Name: GOKUL R

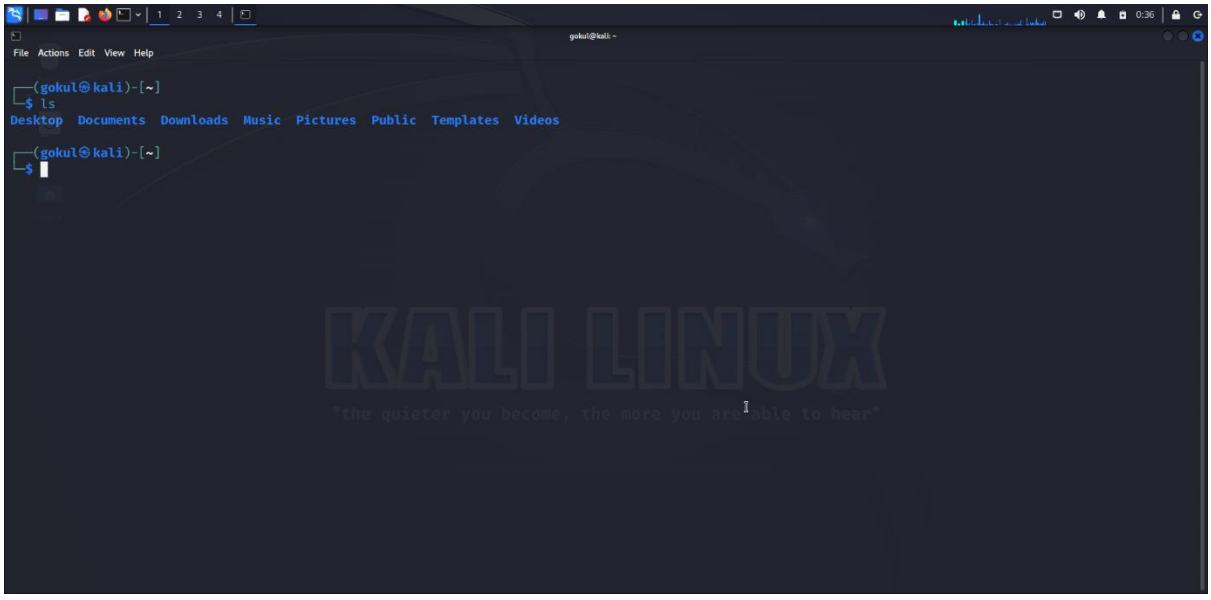
Reg. No: 20MIS0332

Course: Cyber Security and Ethical Hacking

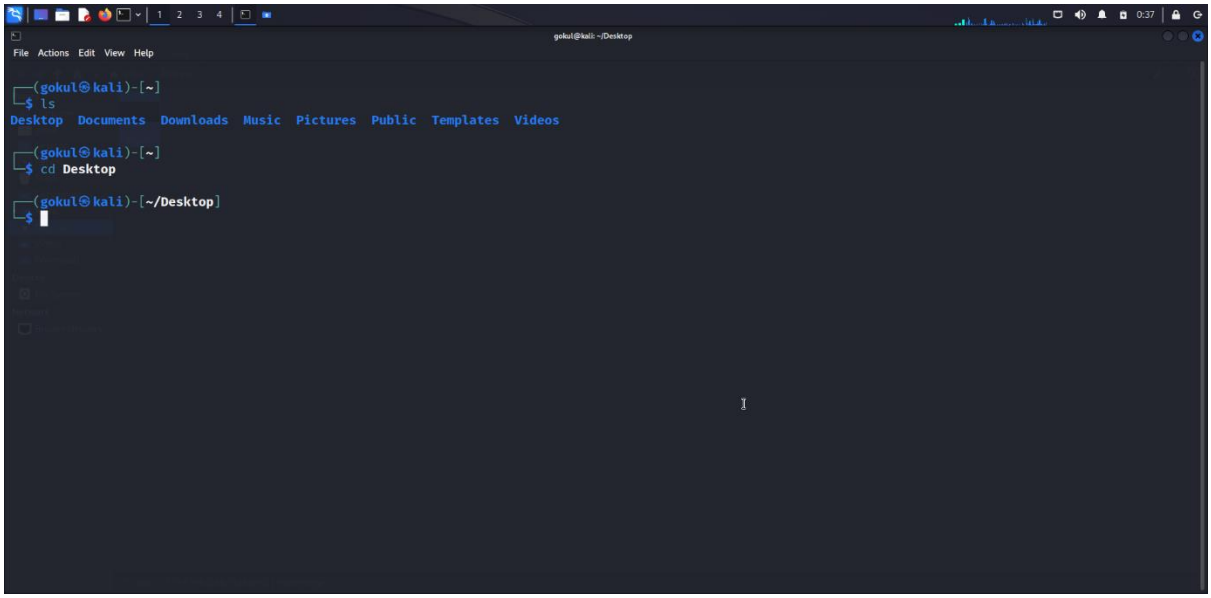
Campus: VIT Vellore

File and directory commands:

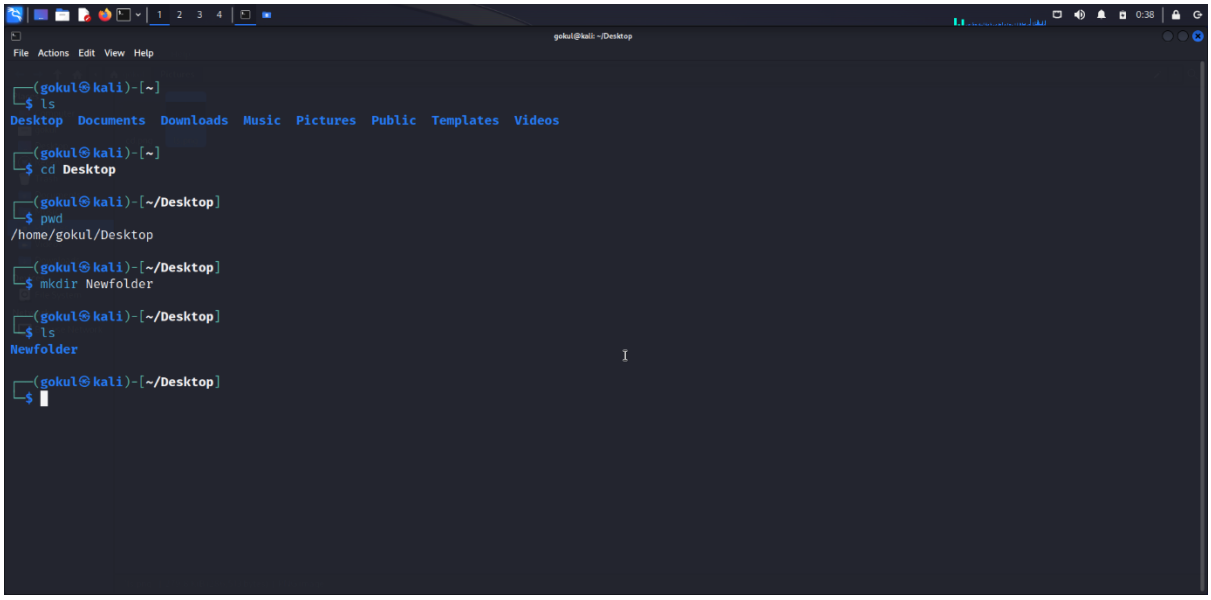
Ls:



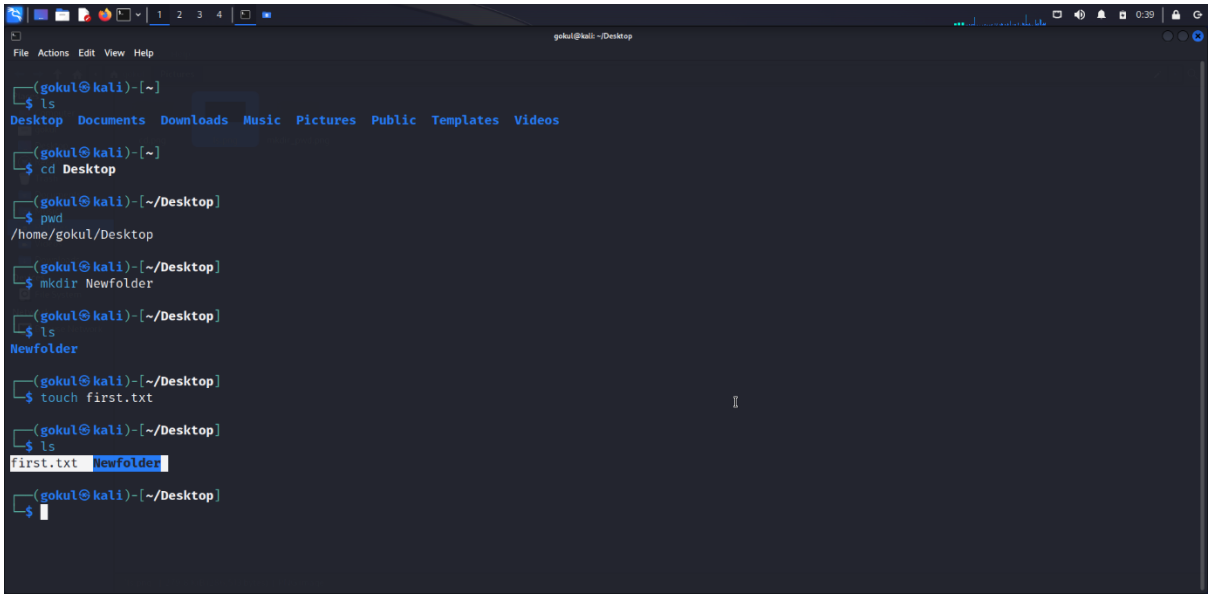
Cd:



