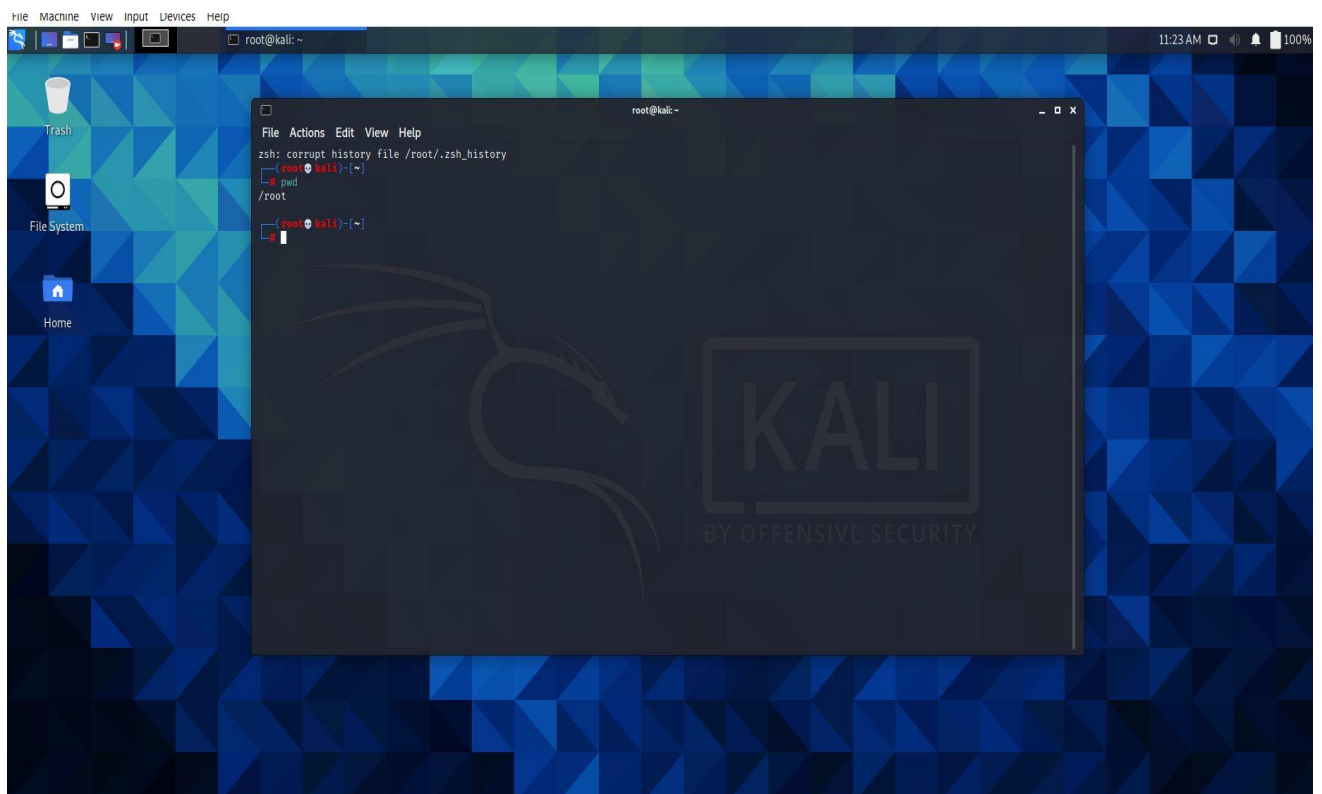


MCA (R) roll no:11

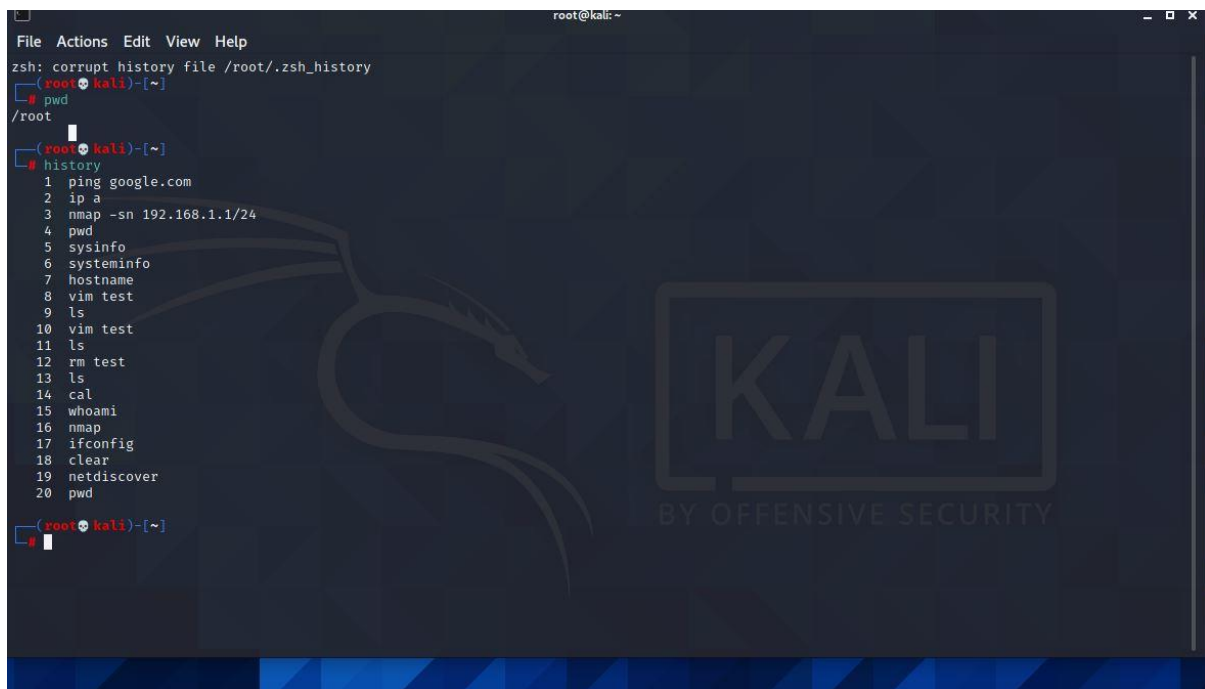
1.pwd

The `pwd` command stands for print working directory. It is one of the most basic and frequently used commands in Linux. When invoked the command prints the complete path of the current working directory.



2.history

history command is used to view the previously executed command. This feature was not available in the Bourne shell. Bash and Korn support this feature in which every command executed is treated as the event and is associated with an event number using which they can be recalled and changed if required. These commands are saved in a history file. In Bash shell history command shows the whole list of the command.

A screenshot of a Kali Linux terminal window. The window title is 'root@kali: ~'. The menu bar shows 'File Actions Edit View Help'. The terminal shows a message 'zsh: corrupt history file /root/.zsh_history' followed by a prompt '# (root@kali)~'. The user enters 'history', and the terminal displays a list of 20 commands: 1 ping google.com, 2 ip a, 3 nmap -sn 192.168.1.1/24, 4 pwd, 5 sysinfo, 6 systeminfo, 7 hostname, 8 vim test, 9 ls, 10 vim test, 11 ls, 12 rm test, 13 ls, 14 cal, 15 whoami, 16 nmap, 17 ifconfig, 18 clear, 19 netdiscover, 20 pwd. The background features a Kali Linux dragon logo and the text 'KALI BY OFFENSIVE SECURITY'.

```
File Actions Edit View Help
zsh: corrupt history file /root/.zsh_history
# (root@kali)~
# pwd
/root
#
# (root@kali)~
# history
 1 ping google.com
 2 ip a
 3 nmap -sn 192.168.1.1/24
 4 pwd
 5 sysinfo
 6 systeminfo
 7 hostname
 8 vim test
 9 ls
10 vim test
11 ls
12 rm test
13 ls
14 cal
15 whoami
16 nmap
17 ifconfig
18 clear
19 netdiscover
20 pwd
# (root@kali)~
```

