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**Title: Linux Command List Assessment** 

**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:** 

S

ls: List files and directories

#### cd: Change directory

pwd: Print working directory

#### mkdir: Make directory

```
File Actions Edit View Help

(kali@ kali)-[~]

cd Documents

(kali@ kali)-[~/Documents]

mkdir Penetration testing

(kali@ kali)-[~/Documents]

s ls

Penetration testing

(kali@ kali)-[~/Documents]
```

### touch: Create an empty file

### cp: Copy files and directories

```
File Actions Edit View Help

[kali@kali)-[~]

$ cd Downloads

[kali@kali)-[~/Downloads]

$ '208IT0302 metasplout scan_ikqosz.pdf' kalamegam.jpg Nessus-10.4.2-ubuntu1404_amd64.deb

[kali@kali)-[~/Downloads]

$ cp kalamegam.png files

cp: cannot stat 'kalamegam.png': No such file or directory

[kali@kali)-[~/Downloads]

$ cp kalamegam.jpg files

[kali@kali)-[~/Downloads]

[kali@kali)-[~/Downloads]
```

## mv: Move or rename files and directories

```
File Actions Edit View Help

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stati@kali]-[-]

[stremnbin_2022-12-15_11_52_8_pg

Screenship _2022-12-15_11_52_8_pg

Screenship _2022-12-15_11_58_pg

Screenship _2022-12-15_11_58_
```

rm: Remove files and directories

```
File Actions Edit View Help

(kali@kali)-[-/Pictures]
5|16s

Screenshot_2022-12-13, 13, 29, 44, png
Screenshot_2022-12-13, 13, 24, png
Screenshot_2022-12-13, 13, 44, png
Screenshot_2022-12-13, 13, 44, png
Screenshot_2022-12-13, 13, 44, png
Screenshot_2022-12-24, 18, 18, 19, png
Screenshot_2022-12-20, 18, 13, 14, png
Screenshot_2022-12-20, 18, 14, png
Screenshot_2022-12-20, 18, 14, png
Screenshot_2022-12-20, 18, 14, png
Screenshot_2022-12-20, 18, 18, 18, png
Screenshot_2022-12-20, 1
```

find: Search for files and directories

```
File Actions Edit View Help

(**ali@*!ali*)-[-]
-$ find Documents': No such file or directory

(**kali@*!ali*)-[-]
-$ find Downloads

Downloads

Downloads/files

Downloads/files

Downloads/files

Downloads/files

Downloads/files

(**kali@*!ali*)-[-]
-$ of Downloads

(**kali@*!ali*)-[-/Downloads]
-$ find files

files

(**kali@*!ali*)-[-/Downloads]
-$ find files

(**kali@*!ali*)-[-/Downloads]
-$ find files
```

#### File Viewing and Editing:

cat: Concatenate and display file content

less: View file content with pagination

```
File Actions Edit View Help

[kali@kali)-[~]
§ less -- Labdn4.txt

[kali@kali)-[~]
```

head: Display the beginning of a file

```
File Actions Edit View Help

(hali@lali)-[-]
5 head - LabQnA.txt

Nikto V2.1.6/2.1.5

* Target Host: 192.108.50.129

* Target Port: 80

GET Retrieved x-powered-by header: PMP/5.2.4-2ubuntu5.10

GET The anti-click/acking X-Frame-Options header is not present.

GET The X-X55-Protection header is not defined. This header can hint to the user agent to protect against some forms of X55

GET The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type

GET Uncommon header 'tcn' found, with contents: list

GET Apache mod_negoriation is enabled with Multiviews, which allows attackers to easily brute force file names. See http://www.wisec.it/sectou.php?id-4698ebdc59d15.

The following alternatives for 'index' were found: index.php

* HEAD Apache/2.2.8 appears to be outdated (current is at least Apache/2.4.37). Apache 2.2.34 is the EOL for the 2.x branch.
```