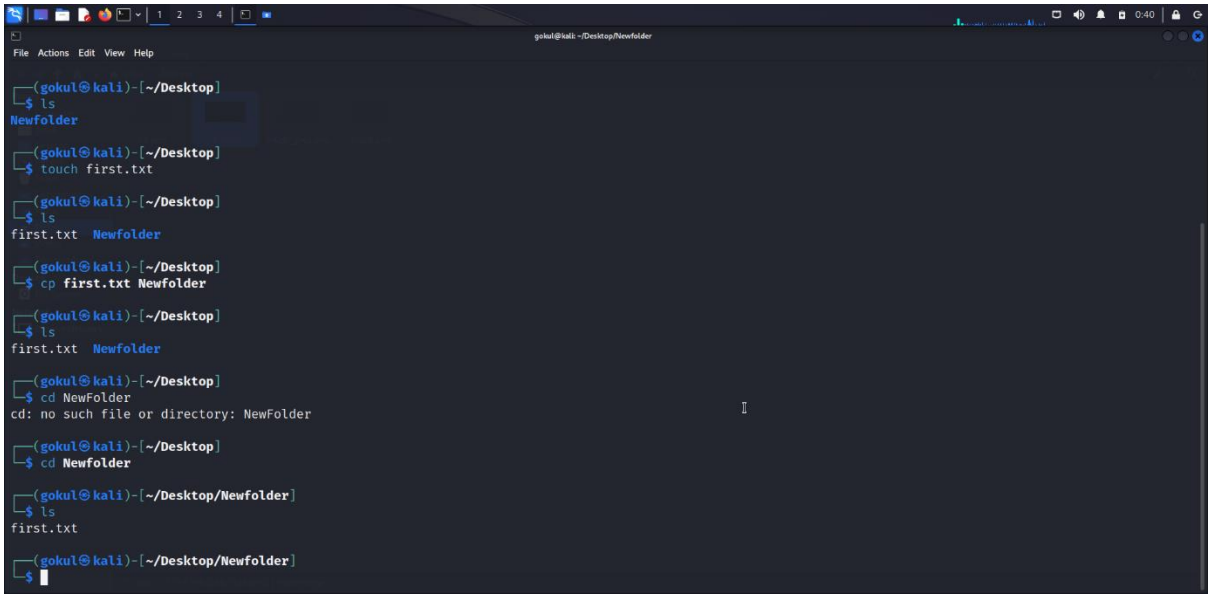
Pwd & Mkdir:



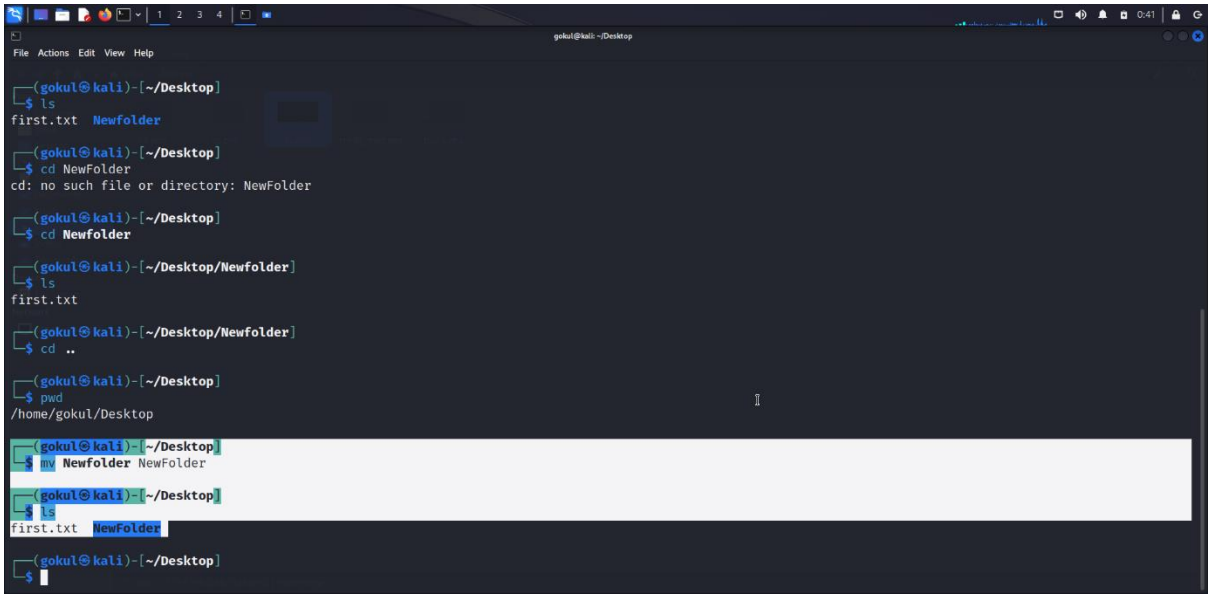
Touch:


gokul@kali: ~/Desktop
File Actions Edit View Help
(gokul㉿kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates Videos
(gokul㉿kali)-[~]
$ cd Desktop
(gokul㉿kali)-[~/Desktop]
$ pwd
/home/gokul/Desktop
(gokul㉿kali)-[~/Desktop]
$ mkdir Newfolder
(gokul㉿kali)-[~/Desktop]
$ ls
Newfolder
(gokul㉿kali)-[~/Desktop]
$ touch first.txt
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt Newfolder
(gokul㉿kali)-[~/Desktop]
$

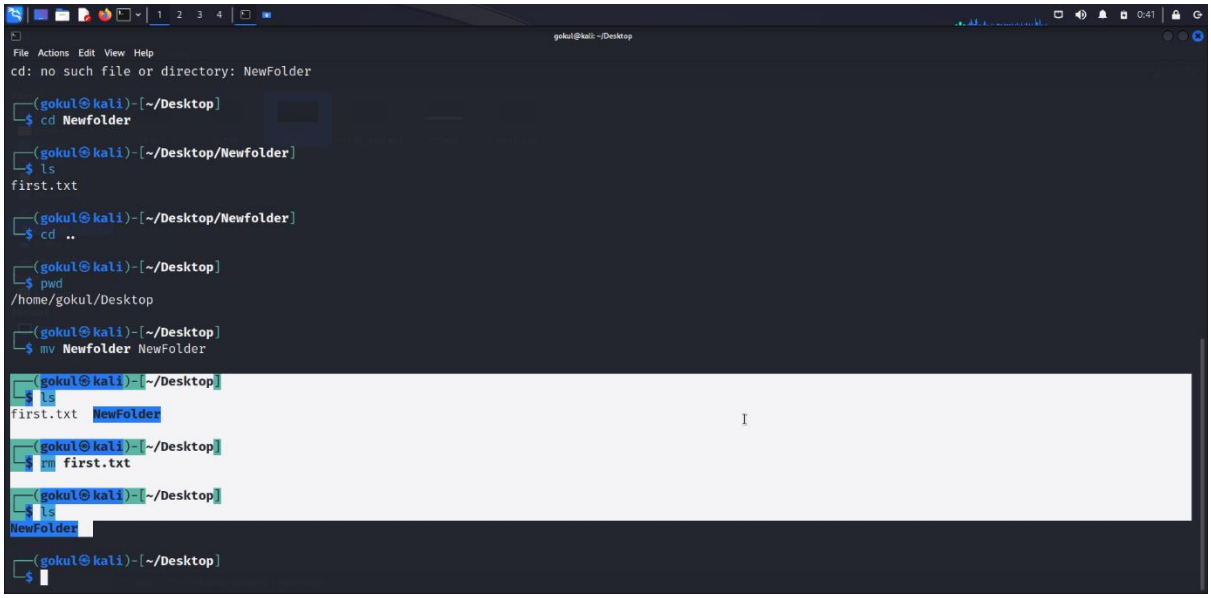
Cp:


gokul@kali: ~/Desktop/Newfolder
File Actions Edit View Help
(gokul㉿kali)-[~/Desktop]
$ ls
Newfolder
(gokul㉿kali)-[~/Desktop]
$ touch first.txt
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt Newfolder
(gokul㉿kali)-[~/Desktop]
$ cp first.txt Newfolder
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt Newfolder
(gokul㉿kali)-[~/Desktop]
$ cd NewFolder
cd: no such file or directory: NewFolder
(gokul㉿kali)-[~/Desktop]
$ cd Newfolder
(gokul㉿kali)-[~/Desktop/Newfolder]
$ ls
first.txt
(gokul㉿kali)-[~/Desktop/Newfolder]
$