3.man

man command in Linux is used to display the user manual of any command that we can run on the terminal. It provides a detailed view of the command which includes NAME, SYNOPSIS, DESCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUES, ERRORS, FILES, VERSIONS, EXAMPLES, AUTHORS and SEE ALSO.

```
(root@kali)~# man tail
(root@kali)~#
```

```
File Actions Edit View Help
TAIL(1) User Commands TAIL(1)

NAME
tail - output the last part of files

SYNOPSIS
tail [OPTION]... [FILE]...

DESCRIPTION
Print the last 10 lines of each FILE to standard output.  With more than one FILE, precede each with a header giving the file name.
With no FILE, or when FILE is -, read standard input.
Mandatory arguments to long options are mandatory for short options too.

-c, --bytes=[+]NUM
    output the last NUM bytes; or use -c +NUM to output starting with byte NUM of each file

-f, --follow[={name|descriptor}]
    output appended data as the file grows;
    an absent option argument means 'descriptor'

-F
    same as --follow=name --retry

-n, --lines=[+]NUM
    output the last NUM lines, instead of the last 10; or use -n +NUM to output starting with line NUM

--max-unchanged-stats=N
    with --follow=name, reopen a FILE which has not
    changed size after N (default 5) iterations to see if it has been unlinked or renamed (this is the usual case of rotated log
    files); with inotify, this option is rarely useful

--pid=PID
Manual page tail(1) line 1 (press h for help or q to quit)
```

4.cd

cd command in linux known as change directory command. It is used to change current working directory.

Syntax:

\$ cd [directory]

To move inside a subdirectory : to move inside a subdirectory in linux we use

\$ cd [directory_name]

```
(root@kali)~# cd college
(root@kali)~/college# cd exam
(root@kali)~/college/exam# cd nano.save
d: not a directory: nano.save
(root@kali)~/college/exam# cd ..
(root@kali)~/college# cd -
/college/exam
(root@kali)~/college/exam#
```

5.ls

ls is a Linux shell command that lists directory contents of files and directories

ls option	Description
ls -a	In Linux, hidden files start with . (dot) symbol and they are not visible in the regular directory. The (ls -a) command will enlist the whole list of the current directory including the hidden files.
ls -l	It will show the list in a long list format.
ls -lh	This command will show you the file sizes in human readable format. Size of the file is very difficult to read when displayed in terms of byte. The (ls -lh)command will give you the data in terms of Mb, Gb, Tb, etc.
ls -lhS	If you want to display your files in descending order (highest at the top) according to their size, then you can use (ls -lhS) command.
ls -l - -block-size=[SIZE]	It is used to display the files in a specific size format. Here, in [SIZE] you can assign size according to your requirement.
ls -d */	It is used to display only subdirectories.
ls -g or ls -lG	With this you can exclude column of group information and owner.
ls -n	It is used to print group ID and owner ID instead of their names.
ls --color=[VALUE]	This command is used to print list as colored or discolored.
ls -li	This command prints the index number if file is in the first column.
ls -p	It is used to identify the directory easily by marking the directories with a slash (/) line sign.
ls -r	It is used to print the list in reverse order.
ls -R	It will display the content of the sub-directories also.
ls -lX	It will group the files with same extensions together in the list.
ls -lt	It will sort the list by displaying recently modified filed at top.

