KALI LINUX COMMAND LIST ASSIGNMENT

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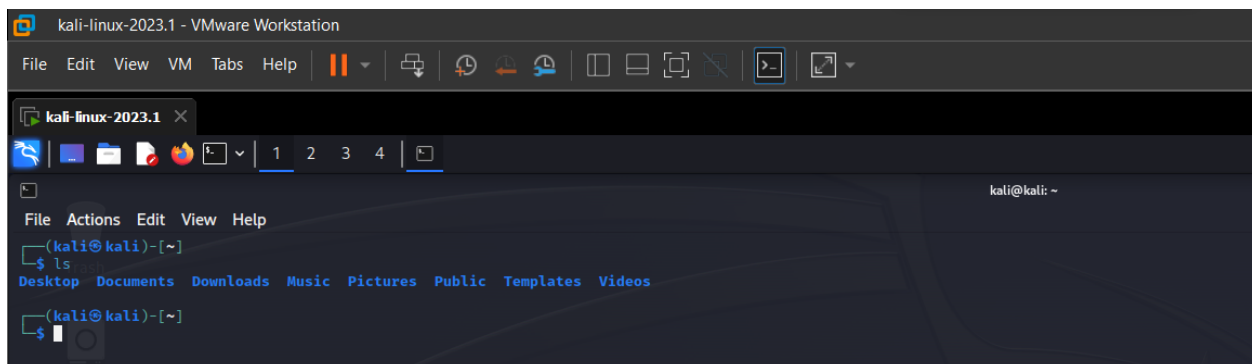**CAMPUS:** VIT VELLORE UNIVERSITY

Instructions: -

The following assessment aims to test your understanding and practical knowledge of various Linux commands. Perform the tasks given below using the appropriate commands. Write down the command(s) used to complete each task. You can use any Linux distribution or command-line interface of your choice. Ensure that you provide the correct output or results for each task.
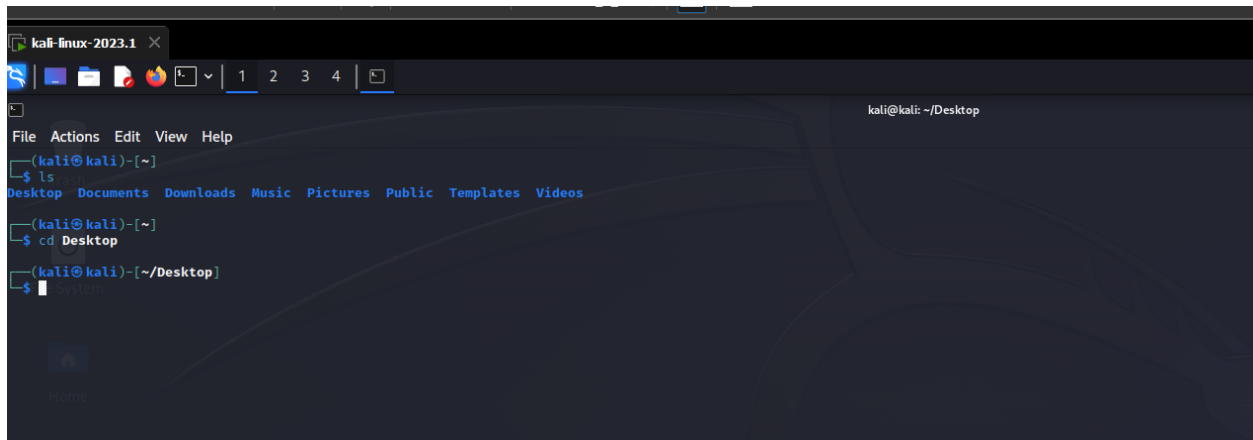
Note: It is recommended to perform this assessment on a Linux machine or virtual environment.

File and Directory Operations:
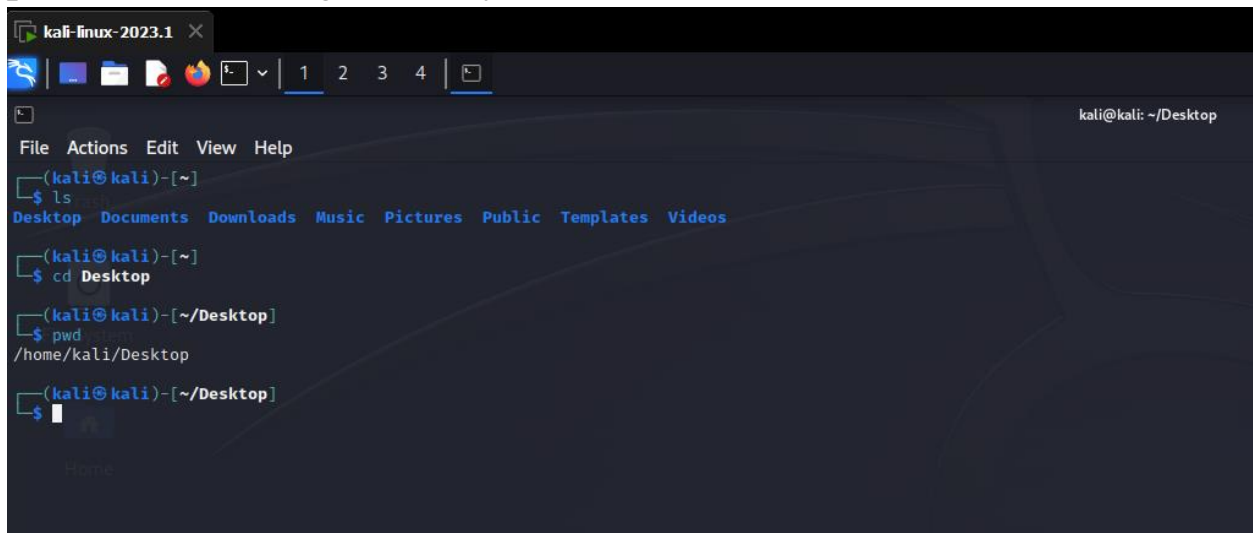
ls: List files and directories

