

Kali Linux in Basic Commands

Kishan intern id :- 2031

1. pwd – Print Working Directory

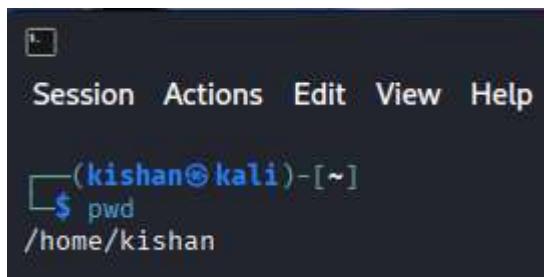
Description: Shows the current directory you are in.

Example:

```
pwd
```

Output:

```
/home/kishan/Documents
```



A screenshot of a terminal window titled 'Session Actions Edit View Help'. The window shows a command-line interface with the prompt '(kishan㉿kali)-[~]'. The user has typed '\$ pwd' and pressed Enter, resulting in the output '/home/kishan'.

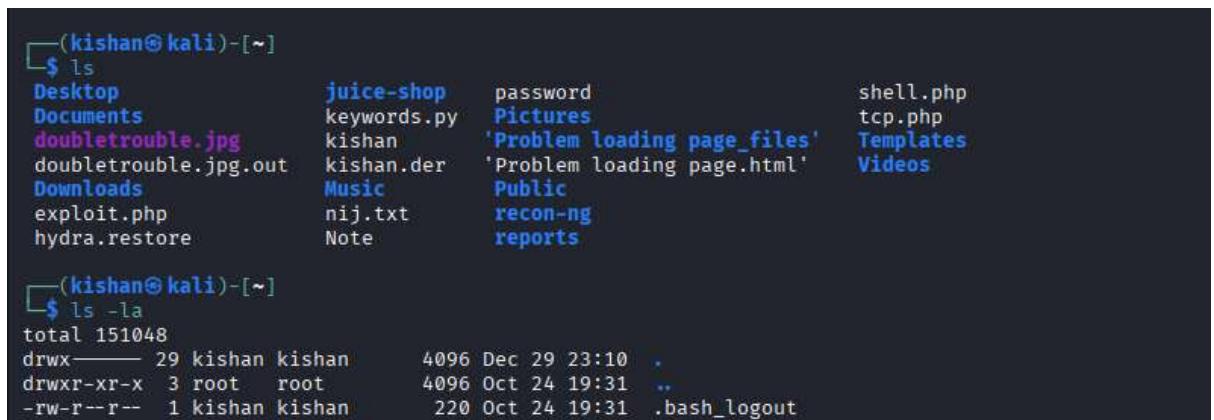
2. ls – List Files and Directories

Description: Displays files and folders in a directory.

Example:

```
ls
```

```
ls -la
```



A screenshot of a terminal window showing the results of the 'ls' and 'ls -la' commands. The first part of the output lists files and directories in the current directory. The second part, 'ls -la', provides a detailed listing including file permissions, ownership, and timestamps.

```
(kishan㉿kali)-[~]
$ ls
Desktop          juice-shop    password      shell.php
Documents        keywords.py   Pictures      tcp.php
doubletrouble.jpg kishan       'Problem loading page_files'
doubletrouble.jpg.out kishan.der  'Problem loading page.html'
Downloads        Music         Public       Templates
exploit.php      nij.txt      recon-ng    Videos
hydra.restore    Note         reports

(kishan㉿kali)-[~]
$ ls -la
total 151048
drwxr-xr-x  29 kishan kishan   4096 Dec 29 23:10 .
drwxr-xr-x  3 root  root    4096 Oct 24 19:31 ..
-rw-r--r--  1 kishan kishan    220 Oct 24 19:31 .bash_logout
```

3. cd – Change Directory

Description: Moves between directories.

Example:

```
cd Downloads
```

```
cd ..
```

```
cd /etc
```

```
[kishan@kali) [~]
$ cd Downloads

[kishan@kali) [/~Downloads]
$ cd ..

[kishan@kali) [~]
$ cd /etc

[kishan@kali) [/etc]
```

4. mkdir – Make Directory

Description: Creates a new directory.

Example:

mkdir projects

mkdir -p dev/web/app

```
(kishan@kali)-[~/]
$ sudo mkdir projects
[sudo] password for kishan:
[kishan@kali)-[~/]
$ ls
bin boot dev etc home initrd.img initrd.img.old lib lib32 lib64 lost+found media mnt opt proc projects root run sbin srv sys tmp usr var vmlinuz vmlinuz.old
```

5. rmdir – Remove Empty Directory

Description: Deletes an empty folder.