<code>ls ~</code>	It gives the contents of home directory.
<code>ls ../</code>	It give the contents of parent directory.
<code>ls --version</code>	It checks the version of ls command.

```

root@kali: ~
File Actions Edit View Help
/
(root@kali)~[/]
# cd root
(root@kali)~[~]
# pwd
/root
(root@kali)~[~]
# ls
college Desktop Documents Downloads Music Pictures prog Public Templates Videos
(root@kali)~[~]
# ls -a
. .config .face .mozilla Public .vboxclient-seamless.pid .xsession-errors.old
.. Desktop .face.icon Music Templates Videos
.bashrc .dmrc .gnupg Pictures .vboxclient-clipboard.pid .viminfo
.cache Documents .ICEauthority .profile .vboxclient-display-svga-x11.pid .Xauthority
college Downloads .local prog .vboxclient-draganddrop.pid .xsession-errors
(root@kali)~[~]
# ls -l
total 40
drwxr-xr-x 5 root root 4096 Jun 14 09:24 college
drwxr-xr-x 2 root root 4096 May 15 03:17 Desktop
drwxr-xr-x 2 root root 4096 May 15 03:17 Documents
drwxr-xr-x 2 root root 4096 May 15 03:17 Downloads
drwxr-xr-x 3 root root 4096 Jun 14 09:19 Music
drwxr-xr-x 2 root root 4096 May 15 03:17 Pictures
drwxr-xr-x 2 root root 4096 Jun 14 09:22 prog
drwxr-xr-x 2 root root 4096 May 15 03:17 Public
drwxr-xr-x 2 root root 4096 May 15 03:17 Templates
drwxr-xr-x 2 root root 4096 May 15 03:17 Videos
(root@kali)~[~]

```

```
root@kali: ~  
File Actions Edit View Help  
(root@kali)-[~]  
# ls -R  
.:  
college Desktop Documents Downloads Music Pictures prog Public Templates Videos  
./college:  
exam lab work  
./college/exam:  
nano.save  
./college/lab:  
./college/work:  
./Desktop:  
./Documents:  
./Downloads:  
./Music:  
college  
./Music/college:  
./Pictures:  
./prog:  
./Public:  
./Templates:  
./Videos:
```

```
root@kali: ~  
File Actions Edit View Help  
(root@kali)-[~]  
# ls --version  
ls (GNU coreutils) 8.32  
Copyright (C) 2020 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.  
This is free software: you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law.  
  
Written by Richard M. Stallman and David MacKenzie.  
(root@kali)-[~]  
# ls -l  
bin dev home initrd.img.old lib32 libx32 media opt root sbin sys usr vmlinuz  
boot etc initrd.img lib lib64 lost+found mnt proc run srv tmp var vmlinuz.old  
(root@kali)-[~]  
# ls -  
college Desktop Documents Downloads Music Pictures prog Public Templates Videos  
(root@kali)-[~]  
# ls -lt  
total 40  
drwxr-xr-x 5 root root 4096 Jun 14 09:24 college  
drwxr-xr-x 2 root root 4096 Jun 14 09:22 prog  
drwxr-xr-x 3 root root 4096 Jun 14 09:19 Music  
drwxr-xr-x 2 root root 4096 May 15 03:17 Desktop  
drwxr-xr-x 2 root root 4096 May 15 03:17 Documents  
drwxr-xr-x 2 root root 4096 May 15 03:17 Downloads  
drwxr-xr-x 2 root root 4096 May 15 03:17 Pictures  
drwxr-xr-x 2 root root 4096 May 15 03:17 Public  
drwxr-xr-x 2 root root 4096 May 15 03:17 Templates  
drwxr-xr-x 2 root root 4096 May 15 03:17 Videos  
(root@kali)-[~]  
# ls -r  
Videos Templates Public prog Pictures Music Downloads Documents Desktop college
```

6.mkdir

to as folders in some operating systems). This command can create multiple directories at once as well as set the permissions for the directories. It is mkdir command in Linux allows the user to create directories (also referred important to note that the user executing this command must have enough permissions to create a directory in the parent directory, or he/she may receive a 'permission denied' error).

Syntax:

```
mkdir [options...] [directories ...]
```

- `--version`: It displays the version number, some information regarding the license and exits.

