

# **Kali Linux in Basic Commands**

**Kishan intern id :- 2031**

### 1. pwd – Print Working Directory

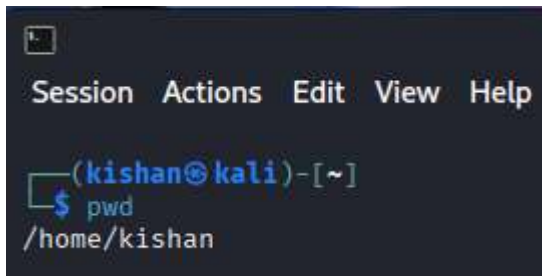
Description: Shows the current directory you are in.

Example:

pwd

Output:

/home/kishan/Documents

A terminal window with a dark background. At the top, there is a menu bar with 'Session', 'Actions', 'Edit', 'View', and 'Help'. Below the menu bar, the prompt is '(kishan@kali)-[~]'. The user has entered the command 'pwd' and the output is '/home/kishan/Documents'.

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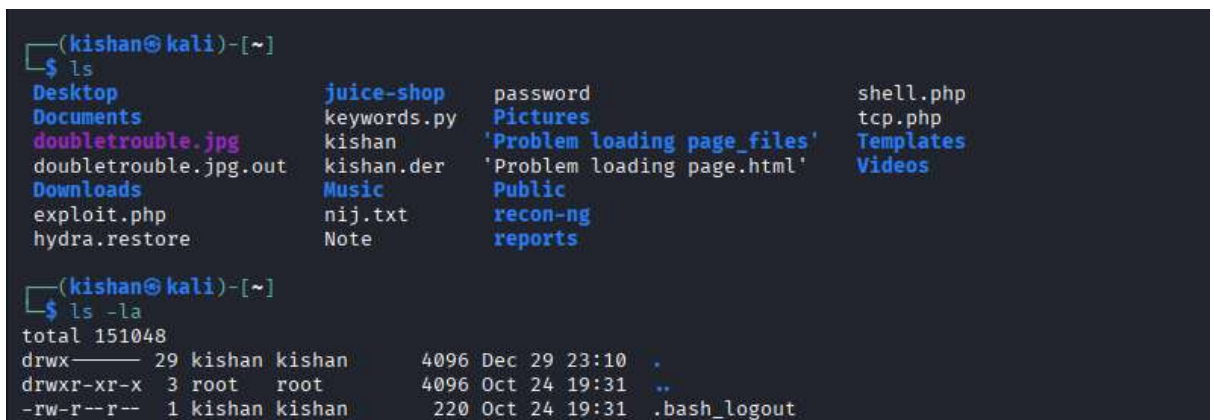
### 2. ls – List Files and Directories

Description: Displays files and folders in a directory.

Example:

ls

ls -la

A terminal window with a dark background. The prompt is '(kishan@kali)-[~]'. The user enters 'ls' and the output shows a list of files and directories: Desktop, Documents, doubletrouble.jpg, doubletrouble.jpg.out, Downloads, exploit.php, hydra.restore, juice-shop, keywords.py, kishan, kishan.der, Music, nij.txt, Note, password, Pictures, 'Problem loading page\_files', 'Problem loading page.html', Public, recon-ng, reports, shell.php, tcp.php, Templates, and Videos. The user then enters 'ls -la' and the output shows the total size of the directory (151048) and a detailed list of files and directories with their permissions, owner, group, size, and date.

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### 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

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

---

#### 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 - 00:02:18 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(s): 1.5 us, 1.5 sy, 0.0 ni, 97.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 3481.1 total, 756.3 free, 1124.5 used, 1809.6 buff/cache
MiB Swap: 3581.0 total, 3581.0 free, 0.0 used, 2356.6 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM    TIME+ COMMAND
 941 root        20   0   42392   15424   77596 R   5.1    4.3   0:34.34 Xorg
2027 kishan     20   0   807760  72488   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 VBoxDRMClient
1644 kishan    20   0   593948  136472  94132 S   0.6    3.8   0:07.47 xfwm4
1680 kishan    20   0   517836   55976   33536 S   0.6    1.6   0:01.11 xfce4-panel
1708 kishan    20   0   273000   29600   22480 S   0.6    0.8   0:06.61 wrapper-2.0
1758 root        20   0   319068   10976    8956 S   0.6    0.3   0:01.80 upowerd
1843 kishan    20   0   281744   36826   10696 S   0.6    1.0   0:00.50 xfce4-screensav
  1 root        20   0   25172   16180   11348 S   0.0    0.5   0:01.22 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-netns
```



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## 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  
(kishan@kali)-[~]  
$
```

---

## 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/kali/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)-[~]
└─$
```