rmdir



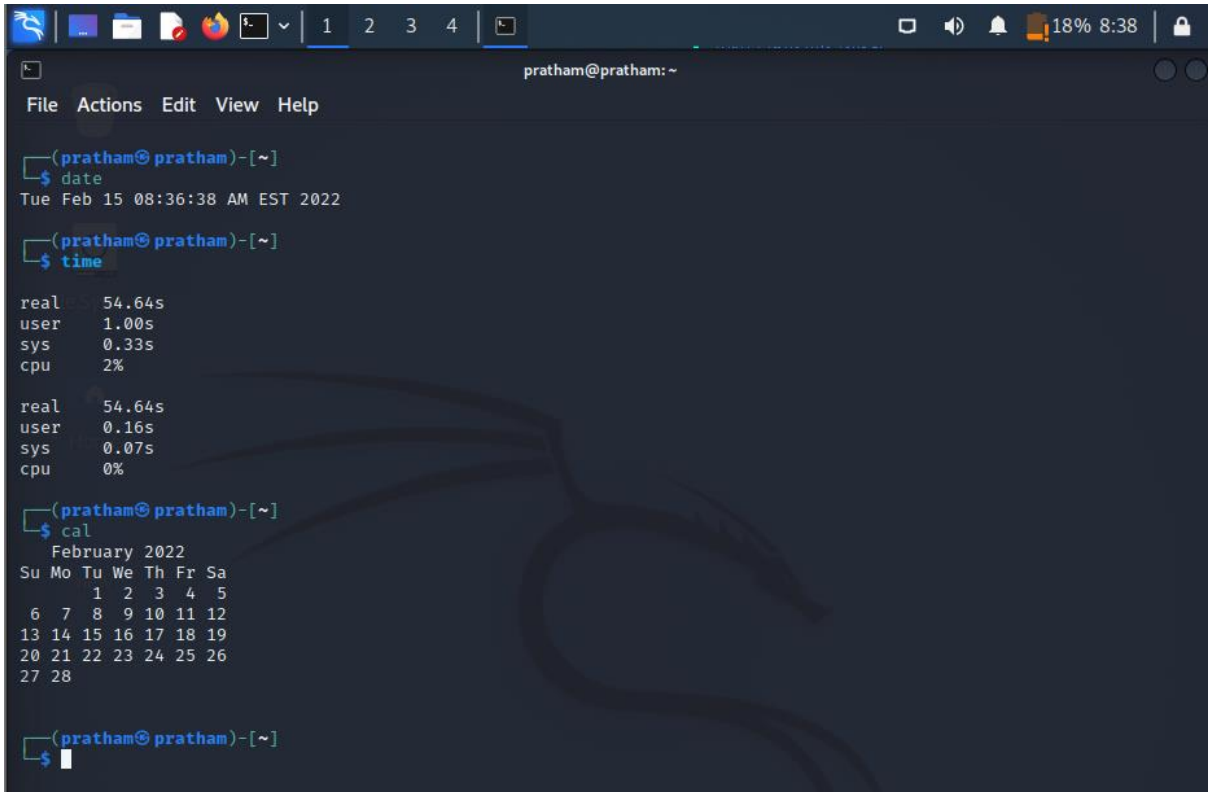
7) touch , rm , cp , mv



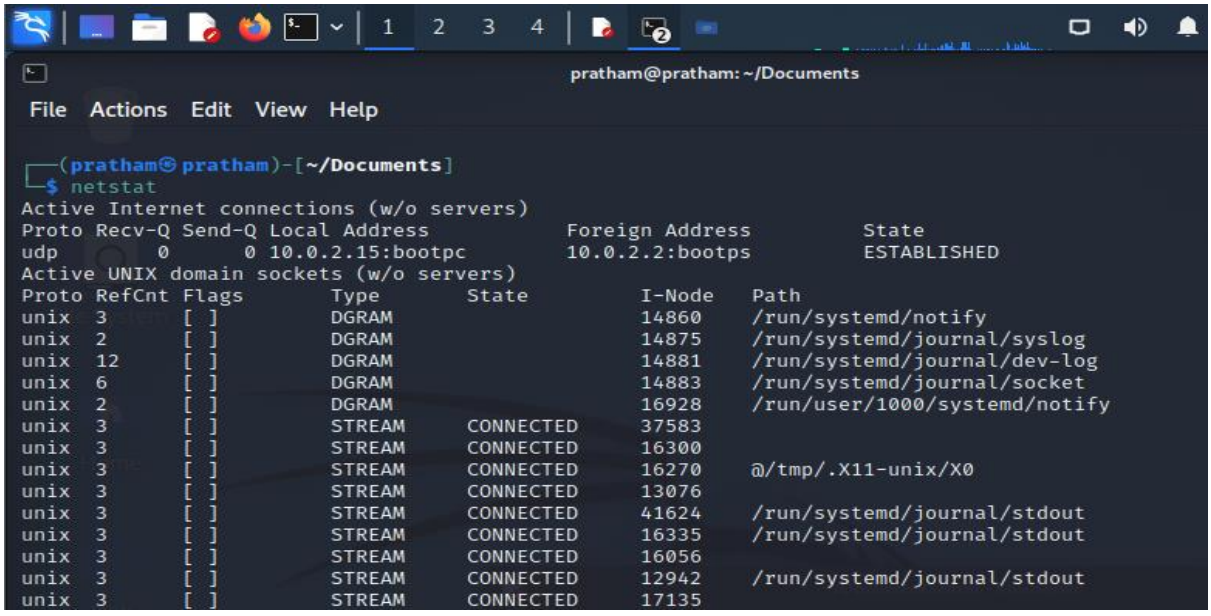
8) touch, cat, echo



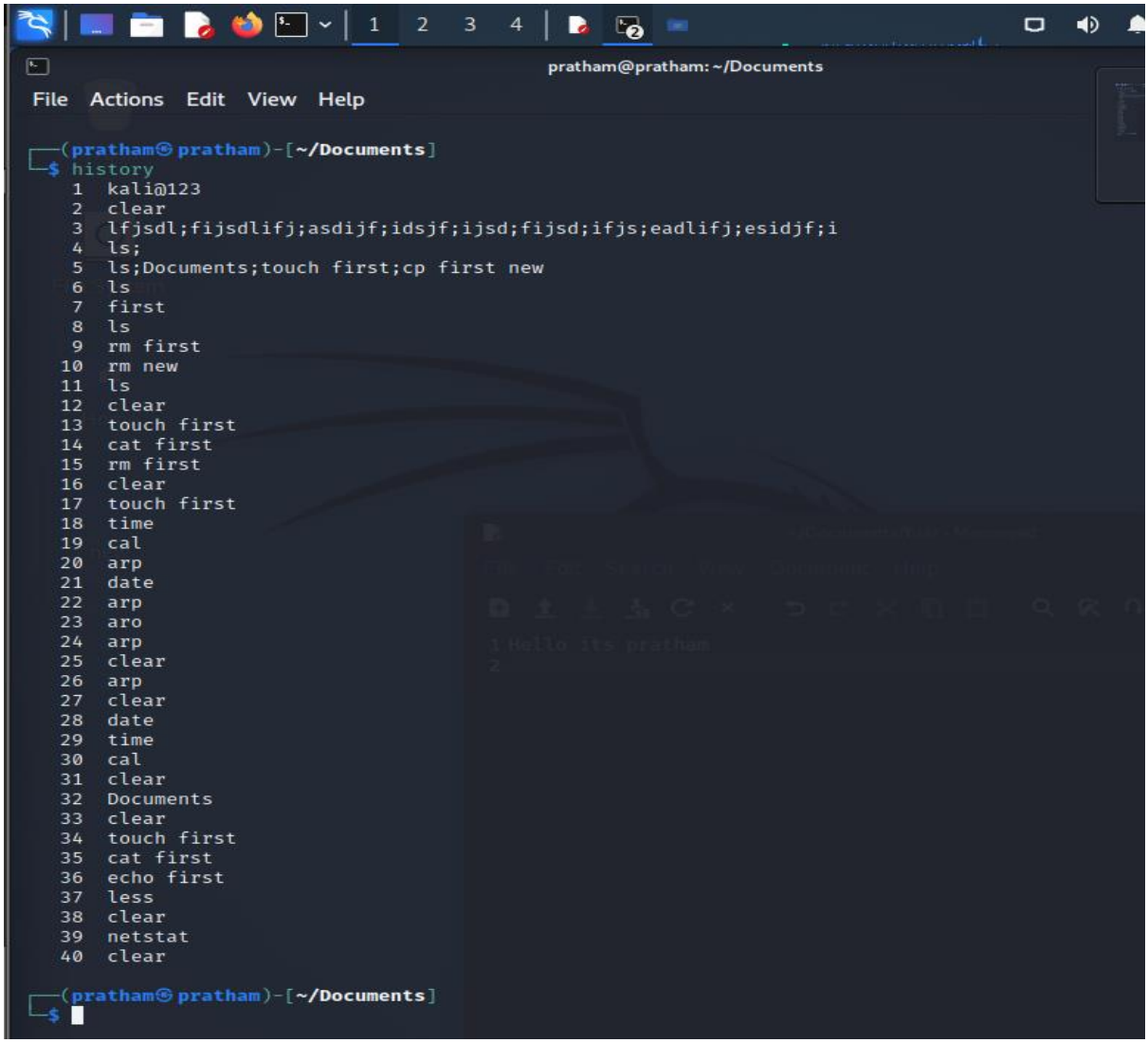
9)date , time , cal


1 2 3 4
18% 8:38
pratham@pratham: ~
File Actions Edit View Help
(pratham㉿pratham)-[~]
$ date
Tue Feb 15 08:36:38 AM EST 2022
(pratham㉿pratham)-[~]
$ time
real 54.64s
user 1.00s
sys 0.33s
cpu 2%
real 54.64s
user 0.16s
sys 0.07s
cpu 0%
(pratham㉿pratham)-[~]
$ cal
February 2022
Su Mo Tu We Th Fr Sa
1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28
(pratham㉿pratham)-[~]
$