Example:

rmdir old_folder

```
(kishan@kali)-[~/]
$ sudo rmdir projects
[kishan@kali)-[~/]
$ ls
bin boot dev etc home initrd.img initrd.img.old lib lib32 lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var vmlinuz vmlinuz.old
```

6. touch – Create Empty File

Description: Creates a new empty file.

Example:

touch file.txt

```
(kishan@kali)-[~/]
$ touch nij.txt

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

7. cp – Copy Files or Directories

Description: Copies files or folders.

Example:

```
cp file.txt backup.txt
```

```
cp -r folder1 folder2
```

```
(kishan㉿kali)-[~]
$ cp shell.php nij.txt

(kishan㉿kali)-[~]
$ █
```

8. mv – Move or Rename Files

Description: Moves or renames files/directories.

Example:

```
mv file.txt newfile.txt
```

```
mv file.txt /home/kishan/
```

```
(kishan㉿kali)-[~]
$ mv ~/.zsh_history ~/.zsh_history_backup
touch ~/.zsh_history
exec zsh

(kishan㉿kali)-[~]
$ █
```

9. rm – Remove Files or Directories

Description: Deletes files or folders.

Example:

```
rm file.txt
```

```
rm -r folder
```

```
(kishan㉿kali)-[~]
$ rm nij.txt

(kishan㉿kali)-[~]
$ █
```

10. cat – View File Content

Description: Displays file content in terminal.

Example:

```
cat file.txt
```

```
(kishan㉿kali)-[~]
$ cat shell.php
<?php
// php-reverse-shell - A Reverse Shell implementation in PHP
// Copyright (C) 2007 pentestmonkey@pentestmonkey.net
//
// This tool may be used for legal purposes only. Users take full responsibility
// for any actions performed using this tool. The author accepts no liability
// for damage caused by this tool. If these terms are not acceptable to you, then
// do not use this tool.
//
// In all other respects the GPL version 2 applies:
//
// This program is free software; you can redistribute it and/or modify
```

11. less – View File Page by Page

Description: Reads large files safely.

Example:

less file.txt

(Press q to quit)

```
(kishan㉿kali)-[~]
$ less shell.php

(kishan㉿kali)-[~]
```

12. head – View First Lines

Description: Shows first 10 lines of a file.

Example:

head file.txt

head -5 file.txt

```
(kishan㉿kali)-[~]
$ head shell.php
<?php
// php-reverse-shell - A Reverse Shell implementation in PHP
// Copyright (C) 2007 pentestmonkey@pentestmonkey.net
//
// This tool may be used for legal purposes only. Users take full responsibility
// for any actions performed using this tool. The author accepts no liability
// for damage caused by this tool. If these terms are not acceptable to you, then
// do not use this tool.
//
// In all other respects the GPL version 2 applies:
```

13. tail – View Last Lines

Description: Shows last 10 lines of a file.

Example:

tail file.txt

tail -f log.txt

```
(kishan㉿kali)-[~]
└─$ tail shell.php
function printit ($string) {
    if (!$daemon) {
        print "$string\n";
    }
}

?>
```

14. echo – Display Text

Description: Prints text to terminal.

Example:

```
echo "Hello Linux"
```

```
(kishan㉿kali)-[~]
└─$ echo "Hello Linux"
Hello Linux

(kishan㉿kali)-[~]
```

15. man – Manual Pages

Description: Shows help for commands.

Example:

```
man ls
```

```
(kishan㉿kali)-[~]
└─$ echo "Hello Linux"
Hello Linux

(kishan㉿kali)-[~]
└─$ man ls

(kishan㉿kali)-[~]
```

16. chmod – Change File Permissions

Description: Controls read, write, execute permissions.

Example:

```
chmod 755 script.sh
```

```
chmod +x script.sh
```

```
(kishan㉿kali)-[~]
$ chmod +x shell.php
```

17. chown – Change File Owner

Description: Changes file owner.

Example:

```
sudo chown user:user file.txt
```

```
(kishan㉿kali)-[~]
$ sudo chown kishan:kishan shell.php
(kishan㉿kali)-[~]
$ ss
```

18. df – Disk Free Space

Description: Shows disk usage.

Example:

```
df -h
```

```
(kishan㉿kali)-[~]
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            1.6G   0    1.6G  0% /dev
tmpfs           349M  1.1M  348M  1% /run
/dev/sda1        95G  27G   63G  31% /
tmpfs           1.7G  4.0K  1.7G  1% /dev/shm
none            1.0M   0    1.0M  0% /run/credentials/systemd-journald.service
tmpfs           1.7G  324K  1.7G  1% /tmp
none            1.0M   0    1.0M  0% /run/credentials/getty@tty1.service
tmpfs           349M  108K  348M  1% /run/user/1000

(kishan㉿kali)-[~]
```

19. du – Directory Size

Description: Displays file or folder size.

Example:

```
du -h folder
```

```
(kishan㉿kali)-[~]
$ du -h Downloads
81M    Downloads/BurpSuite-Extensions
576M   Downloads/Burp Suite Professional Edition
16K    Downloads/bWAPP/db
60K    Downloads/bWAPP/apps
8.1M   Downloads/bWAPP/documents
20K    Downloads/bWAPP/passwords
112K   Downloads/bWAPP/js
992K   Downloads/bWAPP/images
20K    Downloads/bWAPP/admin
2.9M   Downloads/bWAPP/fonts
632K   Downloads/bWAPP/soap
28K    Downloads/bWAPP/stylesheets
15M    Downloads/bWAPP
228K   Downloads/evil
116K   Downloads/Burp Bounty Pro/BurpBountyData/rules
1.5M   Downloads/Burp Bounty Pro/BurpBountyData/profiles
1.6M   Downloads/Burp Bounty Pro/BurpBountyData
4.0K   Downloads/Burp Bounty Pro/profiles
23M    Downloads/Burp Bounty Pro
56K    Downloads/More Hacking Softwares
20K    Downloads/iNFO
1.4G   Downloads
```

20. free – Memory Usage

Description: Shows RAM usage.

Example:

free -h

```
(kishan㉿kali)-[~]
$ free -h
              total        used        free      shared  buff/cache   available
Mem:      3.4Gi       1.1Gi      755Mi      19Mi       1.8Gi      2.3Gi
Swap:     3.5Gi          0B      3.5Gi
```

21. top – Running Processes

Description: Displays active processes in real time.

Example:

Top

```
(kishan㉿kali)-[~]
$ top
top 0:02:18 up 53 min, 1 user, load average: 0.20, 0.06, 0.01
Tasks: 199 total, 3 running, 196 sleeping, 0 stopped, 0 zombie
%CPU us, 1.5 sy, 0.0 ni, 97.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
Mem: 3481.1 total, 756.3 free, 1124.5 used, 1809.0 buff/cache
Swap: 3581.0 total, 3581.0 free, 0.0 used, 2356.6 avail Mem
```

| PID | USER | PR | N | VIRT | RES | SHR | S | %CPU | %MEM | TIME+ | COMMAND |
|-------|--------|----|-----|--------|--------|-------|---|------|------|---------|------------------------------|
| 941 | root | 20 | 0 | 423392 | 154244 | 77596 | R | 5.1 | 4.3 | 0:34.34 | Xorg |
| 2027 | kishan | 20 | 0 | 807780 | 72408 | 54792 | R | 4.0 | 2.0 | 0:08.92 | qterminal |
| 27248 | kishan | 20 | 0 | 10732 | 5928 | 3748 | R | 1.1 | 0.2 | 0:00.04 | top |
| 761 | root | 20 | 0 | 353144 | 2972 | 2684 | S | 0.6 | 0.1 | 0:01.37 | VBoxRMClient |
| 1644 | kishan | 20 | 0 | 593948 | 136472 | 94132 | S | 0.6 | 3.8 | 0:07.47 | xwm4 |
| 1680 | kishan | 20 | 0 | 517836 | 55976 | 33536 | S | 0.6 | 1.6 | 0:01.11 | xfce4-panel |
| 1708 | kishan | 20 | 0 | 273800 | 29600 | 22480 | S | 0.6 | 0.8 | 0:06.61 | wrapper-2.0 |
| 1758 | root | 20 | 0 | 319868 | 10976 | 8956 | S | 0.6 | 0.3 | 0:01.80 | upowerd |
| 1843 | kishan | 20 | 0 | 281744 | 36036 | 19696 | S | 0.6 | 1.0 | 0:00.50 | xfce4-screensav |
| 1 | root | 20 | 0 | 25172 | 16180 | 11348 | S | 0.0 | 0.5 | 0:01.32 | systemd |
| 2 | root | 20 | 0 | 0 | 0 | 0 | S | 0.0 | 0.0 | 0:00.00 | kthreadd |
| 3 | root | 20 | 0 | 0 | 0 | 0 | S | 0.0 | 0.0 | 0:00.00 | pool_workqueue_release |
| 4 | root | 0 | -20 | 0 | 0 | 0 | I | 0.0 | 0.0 | 0:00.00 | kworker/R-rcu_gp |
| 5 | root | 0 | -20 | 0 | 0 | 0 | I | 0.0 | 0.0 | 0:00.00 | kworker/R-sync_wq |
| 6 | root | 0 | -20 | 0 | 0 | 0 | I | 0.0 | 0.0 | 0:00.00 | kworker/R-kvfree_rcu_reclaim |
| 7 | root | 0 | -20 | 0 | 0 | 0 | I | 0.0 | 0.0 | 0:00.00 | kworker/R-slub_flushwq |
| 8 | root | 0 | -20 | 0 | 0 | 0 | I | 0.0 | 0.0 | 0:00.00 | kworker/R-nets |

22. ps – Process Status

Description: Shows running processes.

Example:

```
ps
```

```
ps aux
```

```
(kishan㉿kali)-[~]
$ ps
  PID TTY      TIME CMD
 2073 pts/0    00:00:04 zsh
 27509 pts/0    00:00:00 ps
```

23. kill – Stop a Process

Description: Terminates a running process.

Example:

```
kill 1234
```

```
kill -9 1234
```

```
(kishan㉿kali)-[~]
$ kill 2073

(kishan㉿kali)-[~]
```

24. whoami – Current User

Description: Shows logged-in username.

Example:

```
Whoami
```

```
(kishan㉿kali)-[~]
$ whoami
kishan
```

25. uname – System Information

Description: Displays OS details.

Example:

```
uname -a
```

```
(kishan㉿kali)-[~]
$ uname -a
Linux kali 6.17.10+kali-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.17.10-1kali1 (2025-12-08) x86_64 GNU/Linux
```

26. history – Command History

Description: Shows previously used commands.

Example:

History

```
(kishan㉿kali)-[~]
$ history
1 cp
2 cp shell.php
3 cp --help
4 clear
5 histroy
```

27. clear – Clear Terminal

Description: Clears terminal screen.

Example:

Clear

```
(kishan㉿kali)-[~]
$ clear
```

28. wget – Download Files

Description: Downloads files from internet.

Example:

wget <https://example.com/file.zip>

```
(kishan㉿kali)-[~]
$ wget https://github.com/kc14042005/ecommerce-vuln.git
--2025-12-30 00:10:23-- https://github.com/kc14042005/ecommerce-vuln.git
Resolving github.com (github.com) ... failed: Temporary failure in name resolution.
wget: unable to resolve host address 'github.com'
```

29. curl – Data Transfer Tool

Description: Fetches data from URLs.

Example:

curl <https://example.com>

```
(kishan㉿kali)-[~]
$ curl http://example.com
curl: (6) Could not resolve host: example.com
```

30. sudo – Run as Administrator

Description: Executes commands with root privileges.

Example:

sudo apt update

```
(kishan㉿kali)-[~]
└─$ sudo apt update
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Ign:2 https://deb.nodesource.com/node_22.x nodistro InRelease
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Ign:2 https://deb.nodesource.com/node_22.x nodistro InRelease
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Ign:2 https://deb.nodesource.com/node_22.x nodistro InRelease
Err:1 http://http.kali.org/kali kali-rolling InRelease
      Temporary failure resolving 'http.kali.org'
Err:2 https://deb.nodesource.com/node_22.x nodistro InRelease
      Temporary failure resolving 'deb.nodesource.com'
5 packages can be upgraded. Run 'apt list --upgradable' to see them.
Warning: Failed to fetch http://http.kali.org/dists/kali-rolling/InRelease  Temporary failure resolving 'http.kali.org'
Warning: Failed to fetch https://deb.nodesource.com/node_22.x/dists/nodistro/InRelease  Temporary failure resolving 'deb.nodesource.com'
Warning: Some index files failed to download. They have been ignored, or old ones used instead.

(kishan㉿kali)-[~]
└─$
```