cd: Change directory

pwd: Print working directory

mkdir: Make directory

```
┌──(kali㊀kali)-[~]
└─$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos

┌──(kali㊀kali)-[~]
└─$ cd Desktop

┌──(kali㊀kali)-[~/Desktop]
└─$ pwd
/home/kali/Desktop

┌──(kali㊀kali)-[~/Desktop]
└─$ mkdir SriRaj

┌──(kali㊀kali)-[~/Desktop]
└─$ ls
SriRaj

┌──(kali㊀kali)-[~/Desktop]
└─$
```

touch: Create an empty file

```
┌──(kali㊀kali)-[~/Desktop]
└─$ touch CEH

┌──(kali㊀kali)-[~/Desktop]
└─$ ls
CEH  SriRaj

┌──(kali㊀kali)-[~/Desktop]
└─$
```

cp: Copy files and directories

```
┌──(kali㊀kali)-[~/Desktop]
└─$ cp CEH CyberCourse

┌──(kali㊀kali)-[~/Desktop]
└─$ ls
CEH  CyberCourse  SriRaj

┌──(kali㊀kali)-[~/Desktop]
└─$
```

mv: Move or rename files and directories

rm: Remove files and directories

find: Search for files and directories

```
┌──(kali☉kali)-[~/Desktop]
└─$ find SriRaj
SriRaj
SriRaj/CyberCourse

┌──(kali☉kali)-[~/Desktop]
└─$ ▮
```

File Viewing and Editing:

cat: Concatenate and display file content

```
┌──(kali☉kali)-[~/Desktop]
└─$ cat CEH
hi i am sriraj from course: Cyber Threat Intelligence & Hunting (SIEM Analyst with IBM Qradar)

┌──(kali☉kali)-[~/Desktop]
└─$ ▮
```