10) netstat

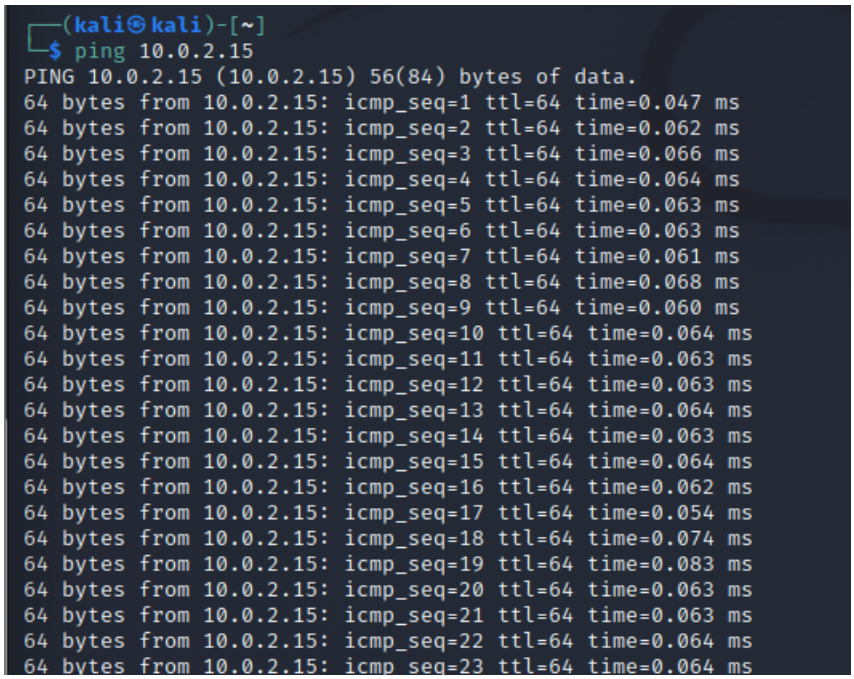

1 2 3 4
pratham@pratham: ~/Documents
File Actions Edit View Help
(pratham㉿pratham)-[~/Documents]
$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
udp 0 0 10.0.2.15:bootpc 10.0.2.2:bootps ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags Type State I-Node Path
unix 3 [ ] DGRAM 14860 /run/systemd/notify
unix 2 [ ] DGRAM 14875 /run/systemd/journal/syslog
unix 12 [ ] DGRAM 14881 /run/systemd/journal/dev-log
unix 6 [ ] DGRAM 14883 /run/systemd/journal/socket
unix 2 [ ] DGRAM 16928 /run/user/1000/systemd/notify
unix 3 [ ] STREAM CONNECTED 37583
unix 3 [ ] STREAM CONNECTED 16300
unix 3 [ ] STREAM CONNECTED 16270 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 13076
unix 3 [ ] STREAM CONNECTED 41624 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 16335 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 16056
unix 3 [ ] STREAM CONNECTED 12942 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 17135

11)history



12)ifconfig

13)ping


┌──(kali㉿kali)-[~]
└─$ ping 10.0.2.15
PING 10.0.2.15 (10.0.2.15) 56(84) bytes of data.
64 bytes from 10.0.2.15: icmp_seq=1 ttl=64 time=0.047 ms
64 bytes from 10.0.2.15: icmp_seq=2 ttl=64 time=0.062 ms
64 bytes from 10.0.2.15: icmp_seq=3 ttl=64 time=0.066 ms
64 bytes from 10.0.2.15: icmp_seq=4 ttl=64 time=0.064 ms
64 bytes from 10.0.2.15: icmp_seq=5 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=6 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=7 ttl=64 time=0.061 ms
64 bytes from 10.0.2.15: icmp_seq=8 ttl=64 time=0.068 ms
64 bytes from 10.0.2.15: icmp_seq=9 ttl=64 time=0.060 ms
64 bytes from 10.0.2.15: icmp_seq=10 ttl=64 time=0.064 ms
64 bytes from 10.0.2.15: icmp_seq=11 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=12 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=13 ttl=64 time=0.064 ms
64 bytes from 10.0.2.15: icmp_seq=14 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=15 ttl=64 time=0.064 ms
64 bytes from 10.0.2.15: icmp_seq=16 ttl=64 time=0.062 ms
64 bytes from 10.0.2.15: icmp_seq=17 ttl=64 time=0.054 ms
64 bytes from 10.0.2.15: icmp_seq=18 ttl=64 time=0.074 ms
64 bytes from 10.0.2.15: icmp_seq=19 ttl=64 time=0.083 ms
64 bytes from 10.0.2.15: icmp_seq=20 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=21 ttl=64 time=0.063 ms
64 bytes from 10.0.2.15: icmp_seq=22 ttl=64 time=0.064 ms
64 bytes from 10.0.2.15: icmp_seq=23 ttl=64 time=0.064 ms