#### tail: Display the end of a file

```
(%ali@ kali)-[~]

Syub-12184: GET />= PHPE9568F34-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.

OSYDB-12184: GET />= PHPE9568F35-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.

OSYDB-302: GET /phpMyAdmin/changelog.php: phpMyAdmin is for managing MySQL databases, and should be protected or limited to authorized hosts.

+ GET Server may loak inodes via ETags, header found with file /phpMyAdmin/Changelog; inode: 92662, size: 40540, mime: Tue Dec 9 12:24:00 2008

+ OSYDB-3092: GET /phpMyAdmin/Changelog: phpMyAdmin is for managing MySQL databases, and should be protected or limited to authorized hosts.

OSYDB-3208: GET /test/: Directory indexing found.

OSYDB-3233: GET /test/: This might be interesting...

OSYDB-3233: GET /phpinfo.php: PHP is installed, and a test script which runs phpinfo() was found. This gives a lot of system information.

OSYDB-3233: GET /cions/: Directory indexing found.

OSYDB-3233: GET /cions/: Directory indexing found.

OSYDB-3233: GET /cions/: Directory indexing found.

OSYDB-3233: GET /cions/: Directory indexing found.
```

### nano: Text editor for creating and editing files

```
File Actions Edit View Help

[kali | kali | -{-|}
| nano --version
GMU nano, version 6.2
(C) 1999-2011, 2013-2022 Free Software Foundation, Inc.
(C) 2014-2022 the contributors to nano
Compiled options: --disable-libmagic --enable-utf8

[kali | kali | -{-|}
| nano file2

[kali | kali | -{-|}
| |
```

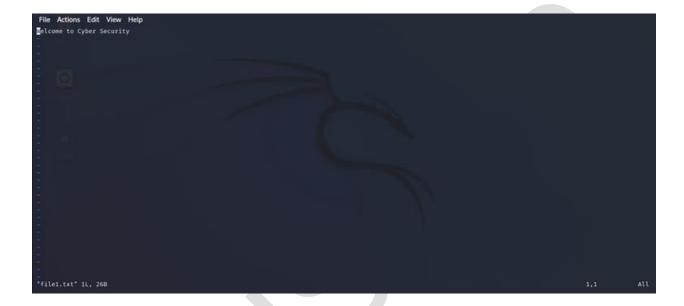


vi/vim: Powerful text editor for experienced users

```
File Actions Edit View Help

(kali@kali)-[~]

$\forall \text{ile1.txt}$
```



## **File Permissions:**

chmod: Change file permissions

chown: Change file owner

### chgrp: Change file group

```
File Actions Edit View Help

(*kali@ kali)-[-]

* **suda** add@roup** cybersecurity

[sudo] password for kali:

Sorry, try again.

[sudo] password for kali:

Adding group 'cybersecurity' (GID 1001) ...

**Done.**

**kali@ kali)-[-]

* **suda** chapt cybersecurity file1.txt

-**kali@ kali)-[-]

* **suda** chapt cybersecurity file1.txt

-**kali@ kali)-[-]

***Suda** chapt cybersecurity file1.txt

-**(kali@ kali)-[-]

***Suda** chapt cybersecurity file1.txt

-**(kali@ kali)-[-]

***Suda** chapt cybersecurity file1.txt
```

D

### File Compression and Archiving:

tar: Archive files

Commands:

- > tar cvf f.tar\*
- > tar xvf f.tar
- > tar tvf f.tar

```
File Actions Edit View Help

(**Lail@ball*)-[-]

5 tar vf f.tar

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Documents/benertation/
Documents/stesting/
Domnloads/
Domnloads/stesting/
Domnloads/files

Domnloads/files

Oomnloads/stesting/
Domnloads/files

file1.tst

index.htal

Labgh4.tst

Nusic/
Pictures/Screenshot_2022-12-21_10_51_50.png

Pictures/Screenshot_2023-01-20_10_8_8_82.png

Pictures/Screenshot_2023-01-20_8_8_8_82.png

Pictures/Screenshot_2023-01-20_8_8_8_82.png

Pictures/Screenshot_2023-01-20_8_8_8_82.png

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Pictures/Screenshot_2023-01-20_8_8_8_8_8.png

Pictures/Screenshot_2023-01-20_8_8_8_8_9.png

Pictures/Screenshot_2023-01-20_8_8_8_8_9.png

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Pictures/Screenshot_2023-01-20_8_9.png

Pictu
```

```
| California | Cal
```