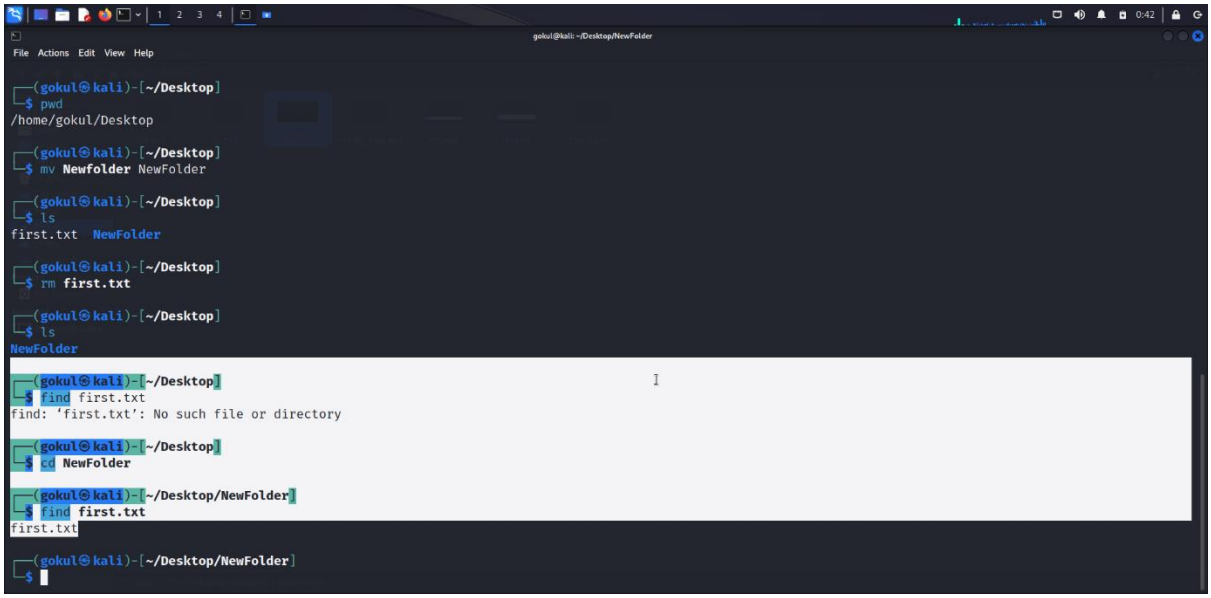
Mv:


File Actions Edit View Help
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt Newfolder
(gokul㉿kali)-[~/Desktop]
$ cd NewFolder
cd: no such file or directory: NewFolder
(gokul㉿kali)-[~/Desktop]
$ cd Newfolder
(gokul㉿kali)-[~/Desktop/Newfolder]
$ ls
first.txt
(gokul㉿kali)-[~/Desktop/Newfolder]
$ cd ..
(gokul㉿kali)-[~/Desktop]
$ pwd
/home/gokul/Desktop
(gokul㉿kali)-[~/Desktop]
$ mv Newfolder NewFolder
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt NewFolder
(gokul㉿kali)-[~/Desktop]
$

Rm:

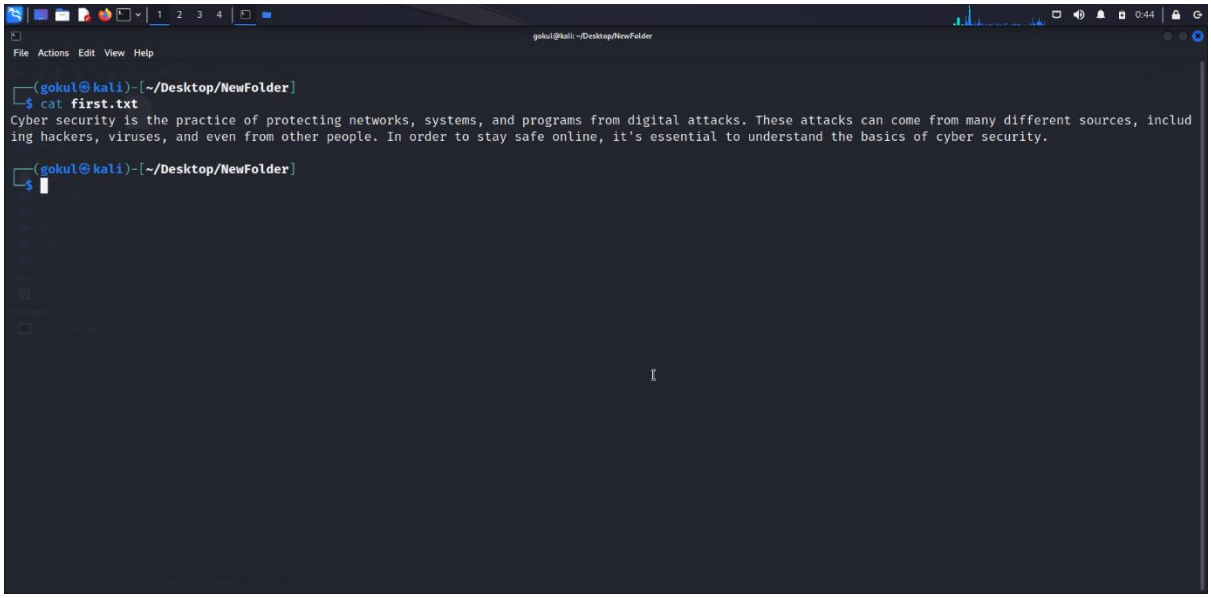

File Actions Edit View Help
cd: no such file or directory: NewFolder
(gokul㉿kali)-[~/Desktop]
$ cd Newfolder
(gokul㉿kali)-[~/Desktop/Newfolder]
$ ls
first.txt
(gokul㉿kali)-[~/Desktop/Newfolder]
$ cd ..
(gokul㉿kali)-[~/Desktop]
$ pwd
/home/gokul/Desktop
(gokul㉿kali)-[~/Desktop]
$ mv Newfolder NewFolder
(gokul㉿kali)-[~/Desktop]
$ ls
first.txt NewFolder
(gokul㉿kali)-[~/Desktop]
$ rm first.txt
(gokul㉿kali)-[~/Desktop]
$ ls
NewFolder
(gokul㉿kali)-[~/Desktop]
$

Find:



File Viewing and Editing:

Cat:



Less:

gokul@kali: ~/Desktop/NewFolder
File Actions Edit View Help
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from many different sources, includ
ing hackers, viruses, and even from other people. In order to stay safe online, it's essential to understand the basics of cyber security.
(END)

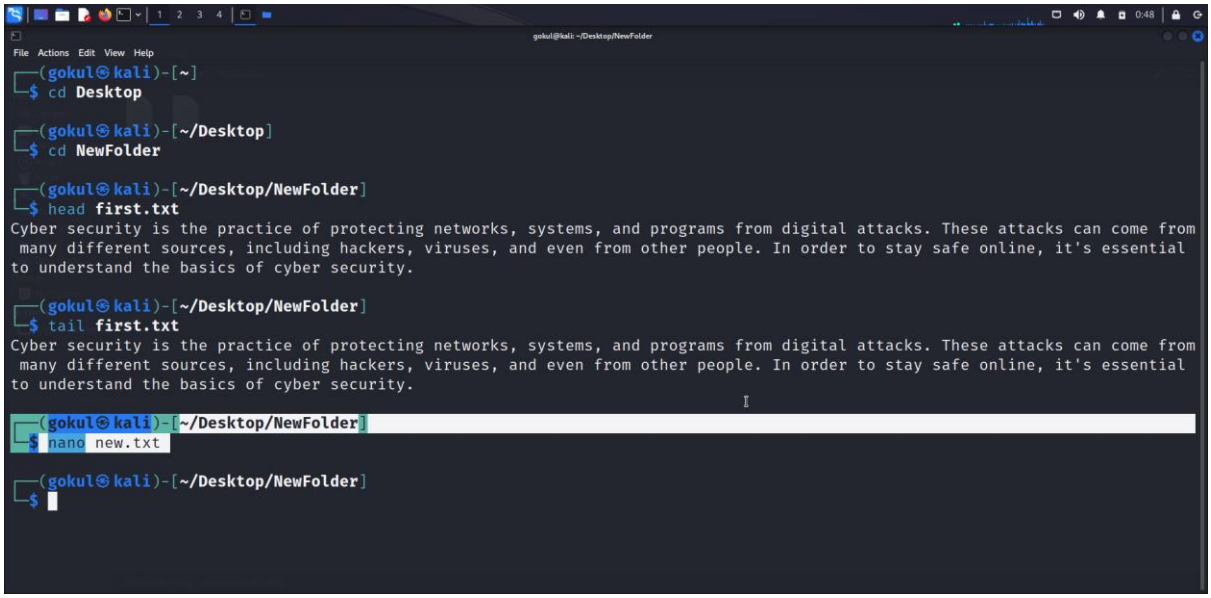
Head:

gokul@kali: ~/Desktop/NewFolder
File Actions Edit View Help
(gokul㉿kali)-[~]
$ cd Desktop
(gokul㉿kali)-[~/Desktop]
$ cd NewFolder
(gokul㉿kali)-[~/Desktop/NewFolder]
$ head first.txt
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from
many different sources, including hackers, viruses, and even from other people. In order to stay safe online, it's essential
to understand the basics of cyber security.
(gokul㉿kali)-[~/Desktop/NewFolder]
$