Syntax:

```
mkdir --version
```

```
(root@kali)~# ls -l
total 100
drwxr-xr-x  2 root root 4096 Nov 12 12:25 college
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Desktop
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Documents
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Downloads
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Music
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Pictures
drwxr-xr-x  2 root root 4096 Nov 12 12:25 prog
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Public
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Templates
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Videos

(root@kali)~# cd college
(root@kali)~/college# ls
total 100
drwxr-xr-x  2 root root 4096 Nov 12 12:25 college
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Desktop
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Documents
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Downloads
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Music
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Pictures
drwxr-xr-x  2 root root 4096 Nov 12 12:25 prog
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Public
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Templates
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Videos

(root@kali)~/college# mkdir assignments
(root@kali)~/college# ls
total 100
drwxr-xr-x  2 root root 4096 Nov 12 12:25 college
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Desktop
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Documents
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Downloads
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Music
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Pictures
drwxr-xr-x  2 root root 4096 Nov 12 12:25 prog
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Public
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Templates
drwxr-xr-x  2 root root 4096 Nov 12 12:25 Videos
drwxr-xr-x  2 root root 4096 Nov 12 12:25 assignments
drwxr-xr-x  2 root root 4096 Nov 12 12:25 exam
drwxr-xr-x  2 root root 4096 Nov 12 12:25 lab
drwxr-xr-x  2 root root 4096 Nov 12 12:25 work

(root@kali)~/college#
```


7.touch

The *touch* command is a standard command used in UNIX/Linux operating system which is used to create, change and modify timestamps of a file. Basically, there are two different commands to create a file in the Linux system which is as follows:

- cat command: It is used to create the file with content.
- touch command: It is used to create a file without any content. The file created using touch command is empty. This command can be used when the user doesn't have data to store at the time of file creation.

```
(root@kali)~[/college]
# touch java
(root@kali)~[/college]
# ls
assignments exam java lab work
(root@kali)~[/college]
# cd exam
(root@kali)~[/college/exam]
# touch exam1
(root@kali)~[/college/exam]
# ls
exam1 nano.save
(root@kali)~[/college/exam]
```

8. rmdir

If you need to delete a directory, use the rmdir command. However, rmdir only allows you to delete empty directories.

9.rm

rm stands for remove here. rm command is used to remove objects such as files, directories, symbolic links and so on from the file system like UNIX. To be more precise, rm removes references to objects from the filesystem, where those objects might have had multiple references (for example, a file with two different names). By default, it does not remove directories. This command normally works silently and you should be very careful while running rm command because once you delete the files then you are not able to recover the contents of files and directories.

Syntax:

rm [OPTION]... FILE...

Let us consider 5 files having name a.txt, b.txt and so on till e.txt.

```
$ ls
```

```
a.txt b.txt c.txt d.txt e.txt
```

Removing one file at a time

```
$ rm a.txt
```

```
$ ls
```

```
b.txt c.txt d.txt e.txt
```

Removing more than one file at a time

```
$ rm b.txt c.txt
```

```
$ ls
```

d.txt e.txt

```
File Actions Edit View Help
zsh: corrupt history file /root/.zsh_history
(root@kali)~# pwd
/root
(root@kali)~# rm -r prog
(root@kali)~# ls
amal college Desktop Documents Downloads java jyothi Music Pictures Public Templates Videos
(root@kali)~# rm -r jyothi
(root@kali)~# ls
amal college Desktop Documents Downloads java Music Pictures Public Templates Videos
(root@kali)~# rm -f java
(root@kali)~# ls
amal college Desktop Documents Downloads Music Pictures Public Templates Videos
(root@kali)~#
```

10.cat

Cat(concatenate) command is very frequently used in Linux. It reads data from the file and gives their content as output. It helps us to create, view, concatenate files. So let us see some frequently used cat commands.

1) To view a single file

Command:

```
$cat filename
```

Output

It will show content of given filename

2) To view multiple files

Command:

```
$cat file1 file2
```

```
(root@kali)-[~/college/lab]
# cat cls
hii all
good mornig
how are you all
```

```
(root@kali)-[~/college/lab]
# cat java.txt
```

```
cat > java.txt
clear
```

```
(root@kali)-[~/college/lab]
#
```