### gzip: Compress files

```
File Actions Edit View Help

[kali@kali)-[-]
grip file1.txt

[kali@kali)-[-]
grip: myfile1.txt: No such file or directory

[kali@kali)-[-]
grip: file1.txt: No such file or directory

[kali@kali]-[-]
grip: file1.txt So such file or directory

[kali@kali]-[-]
grip: file1.txt So such file or directory

[kali@kali]-[-]
grip: file1.txt So such file or directory

[kali@kali]-[-]
grip: file1.txt No such file or directory

[kali@kali]-[-]
grip: file1.txt So such file or directory

[kali@kali]-[-]
grip: file1.txt So such file or directory

[kali@kali]-[-]
grip: file1.txt No such file or directory

[kali@kali]-[-]
grip: file1.txt No such file or directory

[kali@kali]-[-]
grip: file1.txt.gr already has .gr suffix — unchanged
```

## unzip: Extract files from a ZIP archive

```
File Actions Edit View Help

(**nont@ Lail*)-[/home/kali]
g gzip -d demo.txt:
gzip: demo.txt: unknown suffix -- ignored

(**nont@ Lail*)-[/home/kali]
g gzip -d demo.txt.gz: No such file or directory

(**nont@ Lail*)-[/home/kali]
g gzip -d file1.gz: No such file or directory

(**nont@ Lail*)-[/home/kali]
g gunzip file1.gz: No such file or directory

(**nont@ Lail*)-[/home/kali]
g gunzip file1.gz: No such file or directory

(**nont@ Lail*)-[/home/kali]
tar -xf archive.tar.gz: Cannot open: No such file or directory
tar: Error is not recoverable: exiting now

(**nont@ Lail*)-[/home/kali]
```

#### **Process Management:**

ps: List running processes

top: Display real-time system information and processes

```
File Actions Edit View Help

[kali@kali)-[~]

top
```

kill: Terminate processes

bg: Run processes in the background

fg: Bring background processes to the foreground

```
bg: job not found: —help

(root@ kali)-[~]

if f

[1] + running sleep 500

fg %1

^2

zsh: suspended sleep 500

(root@ kali)-[~]

if g %1

[1] + continued sleep 500
```

### **System Information:**

uname: Print system information

df: Display disk space usage free: Display memory usage

uptime: Show system uptime who: Display logged-in users

w: Display logged-in users and their activities

# **Networking:**

ifconfig: Configure network interfaces

```
File Actions Edit View Help

[kali@kali)-{~}

sirconfig

etho: flags-4163-UP, BROADCAST, RUNNING, MULTICAST> mtu 1500

inet 192.168.50.128 netmask 255.255.255.0 broadcast 192.168.50.255

inet 6 fe80::20c.29ff:feb1:d154 prefixlen 64 scopeid 0*20clink>
ether 00:0c.29jb1:d1:54 txqueuelen 1000 (Ethernet)

RX packets 177 bytes 12888 (12.5 KiB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 2218 bytes 194314 (189.7 KiB)

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*10chost>
loop txqueuelen 1000 (Local Loopback)

RX packets 0 bytes 0 (0.0 B)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 0 bytes 0 (0.0 B)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

ping: Send ICMP echo requests to a network host

```
File Actions Edit View Help

(1811) = 101 1912;185.50.129

PING 192:168.50.129 (192:168.50.129) 56(84) bytes of data.