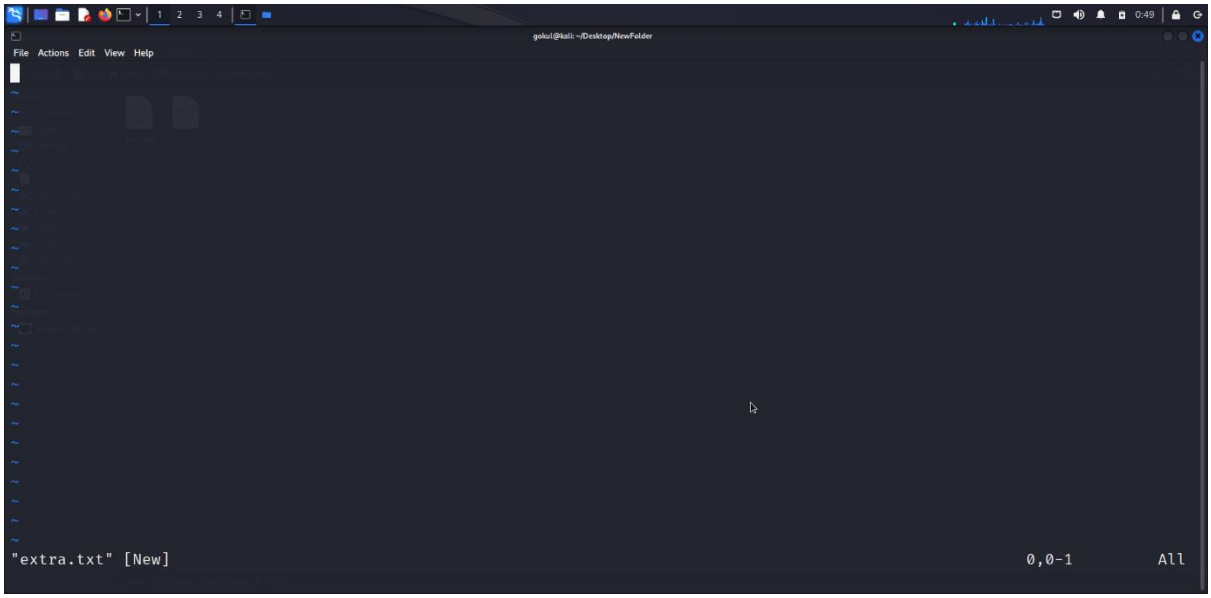
Tail:

File Actions Edit View Help
(gokul㉿kali)-[~]
$ cd Desktop
(gokul㉿kali)-[~/Desktop]
$ cd NewFolder
(gokul㉿kali)-[~/Desktop/NewFolder]
$ head first.txt
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from many different sources, including hackers, viruses, and even from other people. In order to stay safe online, it's essential to understand the basics of cyber security.
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tail first.txt
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from many different sources, including hackers, viruses, and even from other people. In order to stay safe online, it's essential to understand the basics of cyber security.
(gokul㉿kali)-[~/Desktop/NewFolder]
$

Nano:

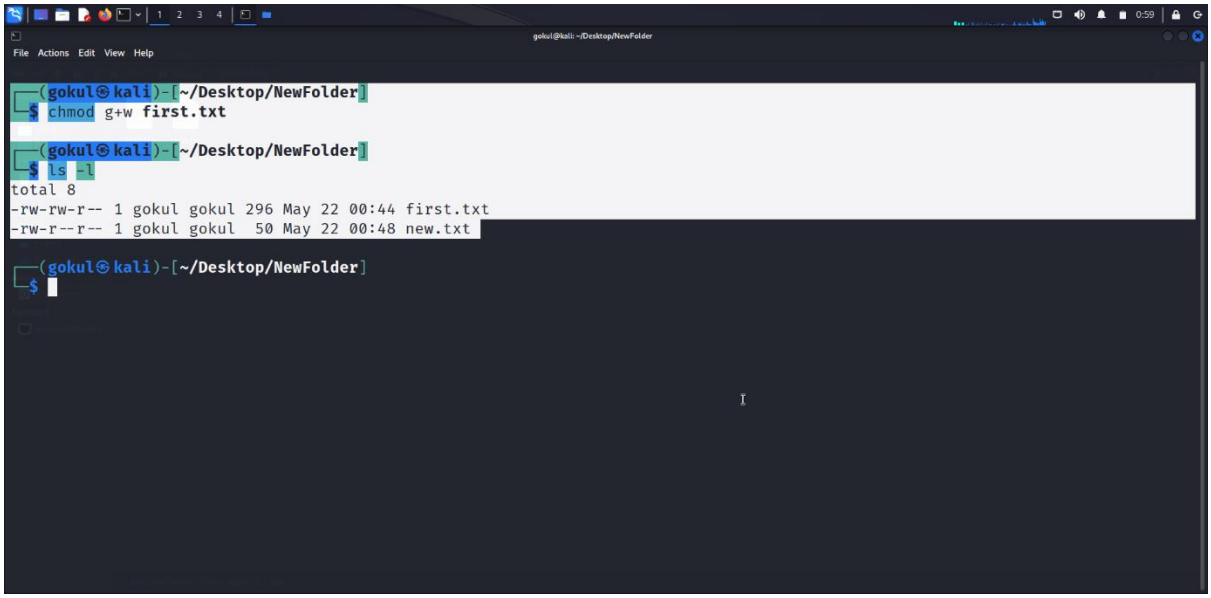

File Actions Edit View Help
(gokul㉿kali)-[~]
$ cd Desktop
(gokul㉿kali)-[~/Desktop]
$ cd NewFolder
(gokul㉿kali)-[~/Desktop/NewFolder]
$ head first.txt
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from many different sources, including hackers, viruses, and even from other people. In order to stay safe online, it's essential to understand the basics of cyber security.
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tail first.txt
Cyber security is the practice of protecting networks, systems, and programs from digital attacks. These attacks can come from many different sources, including hackers, viruses, and even from other people. In order to stay safe online, it's essential to understand the basics of cyber security.
(gokul㉿kali)-[~/Desktop/NewFolder]
$ nano new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$

Vim:

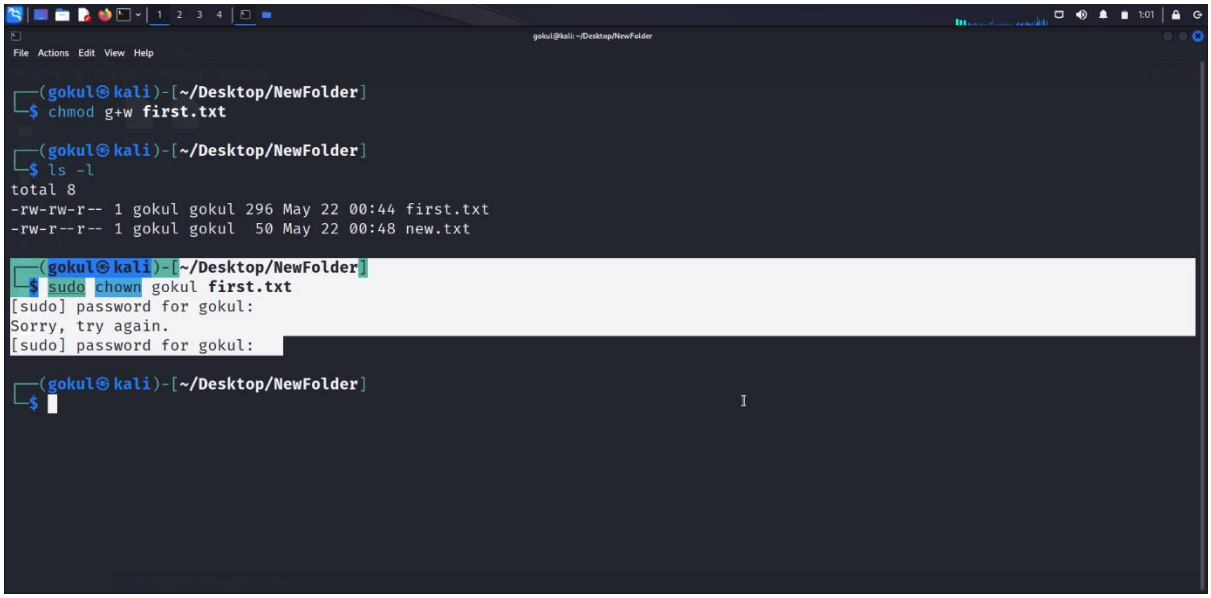


File Permission:

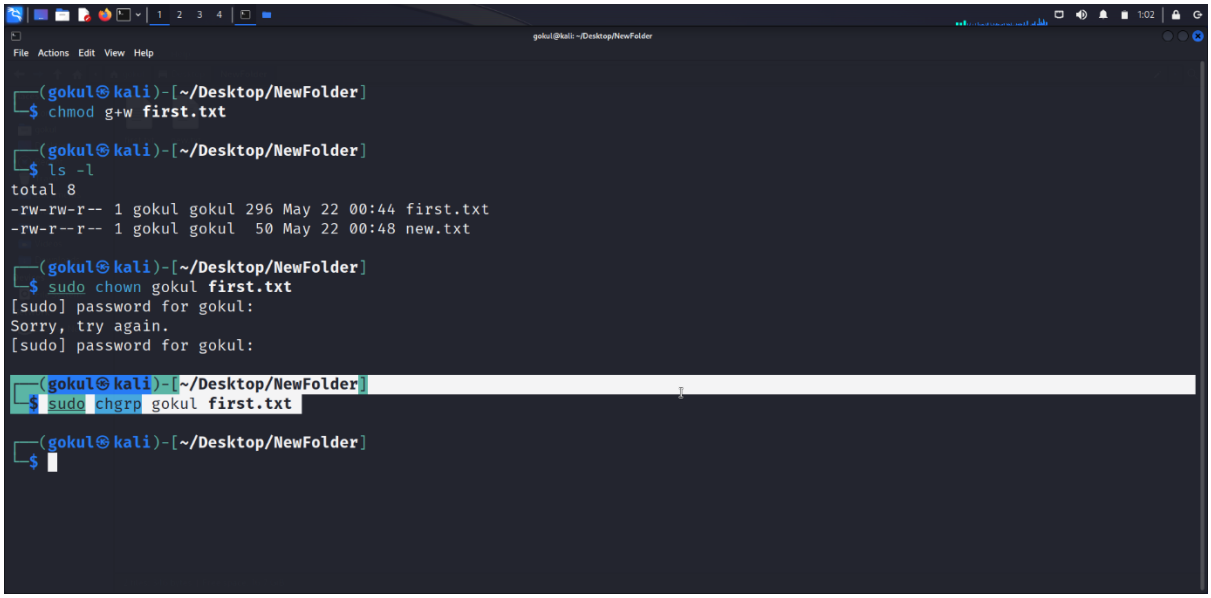
Chmod:



Chown:

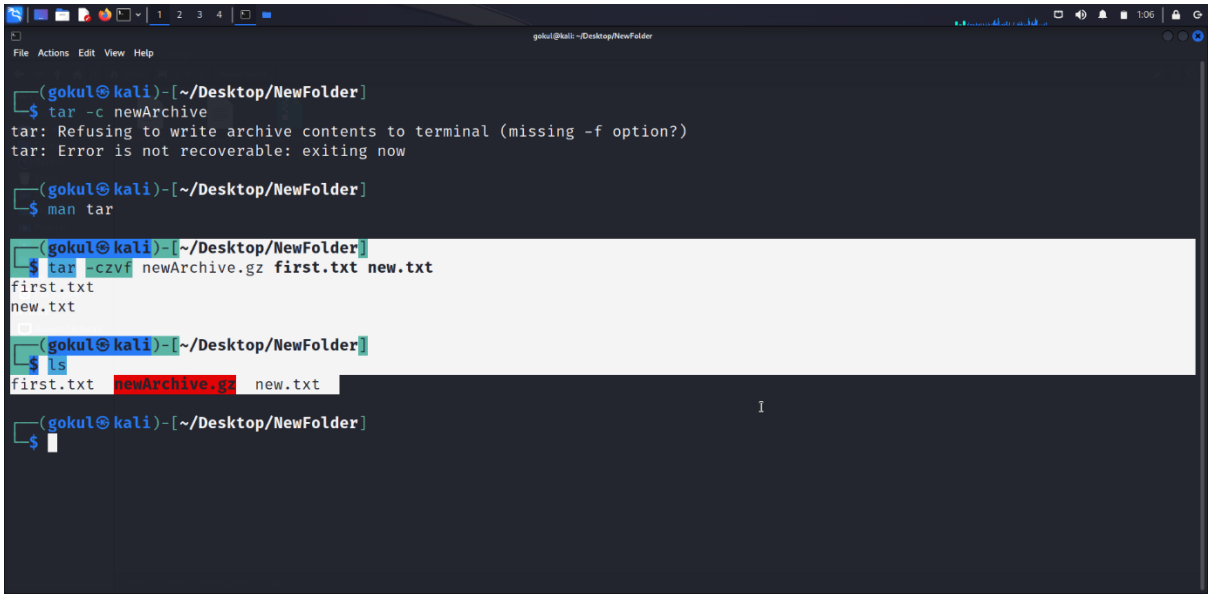


Chgrp:

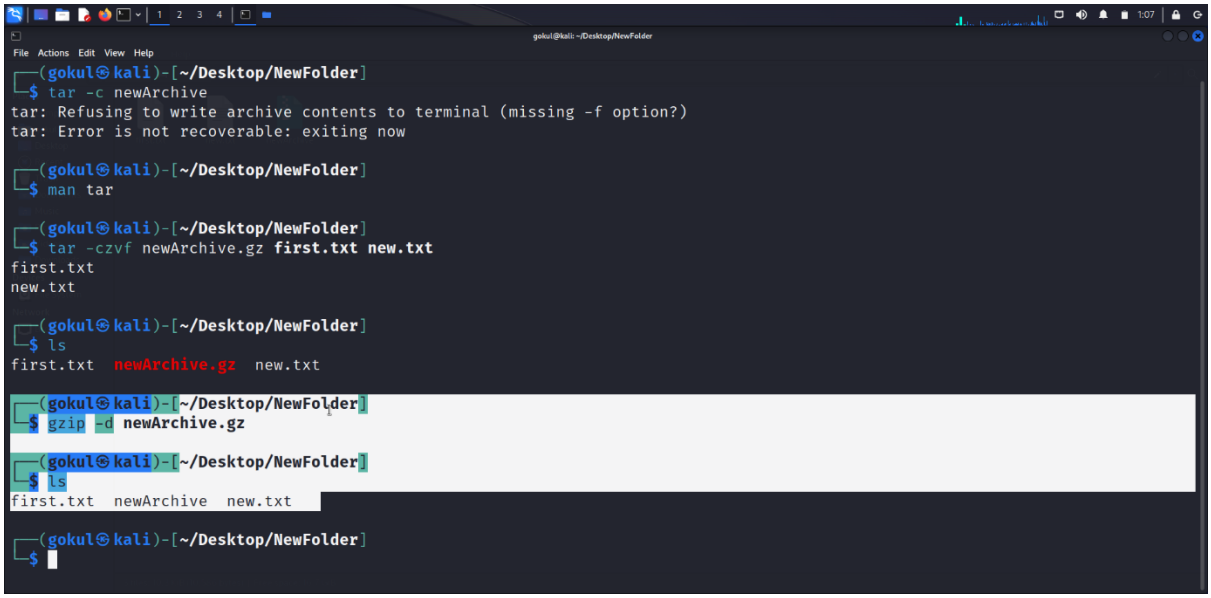


File Compression and Archiving:

Tar:


File Actions Edit View Help
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tar -c newArchive
tar: Refusing to write archive contents to terminal (missing -f option?)
tar: Error is not recoverable: exiting now
(gokul㉿kali)-[~/Desktop/NewFolder]
$ man tar
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tar -czvf newArchive.gz first.txt new.txt
first.txt
new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$ ls
first.txt newArchive.gz new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$

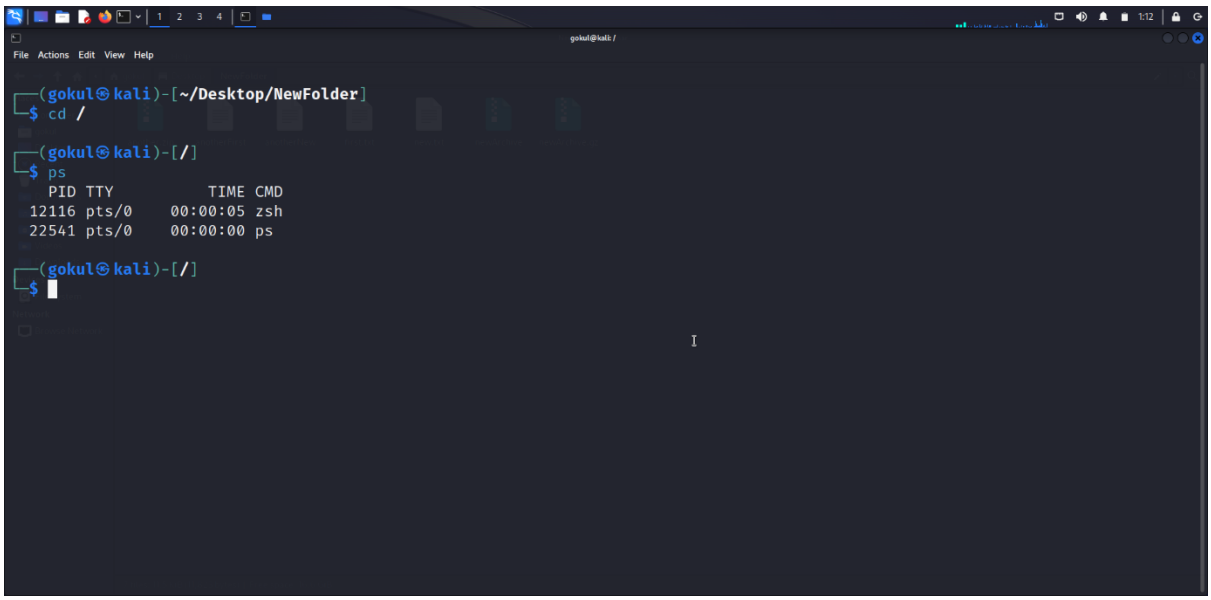
Gzip:


File Actions Edit View Help
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tar -c newArchive
tar: Refusing to write archive contents to terminal (missing -f option?)
tar: Error is not recoverable: exiting now
(gokul㉿kali)-[~/Desktop/NewFolder]
$ man tar
(gokul㉿kali)-[~/Desktop/NewFolder]
$ tar -czvf newArchive.gz first.txt new.txt
first.txt
new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$ ls
first.txt newArchive.gz new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$ gzip -d newArchive.gz
(gokul㉿kali)-[~/Desktop/NewFolder]
$ ls
first.txt newArchive new.txt
(gokul㉿kali)-[~/Desktop/NewFolder]
$

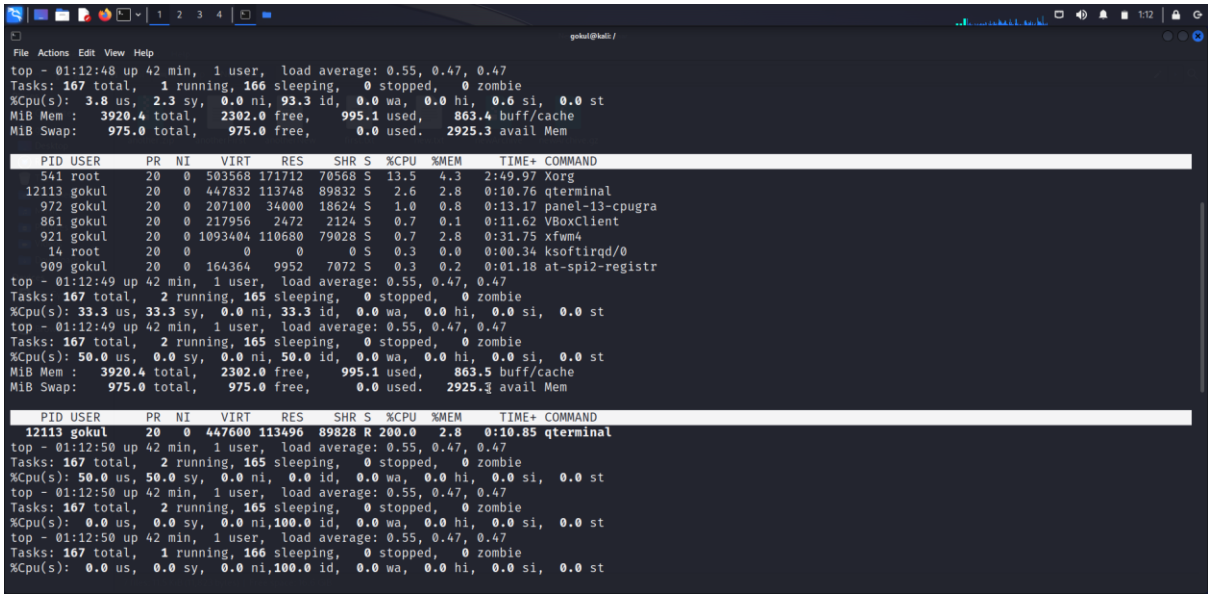
Unzip:

Process Management:

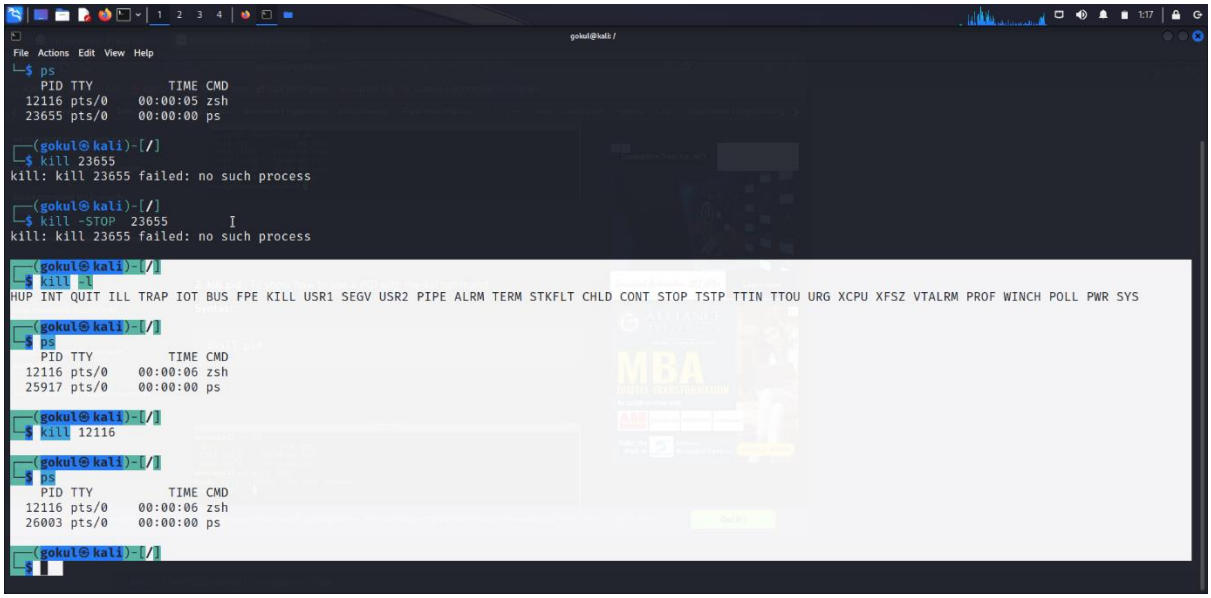
Ps:



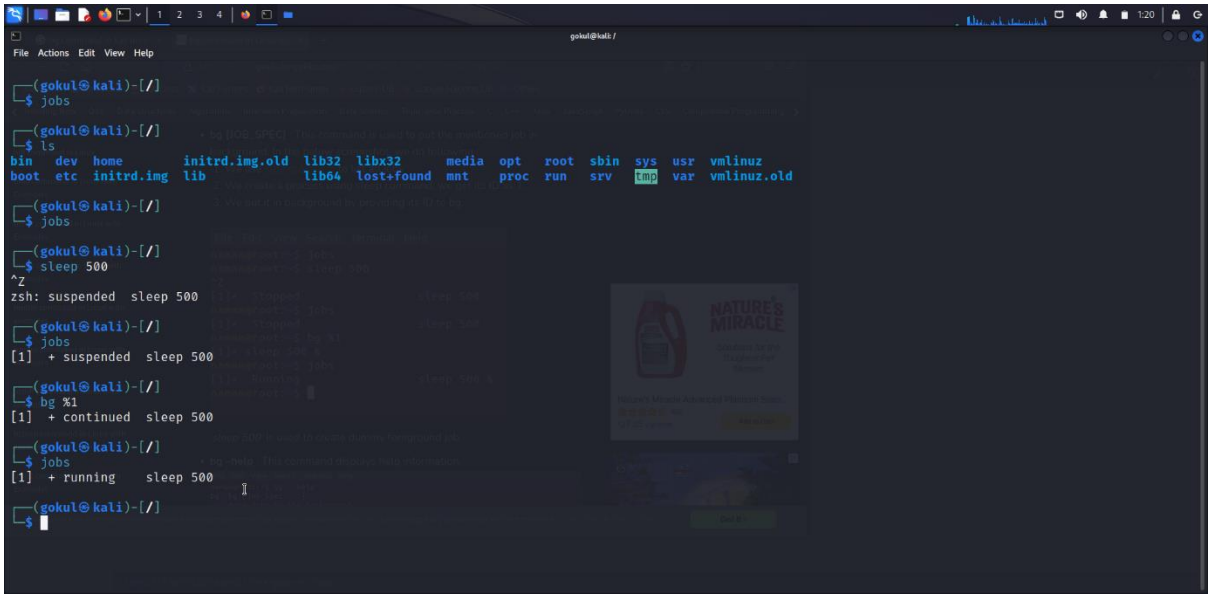
Top:


