

# Smart Bridge Assessment-1

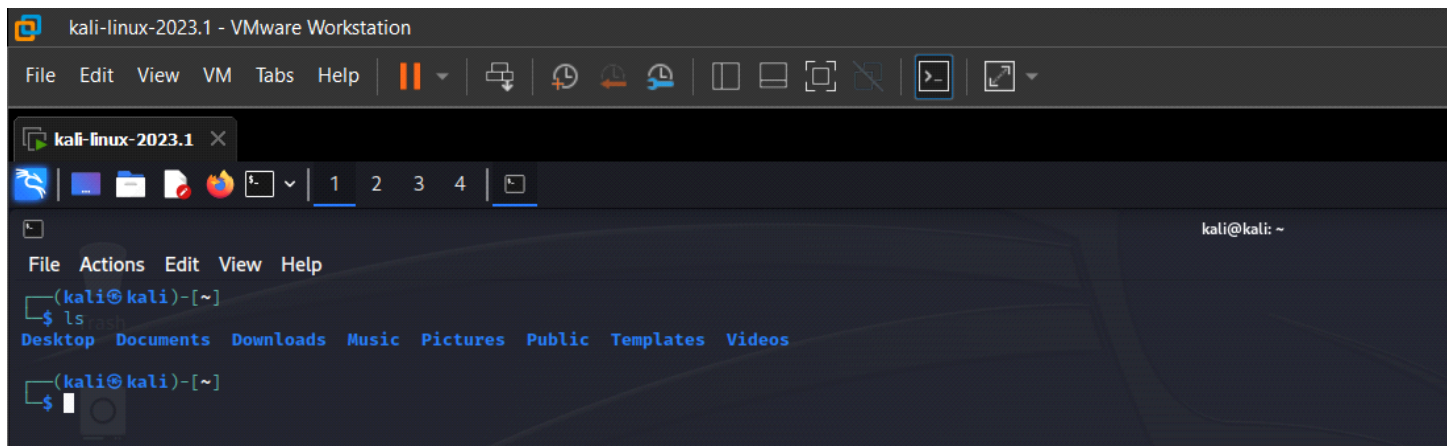
**Name:**J V S Manideep

**Regno:** 20BCN7164

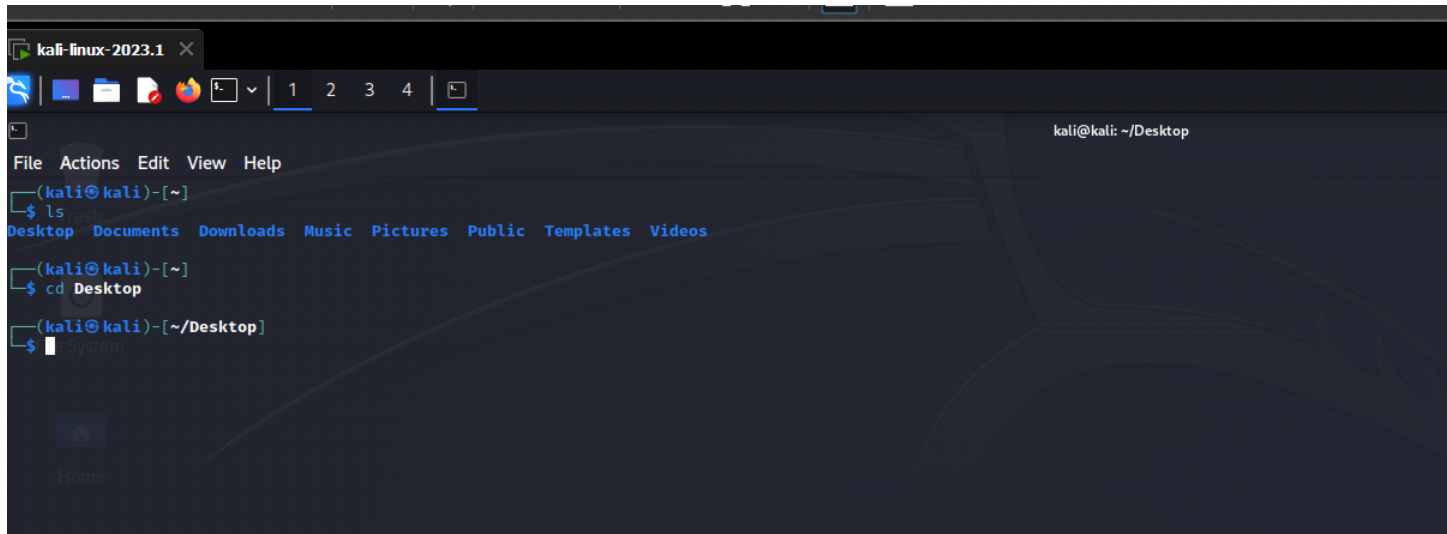
## Linux Command List Assessment

### File and Directory Operations

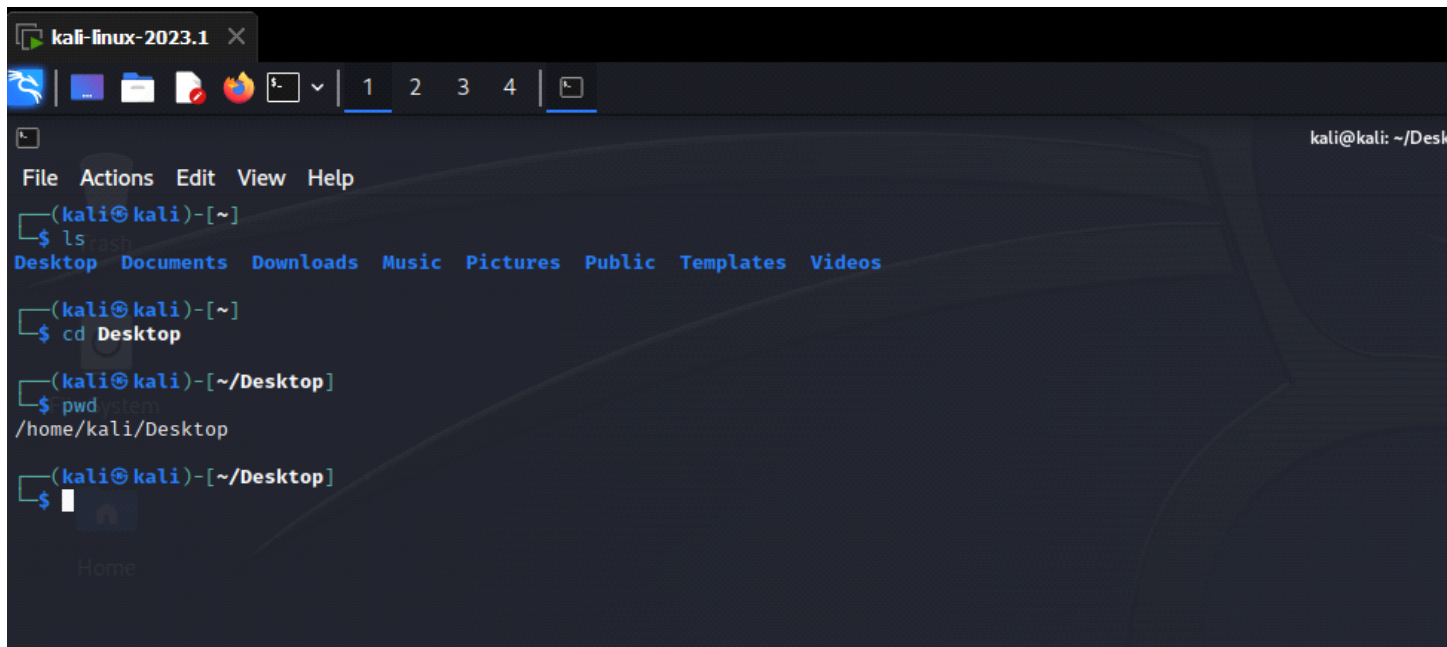
ls: List files and directories



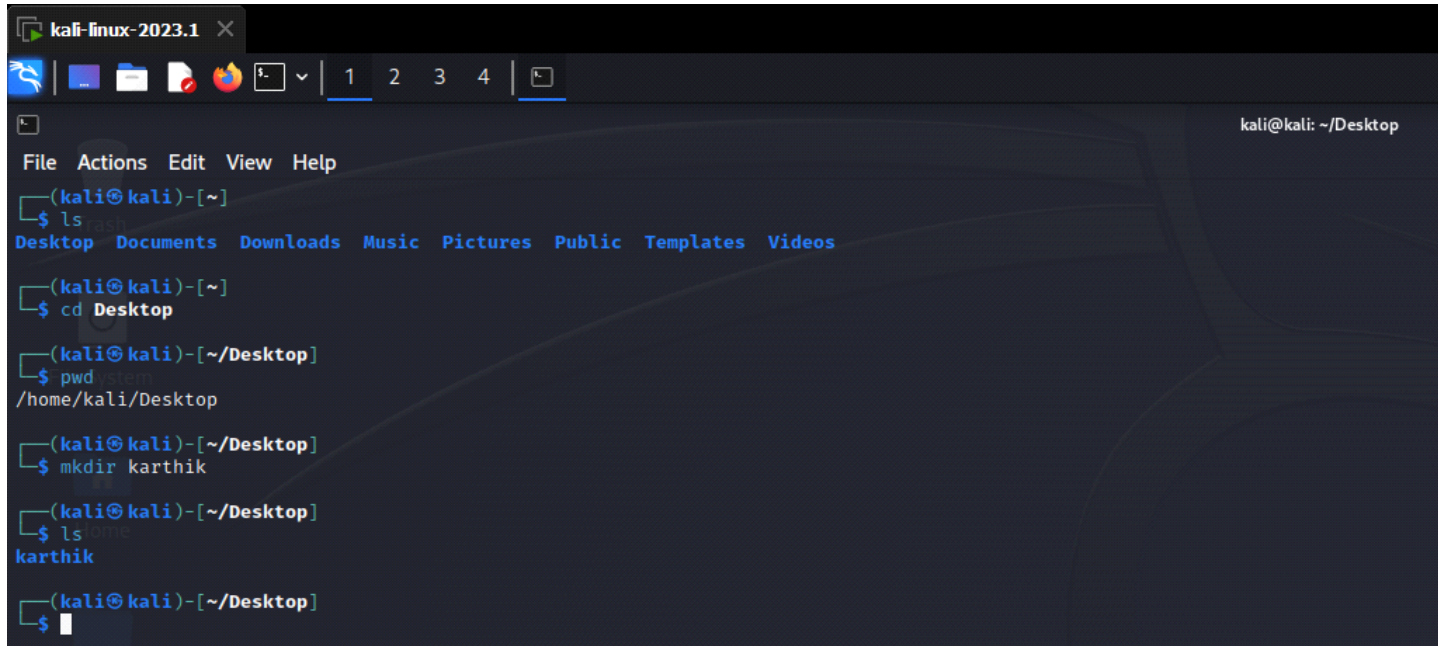
cd: Change directory



pwd: Print working directory

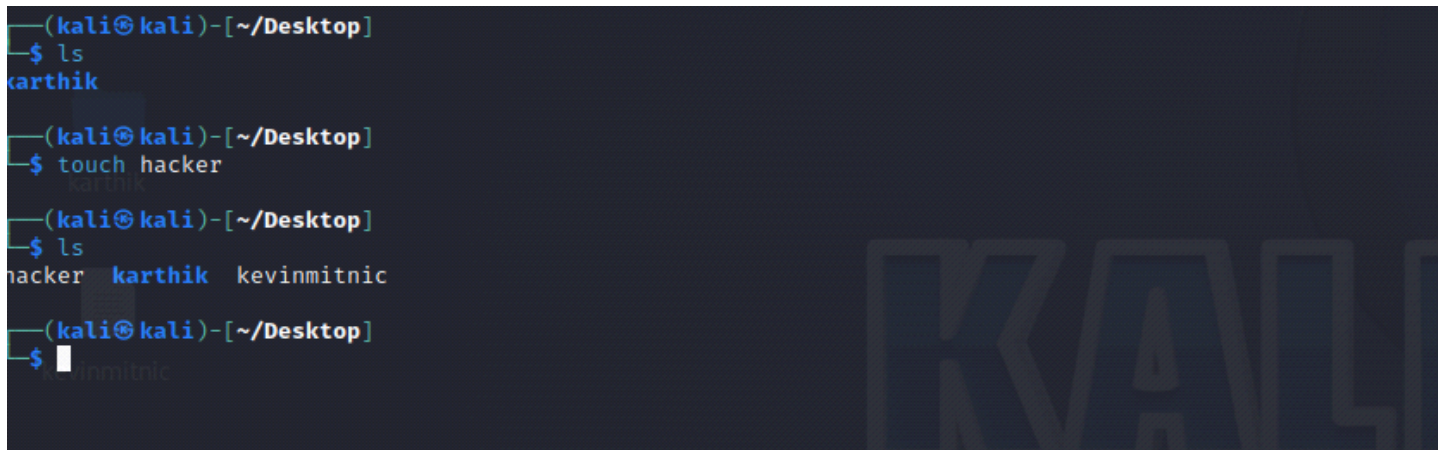


## mkdir: Make directory

A terminal window titled 'kali-linux-2023.1' with a dark background and light blue text. The window shows a series of commands and their outputs. The user starts in the home directory (~), lists files with 'ls', changes to the Desktop directory with 'cd Desktop', confirms the current directory with 'pwd' (output: /home/kali/Desktop), creates a directory named 'karthik' with 'mkdir karthik', and finally lists the contents of the Desktop directory with 'ls', which shows 'karthik'.

```
kali@kali: ~  
$ ls  
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  
kali@kali: ~/Desktop  
$ cd Desktop  
kali@kali: ~/Desktop  
$ pwd  
/home/kali/Desktop  
kali@kali: ~/Desktop  
$ mkdir karthik  
kali@kali: ~/Desktop  
$ ls  
karthik  
kali@kali: ~/Desktop  
$
```

## touch: Create an empty file

A terminal window showing the 'touch' command being used to create an empty file named 'hacker'. The user is in the ~/Desktop directory. The commands shown are 'ls' (output: karthik), 'touch hacker', and 'ls' (output: hacker karthik kevinmitnic).

```
kali@kali: ~/Desktop  
$ ls  
karthik  
kali@kali: ~/Desktop  
$ touch hacker  
kali@kali: ~/Desktop  
$ ls  
hacker  karthik  kevinmitnic  
kali@kali: ~/Desktop  
$
```

## cp: Copy files and directories

```
(kali㉿kali)-[~/Desktop]
$ cp hacker knight

(kali㉿kali)-[~/Desktop]
$ ls
hacker  karthik  kevinmitnic  knight

(kali㉿kali)-[~/Desktop]
$ ss
```

mv: Move or rename files and directories

```
(kali㉿kali)-[~/Desktop]
$ mv knight karthik

(kali㉿kali)-[~/Desktop]
$ ls
hacker  karthik  kevinmitnic

(kali㉿kali)-[~/Desktop]
$ cd karthik

(kali㉿kali)-[~/Desktop/karthik]
$ ls
knight

(kali㉿kali)-[~/Desktop/karthik]
$
```

rm: Remove files and directories

```
(kali㉿kali)-[~/Desktop]
$ ls
hacker  karthik  kevinmitnic

(kali㉿kali)-[~/Desktop]
$ rm kevinmitnic

(kali㉿kali)-[~/Desktop]
$ ls
hacker  karthik

(kali㉿kali)-[~/Desktop]
$
```

find: Search for files and directories

```
(kali㉿kali)-[~/Desktop]
$ find karthik
karthik
karthik/knight

(kali㉿kali)-[~/Desktop]
$
```

## File Viewing and Editing:

cat: Concatenate and display file content

```
(kali㉿kali)-[~/Desktop]
$ cat hacker
hi this is karthik
HACKER
```

less: View file content with pagination

```
(kali㉿kali)-[~/Desktop]
$ less hacker
hi this is karthik
HACKER

zsh: suspended  less hacker  hacker (END)
```

head: Display the beginning of a file

```
(kali㉿kali)-[~/Desktop]
$ head hacker
hi this is karthik
HACKER
```

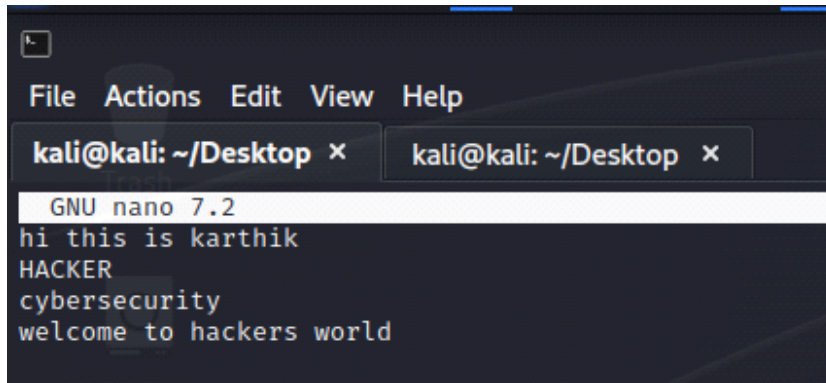
tail: Display the end of a file

```
(kali㉿kali)-[~/Desktop]
$ tail hacker
hi this is karthik
HACKER

welcome to hackers world

(kali㉿kali)-[~/Desktop]
$
```

nano: Text editor for creating and editing files



```
File Actions Edit View Help
kali@kali: ~/Desktop x
GNU nano 7.2
hi this is karthik
HACKER
cybersecurity
welcome to hackers world
```

vi/vim: Powerful text editor for experienced users



```
kali@kali: ~/Desktop x kali@kali: ~/Desktop x
hi this is karthik
HACKER
cybersecurity
welcome to hackers world
~
~
~ File System
~
~
~ Home
~
(kali@kali)-[~/Desktop]
$ vi hacker
zsh: suspended vi hacker
```

## File Permissions:

chmod: Change file permissions

```
(kali@kali)-[~/Desktop]
$ chmod +x+r hacker
(kali@kali)-[~/Desktop]
$
```

chown: Change file owner

```
(kali@kali)-[~/Desktop]
$ chown kali hacker
```

chgrp: Change file group

```
(kali@kali)-[~/Desktop]
$ chgrp kali hacker
```

## File Compression and Archiving:

tar: Archive files

```
(kali㉿kali)-[~/Desktop]
$ tar -cf fil.tar hacker

(kali㉿kali)-[~/Desktop]
$ ls
fil.tar  hacker  hackerY  karthik
```

gzip: Compress files

```
(kali㉿kali)-[~/Desktop]
$ gzip 'fil.tar'

(kali㉿kali)-[~/Desktop]
$ ls
fil.tar.gz  hacker  hackerY  karthik

(kali㉿kali)-[~/Desktop]
$
```

unzip: Extract files from a ZIP archive

```
(kali㉿kali)-[~/Desktop]
$ unzip 'dark.zip'
Archive:  dark.zip
replace hackerY? [y]es, [n]o, [A]ll, [N]one, [r]ename:
error:  invalid response [{ENTER}]
replace hackerY? [y]es, [n]o, [A]ll, [N]one, [r]ename: hello
error:  invalid response [hello]
replace hackerY? [y]es, [n]o, [A]ll, [N]one, [r]ename: n
replace karthik/knight? [y]es, [n]o, [A]ll, [N]one, [r]ename: n
```

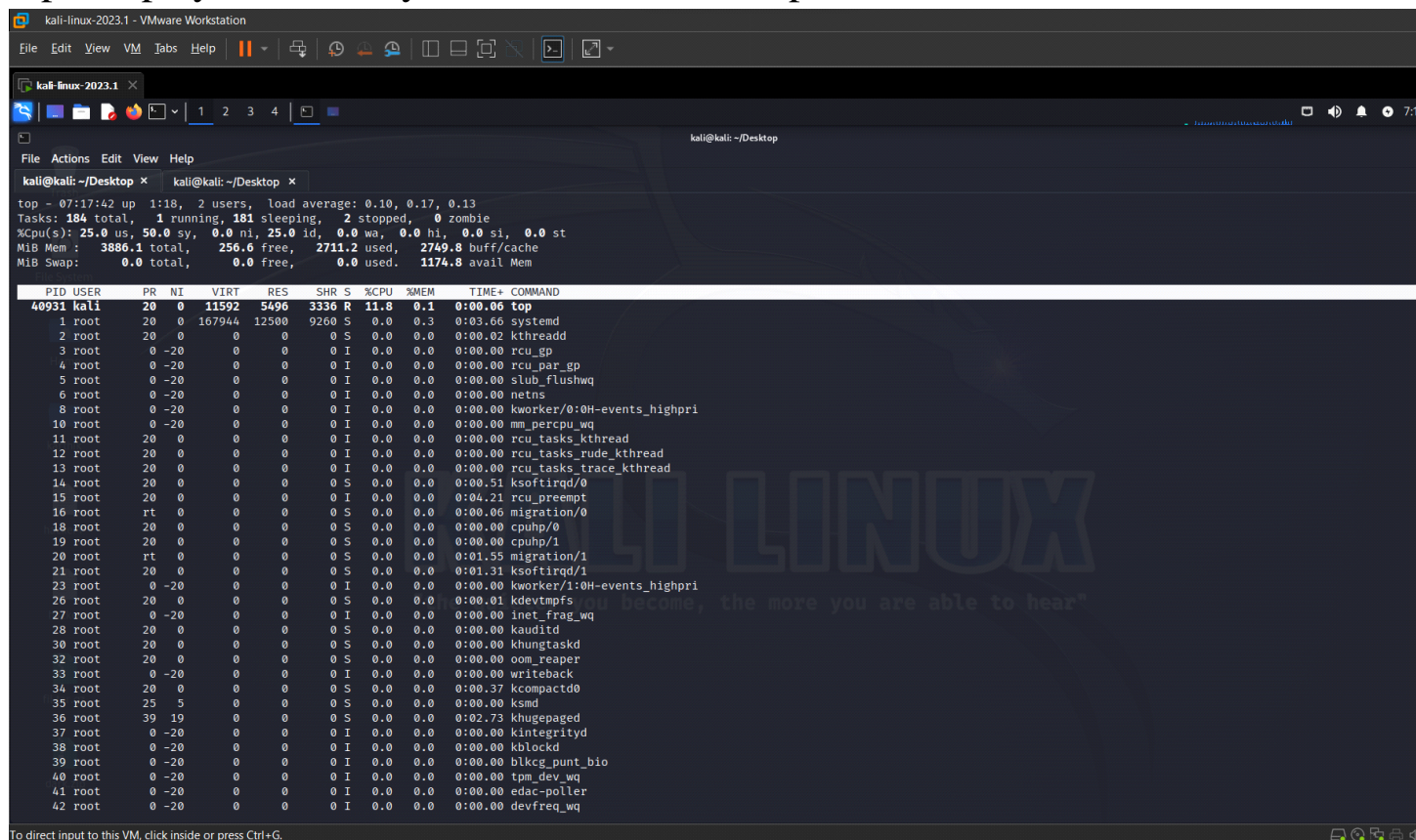
## Process Management:

ps: List running processes



```
(kali@kali)-[~/Desktop]
$ ps
  PID TTY          TIME CMD
  6368 pts/0        00:00:13 zsh
 14727 pts/0        00:00:00 less
 17026 pts/0        00:00:00 vi
 40652 pts/0        00:00:00 ps
```

top: Display real-time system information and processes



```
kali-linux-2023.1 - VMware Workstation
File Edit View VM Tabs Help
kali-linux-2023.1 x
kali@kali: ~/Desktop x
top - 07:17:42 up 1:18, 2 users, load average: 0.10, 0.17, 0.13
Tasks: 184 total, 1 running, 181 sleeping, 2 stopped, 0 zombie
%Cpu(s): 25.0 us, 50.0 sy, 0.0 ni, 25.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 3886.1 total, 256.6 free, 2711.2 used, 2749.8 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used, 1174.8 avail Mem

  PID USER      PR  NI  VIRT  RES  SHR S %CPU  %MEM    TIME+  COMMAND
 40931 kali      20   0 11592 5408 3336 R 11.0   0.1   0:00.06 top
    1 root      20   0 167944 12500 9260 S  0.0   0.3   0:00.06 systemd
    2 root      20   0      0      0      0 S  0.0   0.0   0:00.02 kthreadd
    3 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 rcu_gp
    4 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 rcu_par_gp
    5 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 slub_flushwq
    6 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 netns
    8 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 kworker/0:0H-events_highpri
   10 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 mm_percpu_wq
   11 root      20   0      0      0      0 I  0.0   0.0   0:00.00 rcu_tasks_kthread
   12 root      20   0      0      0      0 I  0.0   0.0   0:00.00 rcu_tasks_rude_kthread
   13 root      20   0      0      0      0 I  0.0   0.0   0:00.00 rcu_tasks_trace_kthread
   14 root      20   0      0      0      0 S  0.0   0.0   0:00.51 ksoftirqd/0
   15 root      20   0      0      0      0 I  0.0   0.0   0:04.21 rcu_preempt
   16 root      rt    0      0      0      0 S  0.0   0.0   0:00.06 migration/0
   18 root      20   0      0      0      0 S  0.0   0.0   0:00.00 cpuhp/0
   19 root      20   0      0      0      0 S  0.0   0.0   0:00.00 cpuhp/1
   20 root      rt    0      0      0      0 S  0.0   0.0   0:01.55 migration/1
   21 root      20   0      0      0      0 S  0.0   0.0   0:01.31 ksoftirqd/1
   23 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 kworker/1:0H-events_highpri
   26 root      20   0      0      0      0 S  0.0   0.0   0:00.01 kdevtmpfs
   27 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 inet_frag_wq
   28 root      20   0      0      0      0 S  0.0   0.0   0:00.00 kauditd
   30 root      20   0      0      0      0 S  0.0   0.0   0:00.00 khungtaskd
   32 root      20   0      0      0      0 S  0.0   0.0   0:00.00 oom_reaper
   33 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 writeback
   34 root      20   0      0      0      0 S  0.0   0.0   0:00.37 kcompactd0
   35 root      25   5      0      0      0 S  0.0   0.0   0:00.00 ksmd
   36 root      39  19      0      0      0 S  0.0   0.0   0:02.73 khugepaged
   37 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 kintegrityd
   38 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 kblockd
   39 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 blkcg_punt_bio
   40 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 tpm_dev_wq
   41 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 edac-poller
   42 root      0 -20    0      0      0 I  0.0   0.0   0:00.00 devfreq_wq
```

kill: Terminate processes

```
(kali㉿kali)-[~/Desktop]
$ ps
  PID TTY          TIME CMD
  6368 pts/0        00:00:15 zsh
 14727 pts/0        00:00:00 less
 17026 pts/0        00:00:00 vi
 59577 pts/0        00:00:00 top
 59724 pts/0        00:00:00 ps

(kali㉿kali)-[~/Desktop]
$ kill 59577
```

bg: Run processes in the background

```
(kali㉿kali)-[~/Desktop]
$ bg
[3]      continued top
[3]  +  suspended (signal) top

(kali㉿kali)-[~/Desktop]
$
```

fg: Bring background processes to the foreground

```
(kali㉿kali)-[~/Desktop]
$ fg
[3]      continued top
```

## System Information:

uname: Print system information

```
(kali㉿kali)-[~/Desktop]
$ uname
Linux
```

df: Display disk space usage

```
(kali㉿kali)-[~/Desktop]
$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            1941744         0   1941744  0% /dev
tmpfs           397932      1168   396764  1% /run
/dev/sr0        4076828 4076828         0 100% /run/live/medium
/dev/loop0      3505408 3505408         0 100% /run/live/rootfs/filesystem.squashfs
tmpfs           1989660 1614576   375084  82% /run/live/overlay
overlay         1989660 1614576   375084  82% /
tmpfs           1989660         0   1989660  0% /dev/shm
tmpfs            5120         0     5120  0% /run/lock
tmpfs           1989660       760   1988900  1% /tmp
tmpfs           397932       96   397836  1% /run/user/1000
```

free: Display memory usage

```
(kali㉿kali)-[~/Desktop]
$ free
              total        used        free      shared  buff/cache   available
Mem:           3979320      2781232      257384      1635256      2817028      1198088
Swap:              0           0           0

(kali㉿kali)-[~/Desktop]
$ uptime
07:58:54 up 1:59, 2 users, load average: 0.10, 0.17, 0.09
```

uptime: Show system uptime

```
(kali㉿kali)-[~/Desktop]
$ free
              total        used        free      shared  buff/cache   available
Mem:           3979320      2781232      257384      1635256      2817028      1198088
Swap:              0           0           0

(kali㉿kali)-[~/Desktop]
$ uptime
07:58:54 up 1:59, 2 users, load average: 0.10, 0.17, 0.09
```

who: Display logged-in users

```
(kali㉿kali)-[~/Desktop]
$ who
kali          tty1          2023-05-22 06:00
kali          tty7          2023-05-22 06:01 (:0)

(kali㉿kali)-[~/Desktop]
$ w
07:59:41 up 2:00, 2 users, load average: 0.04, 0.14, 0.08
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT
kali      tty1          -          06:00    1:59m   2.39s   2.31s  -zsh
kali      tty7          :0          06:01    1:59m   1:25    0.95s  xfce4-session

(kali㉿kali)-[~/Desktop]
$
```

w: Display logged-in users and their activities

```

(kali㉿kali)-[~/Desktop]
$ who
kali      tty1      2023-05-22 06:00
kali      tty7      2023-05-22 06:01 (:0)

(kali㉿kali)-[~/Desktop]
$ w
07:59:41 up 2:00, 2 users, load average: 0.04, 0.14, 0.08
USER      TTY      FROM      LOGIN@    IDLE   JCPU   PCPU WHAT
kali      tty1      -          06:00     1:59m  2.39s  2.31s -zsh
kali      tty7      :0         06:01     1:59m  1:25   0.95s xfce4-session

(kali㉿kali)-[~/Desktop]
$

```

## Networking:

### ifconfig: Configure network interfaces

```

(kali㉿kali)-[~/Desktop]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.113.128 netmask 255.255.255.0 broadcast 192.168.113.255
    inet6 fe80::1ce9:819f:70a2:90b prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:34:d3:bf txqueuelen 1000 (Ethernet)
    RX packets 972666 bytes 1462715467 (1.3 GiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 35336 bytes 2280261 (2.1 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 4 bytes 240 (240.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4 bytes 240 (240.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

ping: Send ICMP echo requests to a network host



```
File System
(kali㉿kali)-[~/Desktop]
$ ping 1.1.1.1
PING 1.1.1.1 (1.1.1.1) 56(84) bytes of data.
64 bytes from 1.1.1.1: icmp_seq=1 ttl=128 time=36.6 ms
64 bytes from 1.1.1.1: icmp_seq=2 ttl=128 time=36.3 ms
64 bytes from 1.1.1.1: icmp_seq=3 ttl=128 time=37.0 ms
64 bytes from 1.1.1.1: icmp_seq=4 ttl=128 time=38.8 ms
64 bytes from 1.1.1.1: icmp_seq=5 ttl=128 time=35.8 ms
64 bytes from 1.1.1.1: icmp_seq=6 ttl=128 time=36.1 ms
64 bytes from 1.1.1.1: icmp_seq=7 ttl=128 time=35.8 ms
64 bytes from 1.1.1.1: icmp_seq=8 ttl=128 time=36.1 ms
64 bytes from 1.1.1.1: icmp_seq=9 ttl=128 time=37.6 ms
64 bytes from 1.1.1.1: icmp_seq=10 ttl=128 time=44.0 ms
64 bytes from 1.1.1.1: icmp_seq=11 ttl=128 time=35.5 ms
64 bytes from 1.1.1.1: icmp_seq=12 ttl=128 time=35.5 ms
64 bytes from 1.1.1.1: icmp_seq=13 ttl=128 time=36.2 ms
64 bytes from 1.1.1.1: icmp_seq=14 ttl=128 time=36.0 ms
64 bytes from 1.1.1.1: icmp_seq=15 ttl=128 time=36.4 ms
64 bytes from 1.1.1.1: icmp_seq=16 ttl=128 time=35.7 ms
64 bytes from 1.1.1.1: icmp_seq=17 ttl=128 time=37.3 ms
64 bytes from 1.1.1.1: icmp_seq=18 ttl=128 time=48.9 ms
64 bytes from 1.1.1.1: icmp_seq=19 ttl=128 time=45.8 ms
64 bytes from 1.1.1.1: icmp_seq=20 ttl=128 time=50.5 ms
64 bytes from 1.1.1.1: icmp_seq=21 ttl=128 time=38.4 ms
64 bytes from 1.1.1.1: icmp_seq=22 ttl=128 time=39.0 ms
64 bytes from 1.1.1.1: icmp_seq=23 ttl=128 time=36.3 ms
64 bytes from 1.1.1.1: icmp_seq=24 ttl=128 time=37.1 ms
64 bytes from 1.1.1.1: icmp_seq=25 ttl=128 time=38.1 ms
64 bytes from 1.1.1.1: icmp_seq=26 ttl=128 time=37.1 ms
^C
— 1.1.1.1 ping statistics —
26 packets transmitted, 26 received, 0% packet loss, time 25033ms
rtt min/avg/max/mdev = 35.499/38.376/50.461/4.034 ms

(kali㉿kali)-[~/Desktop]
$
```

To direct input to this VM, click inside or press Ctrl+G.

ssh: Securely connect to a remote system



```
(kali㉿kali)-[~/Desktop]
$ sudo service ssh start

(kali㉿kali)-[~/Desktop]
$

Try: sudo apt install <deb name>
karna@karna-virtual-machine:~$ ssh@192.168.113.128
ssh@192.168.113.128: command not found
karna@karna-virtual-machine:~$ ssh kali@192.168.113.128
The authenticity of host '192.168.113.128 (192.168.113.128)' can't be established.
ED25519 key fingerprint is SHA256:wbBGUqwlwtD9xiaz+0paV+4XClSud6yzDOXP/p5VrnA.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.113.128' (ED25519) to the list of known hosts.
kali@192.168.113.128's password:
Linux kali 6.1.0-kali5-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.12-1kali2 (2023-02-23) x86_64

The programs included with the Kali GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
(kali㉿kali)-[~]
$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos

(kali㉿kali)-[~]
$ cd Desktop

(kali㉿kali)-[~/Desktop]
$ ls
dark.zip  fil.tar.gz  hacker  hackerY  karthik

(kali㉿kali)-[~/Desktop]
$
```

scp: Securely copy files between systems

```
karna@karna-virtual-machine:~$ scp paper.txt kali@192.168.113.128:/~
kali@192.168.113.128's password:
paper.txt: No such file or directory
karna@karna-virtual-machine:~$ scp paper kali@192.168.113.128:/~
kali@192.168.113.128's password:
scp: /~: Permission denied
karna@karna-virtual-machine:~$
```

wget: Download files from the web

```
(kali㉿kali)-[~]
$ systemctl start ssh

(kali㉿kali)-[~]
$ wget https://vitap.ac.in/wp-content/uploads/2021/07/lab1.jpg
--2023-05-22 09:33:16-- https://vitap.ac.in/wp-content/uploads/2021/07/lab1.jpg
Resolving vitap.ac.in (vitap.ac.in)... 5.9.36.52
Connecting to vitap.ac.in (vitap.ac.in)|5.9.36.52|:443 ... connected.
HTTP request sent, awaiting response... 200 OK
Length: 79293 (77K) [image/jpeg]
Saving to: 'lab1.jpg'

lab1.jpg                               100%[=====>] 77.43K  259KB/s  i
2023-05-22 09:33:17 (259 KB/s) - 'lab1.jpg' saved [79293/79293]

(kali㉿kali)-[~]
$ ls
Desktop  Documents  Downloads  lab1.jpg  Music  Pictures  Public  smart  Templates  Videos

(kali㉿kali)-[~]
$
```

## System Administration:

sudo: Execute commands with superuser privileges

```
(kali㉿kali)-[~]
$ sudo su
(root㉿kali)-[/home/kali]
#
```

apt-get: Package management for Debian-based distributions

```
hacker
(kali@kali)-[~/Desktop]
$ sudo apt-get update
Get:1 file:/run/live/medium kali-last-snapshot InRelease
Ign:1 file:/run/live/medium kali-last-snapshot InRelease
Get:2 file:/run/live/medium kali-last-snapshot Release [7,354 B]
Get:2 file:/run/live/medium kali-last-snapshot Release [7,354 B]
Get:3 file:/run/live/medium kali-last-snapshot Release.gpg
Ign:3 file:/run/live/medium kali-last-snapshot Release.gpg
Get:4 http://kali.download/kali kali-rolling InRelease [41.2 kB]
Get:5 http://kali.download/kali kali-rolling/non-free Sources [130 kB]
Get:6 http://kali.download/kali kali-rolling/main Sources [15.6 MB]
Get:7 http://kali.download/kali kali-rolling/main amd64 Packages [19.3 MB]
48% [6 Sources store 0 B] [7 Packages 12.6 MB/19.3 MB 71%]
```

yum: Package management for Red Hat-based distributions

systemctl: Manage system services

```

(kali㉿kali)-[~/Desktop]
$ systemctl status
kali
State: running
Units: 271 loaded (incl. loaded aliases)
Jobs: 0 queued
Failed: 0 units
Since: Mon 2023-05-22 05:59:33 UTC; 2h 26min ago
systemd: 252.5-2
CGroup: /
└─Home
   └─init.scope
       └─1 /sbin/init components splash noeject
       └─system.slice
           └─ModemManager.service
               └─1774 /usr/sbin/ModemManager
           └─NetworkManager.service
               └─1762 /usr/sbin/NetworkManager --no-daemon
           └─colord.service
               └─2210 /usr/libexec/colord
           └─cron.service
               └─1753 /usr/sbin/cron -f
           └─dbus.service
               └─1754 /usr/bin/dbus-daemon --system --address=systemd: --nofork --nopidfile --systemd-activation --syslog-only
           └─haveged.service
               └─550 /usr/sbin/haveged --Foreground --verbose=1
           └─lightdm.service
               └─1785 /usr/sbin/lightdm
               └─1801 /usr/lib/xorg/Xorg :0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -novtswitch
           └─open-vm-tools.service
               └─557 /usr/bin/vmtoolsd
           └─polkit.service
               └─1757 /usr/lib/polkit-1/polkitd --no-debug
           └─rtkit-daemon.service
               └─1907 /usr/libexec/rtkit-daemon
           └─run-vmblock\x2dfuse.mount
               └─511 vmware-vmblock-fuse /run/vmblock-fuse -o rw,subtype=vmware-vmblock,default_permissions,allow_other,dev,suid
           └─ssh.service
               └─71455 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"
           └─systemd-journald.service
               └─492 /lib/systemd/systemd-journald
           └─systemd-logind.service

```

crontab: Schedule recurring tasks



```
(kali㉿kali)-[~/smart]
└─$ crontab -e
no crontab for kali - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano      ← easiest
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.tiny

Choose 1-3 [1]: 1
No modification made
```

```
kali@kali: ~/smart x  kali@kali: ~ x
GNU nano 7.2 /tm
q# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# File System
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Home
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow  command
```

useradd: Add a new user

```
(kali㉿kali)-[~/Desktop]
$ useradd -D
GROUP=100
HOME=/home
INACTIVE=-1
EXPIRE=
SHELL=/bin/sh
SKEL=/etc/skel
CREATE_MAIL_SPOOL=no
LOG_INIT=yes
```

passwd: Change user password

```
(kali㉿kali)-[~]
$ passwd
Changing password for kali.
Current password:
New password:
Retype new password:
passwd: password updated successfully
```