64 bytes from 192:168.50.129; icmp_seq-1 ttl-64 time-2.49 ms

64 bytes from 192:168.50.129; icmp_seq-2 ttl-64 time-0.808 ms

64 bytes from 192:168.50.129; icmp_seq-2 ttl-64 time-0.808 ms

64 bytes from 192:168.50.129; icmp_seq-2 ttl-64 time-0.725 ms

64 bytes from 192:168.50.129; icmp_seq-8 ttl-64 time-0.725 ms

64 bytes from 192:168.50.129; icmp_seq-8 ttl-64 time-0.722 ms

64 bytes from 192:168.50.129; icmp_seq-8 ttl-64 time-0.722 ms

64 bytes from 192:168.50.129; icmp_seq-8 ttl-64 time-0.724 ms

64 bytes from 192:168.50.129; icmp_seq-1 ttl-64 time-0.674 ms

64 bytes from 192:168.50.129; icmp_seq-1 ttl-64 time-0.674 ms

64 bytes from 192:168.50.129; icmp_seq-1 ttl-64 time-0.725 ms

64 bytes from 192:168.50.129; icmp_seq-1 ttl-64 time-0.729 ms

64 bytes from 192:168.50.129; icmp_seq-11 ttl-64 time-0.729 ms

64 bytes from 192:168.50.129; icmp_seq-21 ttl-64 time-0.739 ms

64 bytes from 192:168.50.129; icmp_seq-21 ttl-64 time-0.739 ms

64 bytes from 192:168.50.129; icmp_seq-22 ttl-64 time-0.739 ms

64 bytes from 192:168.50
```

ssh: Securely connect to a remote system

scp: Securely copy files between systems

wget: Download files from the web

```
File Actions Edit View Help

\[
\text{(kali@kali)-[-]}{\sections get file: \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \(\
```

#### **System Administration:**

sudo: Execute commands with superuser privileges

#### apt-get: Package management for Debian-based distributions

```
File Actions Edit View Help

(Mail@ Bali):[-]

spi=get
apt 2.6.5 (and64)
Usage: apt-get (options) command
apt-get (options) install/remove pkgi [pkg2 ...]
apt-get (options) source pkgi [pkg2 ...]
apt-get (options) source pkgi [pkg2 ...]
apt-get is a command line interface for retrieval of packages
and information about them from authenticated sources and
for installation, upgrade and removal of packages together
with their dependencies.

Most used commands:
update - Retrieve new lists of packages
upgrade - Perform an upgrade
install - Install new packages (pkg is libcó not libcó.deb)
reinstall - Reinstall packages (pkg is libcó not libcó.deb)
reinstall - Reinstall packages (pkg is libcó not libcó.deb)
surge - Remove packages and config files
autoremove - Remove automatically all unused packages
dist-upgrade - Distribution upgrade, see apt-get(8)
dselect-upgrade - Follow dselect selections
build-dep - Configure build-dependencies for source packages
satisfy - Satisfy dependency strings
clean - Erase downloaded archive files
autoclean - Erase downloaded archive files
check - Verify that there are no broken dependencies
source - Download source archives
download - Download the binary package into the current directory
changelog - Download and display the changelog for the given package

See apt-get(8) for more information about the available commands.
Configuration options and syntax is detailed in apt.conf(5).
Information about how to configure sources can be found in sources.list(5).
Package and version choices can be expressed via apt.preferences(5).
```

#### systemctl: Manage system services

```
File Actions Edit View Help

(Lail@ Mall) [-]

System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=System=Syst
```

### crontab: Schedule recurring tasks

```
File Actions Edit View Help

(**Lali@ Mall)-[-]
5 crontab -0
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

(**Lali@ kali)-[-]

**Lali@ kali)-[-]
```

```
File Actions Edit View Help

(AU nano 6.2

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks to be run by cron.

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit time for an provide concrete values for

Edit this file time you can provide concrete values for

Edit define the time you can run a backup of all your user accounts

Edit this file to introduce tasks will be started based on the cron's system

Edit define the time for the crontab jobs (including errors) is sent through

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

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Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to introduce tasks will be run

Edit this file to int
```

#### useradd: Add a new user

passwd: Change user password

```
(kali⊕ kali)-[~]

$ passwd

Changing password for kali.

Current password:
```

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