File Actions Edit View Help
top - 01:12:48 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 1 running, 166 sleeping, 0 stopped, 0 zombie
%Cpu(s): 3.8 us, 2.3 sy, 0.0 ni, 93.3 id, 0.0 wa, 0.0 hi, 0.6 si, 0.0 st
MiB Mem : 3920.4 total, 2302.0 free, 995.1 used, 863.4 buff/cache
MiB Swap: 975.0 total, 975.0 free, 0.0 used. 2925.3 avail Mem
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
541 root 20 0 503568 171712 70568 S 13.5 4.3 2:49.97 Xorg
12113 gokul 20 0 447832 113748 89832 S 2.6 2.8 0:10.76 qterminal
972 gokul 20 0 207100 34000 18624 S 1.0 0.8 0:13.17 panel-13-cpugra
861 gokul 20 0 217956 2472 2124 S 0.7 0.1 0:11.62 VBoxClient
921 gokul 20 0 1093404 110680 79028 S 0.7 2.8 0:31.75 xfwm4
14 root 20 0 0 0 0 S 0.3 0.0 0:00.34 ksoftirqd/0
909 gokul 20 0 164364 9952 7072 S 0.3 0.2 0:01.18 at-spi2-registr
top - 01:12:49 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 2 running, 165 sleeping, 0 stopped, 0 zombie
%Cpu(s): 33.3 us, 33.3 sy, 0.0 ni, 33.3 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
top - 01:12:49 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 2 running, 165 sleeping, 0 stopped, 0 zombie
%Cpu(s): 50.0 us, 0.0 sy, 0.0 ni, 50.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 3920.4 total, 2302.0 free, 995.1 used, 863.5 buff/cache
MiB Swap: 975.0 total, 975.0 free, 0.0 used. 2925.3 avail Mem
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
12113 gokul 20 0 447600 113496 89828 R 200.0 2.8 0:10.85 qterminal
top - 01:12:50 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 2 running, 165 sleeping, 0 stopped, 0 zombie
%Cpu(s): 50.0 us, 50.0 sy, 0.0 ni, 0.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
top - 01:12:50 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 2 running, 165 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
top - 01:12:50 up 42 min, 1 user, load average: 0.55, 0.47, 0.47
Tasks: 167 total, 1 running, 166 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st

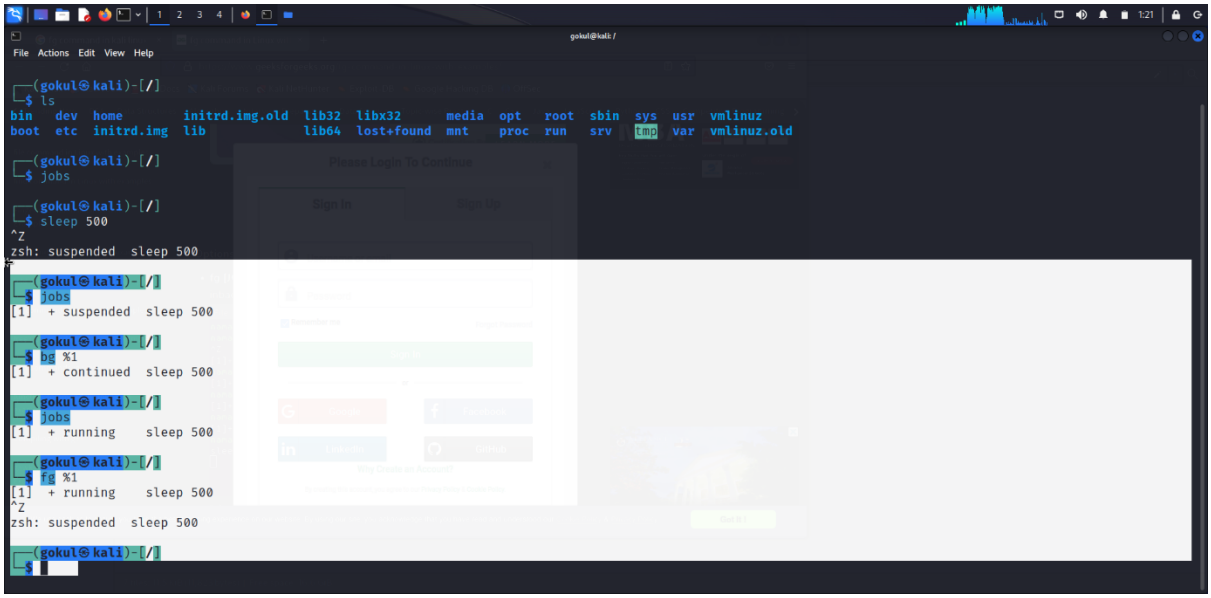
Kill:


File Actions Edit View Help
$ ps
PID TTY TIME CMD
12116 pts/0 00:00:05 zsh
23655 pts/0 00:00:00 ps
(gokul㉿kali)-[/]
$ kill 23655
kill: kill 23655 failed: no such process
(gokul㉿kali)-[/]
$ kill -STOP 23655
kill: kill 23655 failed: no such process
(gokul㉿kali)-[/]
$ kill -l
HUP INT QUIT ILL TRAP IOT BUS FPE KILL USR1 SEGV USR2 PIPE ALRM TERM STKFLT CHLD CONT STOP TSTP TTIN TTOU URG XCPU XFSZ VTALRM PROF WINCH POLL PWR SYS
(gokul㉿kali)-[/]
$ ps
PID TTY TIME CMD
12116 pts/0 00:00:06 zsh
25917 pts/0 00:00:00 ps
(gokul㉿kali)-[/]
$ kill 12116
(gokul㉿kali)-[/]
$ ps
PID TTY TIME CMD
12116 pts/0 00:00:06 zsh
26003 pts/0 00:00:00 ps
(gokul㉿kali)-[/]
$

Bg:



Fg:



System Information:

Uname, df, free, uptime, who, w:

```
File  Actions  Edit  View  Help
Linux

┌──(gokul㉿kali)-[/]
└─$ df
Filesystem     1K-blocks     Used Available Use% Mounted on
udev             1966708        0   1966708   0% /dev
tmpfs             401456      964    400492   1% /run
/dev/sda1       31861548 12838436  17379080  43% /
tmpfs            2007264        0   2007264   0% /dev/shm
tmpfs               5120        0      5120   0% /run/lock
tmpfs             401452     2500    398952   1% /run/user/1000

┌──(gokul㉿kali)-[/]
└─$ free
               total        used        free      shared  buff/cache   available
Mem:         4014532     1627412     1680072       38368      974392     2387120
Swap:         998396           0      998396

┌──(gokul㉿kali)-[/]
└─$ uptime
 01:21:45 up 51 min,  1 user,  load average: 1.55, 1.31, 0.88

┌──(gokul㉿kali)-[/]
└─$ who
gokul    tty7         2023-05-22 00:31 (:0)

┌──(gokul㉿kali)-[/]
└─$ w
 01:21:55 up 51 min,  1 user,  load average: 1.31, 1.26, 0.87
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
gokul    tty7     :0               00:31   51:04   4:00   2.05s xfce4-session

┌──(gokul㉿kali)-[/]
└─$
```

Networking:

Ifconfig:

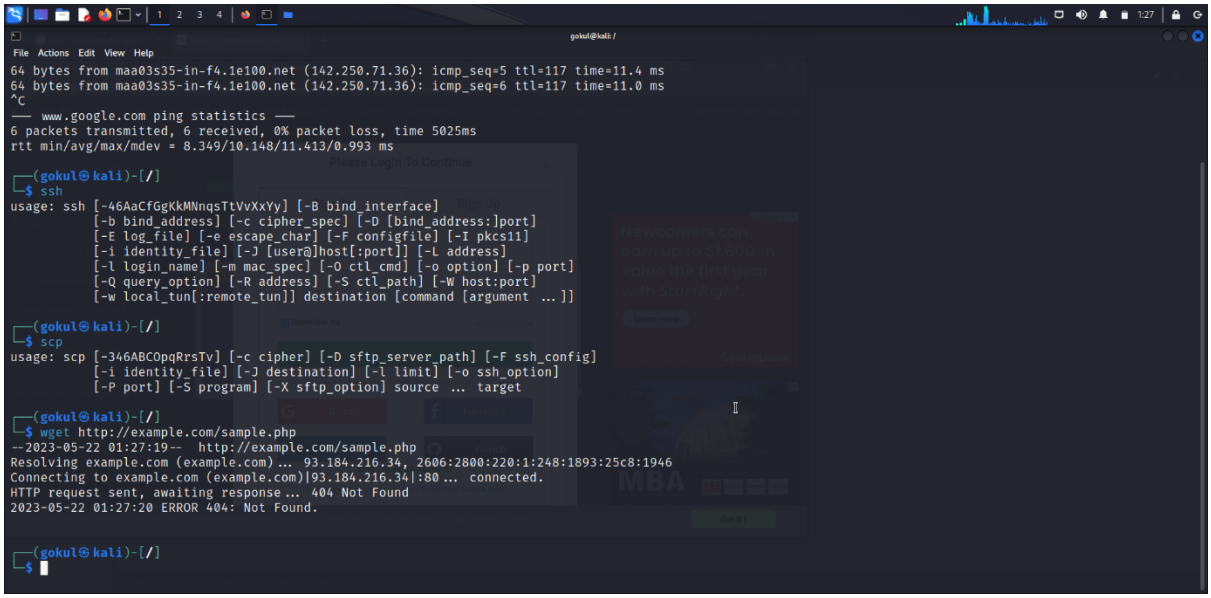
```
File  Actions  Edit  View  Help

┌──(gokul㉿kali)-[/]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:feae:aa8c  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:ae:aa:8c  txqueuelen 1000  (Ethernet)
        RX packets 35065  bytes 33684915 (32.1 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 18753  bytes 3230083 (3.0 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 6  bytes 340 (340.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 6  bytes 340 (340.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

┌──(gokul㉿kali)-[/]
└─$ ping www.google.com
PING www.google.com (142.250.71.36) 56(84) bytes of data.
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=1 ttl=117 time=10.0 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=2 ttl=117 time=7.96 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=3 ttl=117 time=9.29 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=4 ttl=117 time=7.87 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=5 ttl=117 time=8.04 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=6 ttl=117 time=9.27 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=7 ttl=117 time=8.32 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=8 ttl=117 time=9.45 ms
64 bytes from maa03s35-in-f4.1e100.net (142.250.71.36): icmp_seq=9 ttl=117 time=8.62 ms
```