less: View file content with pagination
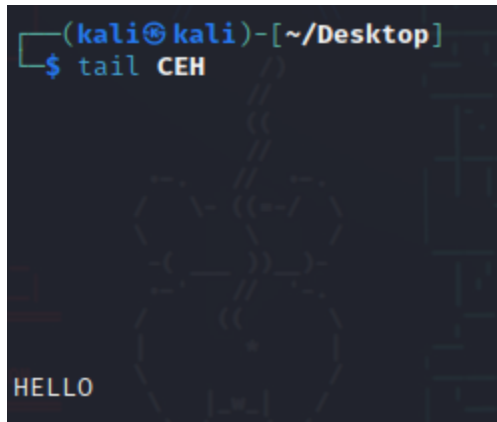
```
┌──(kali☉kali)-[~/Desktop]
└─$ less CEH

zsh: suspended   less CEH
```

```
hi i am sriraj from course: Cyber Threat Intelligence & Hunting (SIEM Analyst with IBM Qradar)
CEH (END)▮
```
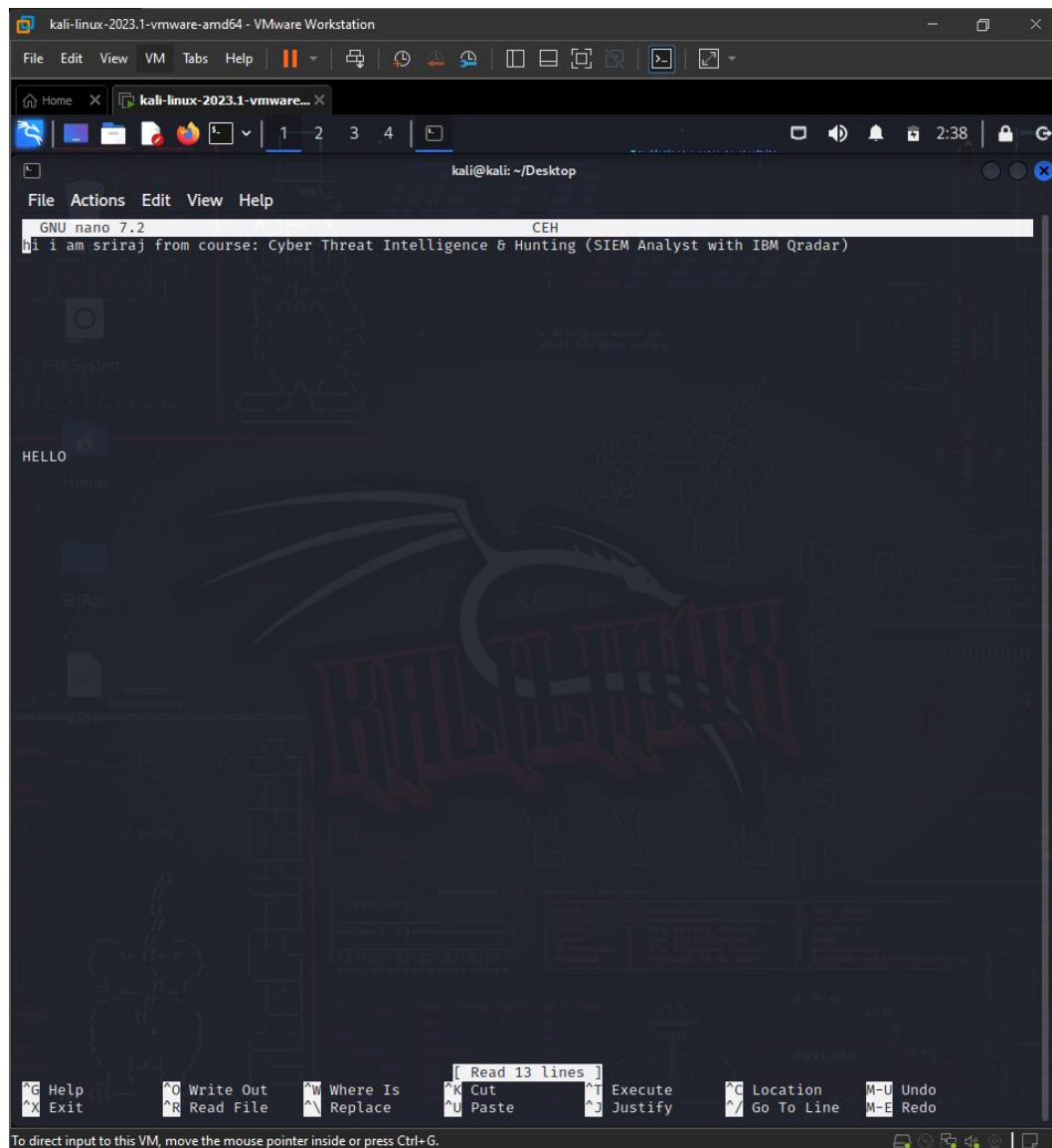
head: Display the beginning of a file

```
┌──(kali☉kali)-[~/Desktop]
└─$ head CEH
hi i am sriraj from course: Cyber Threat Intelligence & Hunting (SIEM Analyst with IBM Qradar)
```

tail: Display the end of a file


```
┌──(kali㉿kali)-[~/Desktop]
└─$ tail CEH



HELLO
```

nano: Text editor for creating and editing files

vi/vim: Powerful text editor for experienced users

```
  ┌──(kali㊀kali)-[~/Desktop]
  └─$ vi CEH

zsh: suspended  vi CEH
```

```
File  Actions  Edit  View  Help
hi i am sriraj from course: Cyber Threat Intelligence & Hunting (SIEM Analyst with IBM Qradar)




HELLO
~
```

File Permissions:

chmod: Change file permissions

```
  ┌──(kali㊀kali)-[~/Desktop]
  └─$ chmod +x+r CEH
```

chown: Change file owner

```
  ┌──(kali㊀kali)-[~/Desktop]
  └─$ chown kali CEH
```

chgrp: Change file group

```
  ┌──(kali㊀kali)-[~/Desktop]
  └─$ chgrp kali CEH
```

File Compression and Archiving:

tar: Archive files

gzip: Compress files

unzip: Extract files from a ZIP archive

Process Management:

ps: List running processes

top: Display real-time system information and processes

kill: Terminate processes

bg: Run processes in the background

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
```

uptime: Show system uptime

```
┌──(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)
```

w: Display logged-in users and their activities

```
┌──(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
```

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 0×20<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 0×10<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

```
┌──(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
q64 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

scp: Securely copy files between systems

wget: Download files from the web

System Administration:

sudo: Execute commands with superuser privileges

apt-get: Package management for Debian-based distributions

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: /
         ├─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

useradd: Add a new user

passwd: Change user password

```
  ┌──(kali㊀kali)-[~]
  └─$ passwd
Changing password for kali.
Current password:
New password:
Retype new password:
passwd: password updated successfully
```

Ensure that you provide the correct command(s) used to accomplish each task. Write your answers below each task.

Once you have completed the assessment, review your answers and verify that the output or results are correct.

Make this in doucement format and send them with images