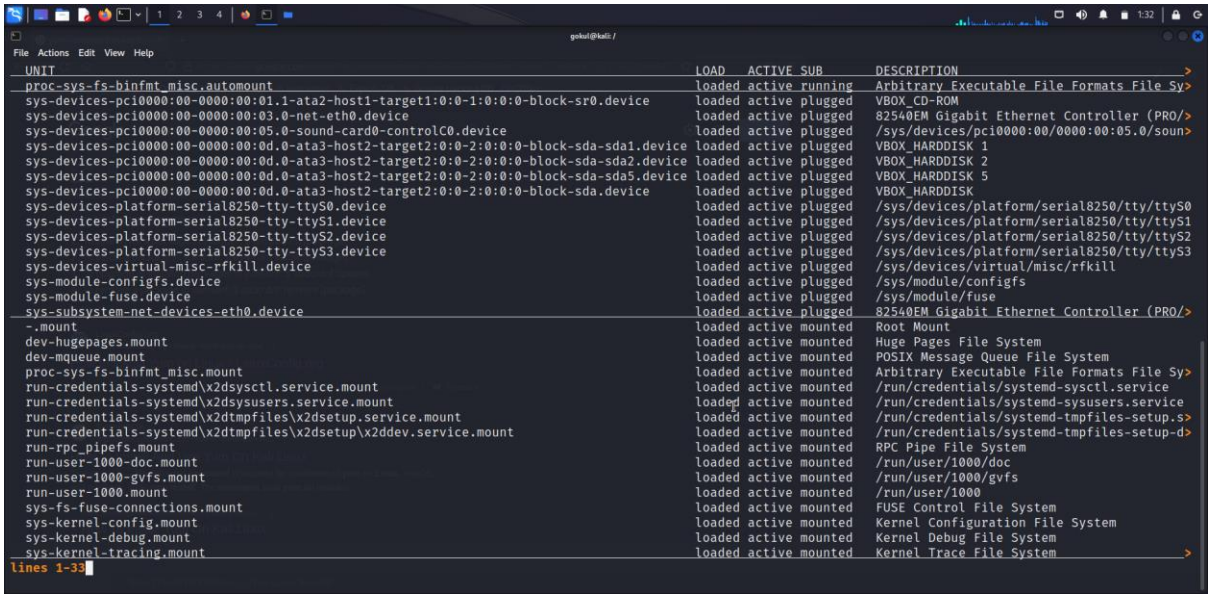
Ssh, scp, wget:



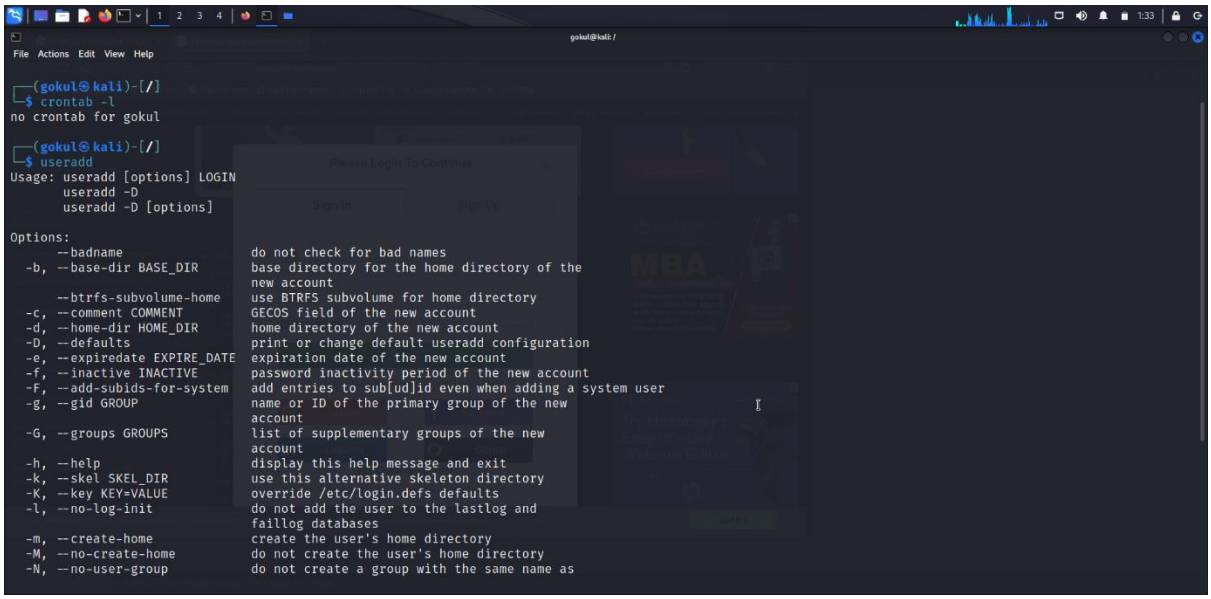
System Administration:

Sudo, apt-get, yum:

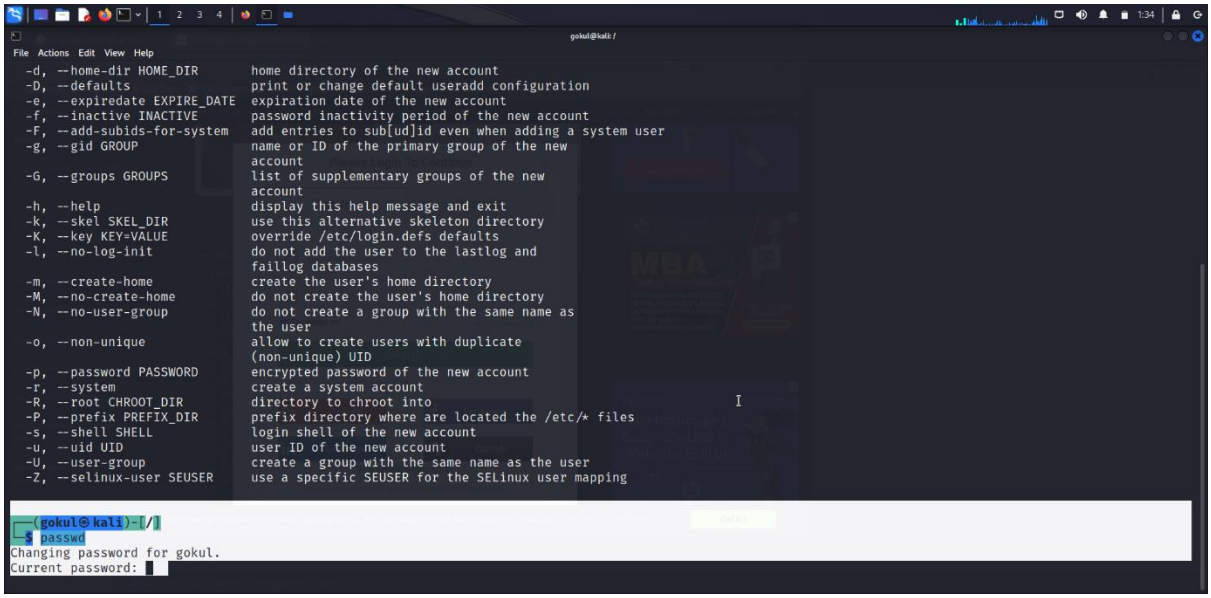
Systemctl:



Crontab, useradd:



Passwd:


File Actions Edit View Help
-d, --home-dir HOME_DIR home directory of the new account
-D, --defaults print or change default useradd configuration
-e, --expiredate EXPIRE_DATE expiration date of the new account
-f, --inactive INACTIVE password inactivity period of the new account
-F, --add-subids-for-system add entries to sub[ud]id even when adding a system user
-g, --gid GROUP name or ID of the primary group of the new account
-G, --groups GROUPS list of supplementary groups of the new account
-h, --help display this help message and exit
-k, --skel SKEL_DIR use this alternative skeleton directory
-K, --key KEY=VALUE override /etc/login.defs defaults
-l, --no-log-init do not add the user to the lastlog and faillog databases
-m, --create-home create the user's home directory
-M, --no-create-home do not create the user's home directory
-N, --no-user-group do not create a group with the same name as the user
-o, --non-unique allow to create users with duplicate (non-unique) UID
-p, --password PASSWORD encrypted password of the new account
-r, --system create a system account
-R, --root CHROOT_DIR directory to chroot into
-P, --prefix PREFIX_DIR prefix directory where are located the /etc/* files
-s, --shell SHELL login shell of the new account
-u, --uid UID user ID of the new account
-U, --user-group create a group with the same name as the user
-Z, --selinux-user SEUSER use a specific SEUSER for the SELinux user mapping
(gokul㉿kali)-[/]
$ passwd
Changing password for gokul.
Current password: