

Q1. How to perform calculation directly from terminal? Which command is used? How to set limit of numbers to display after particular constant(say pi)?

ans:-

We can do the calculation by two ways:

1.gcalccmd:-

ex:-

a.  $2+2*4$   
10

b.  $\ln(10)$   
2.302585093

2.Qalc:-

.It doesn't come pre-installed like gcalccmd .You have to install Qalc using the following command in the terminal: `sudo apt-get install qalc`.

After installation, we use it for calculation. Just write expression and press enter, then answer will be printed.

Ex:- Qalc also remembers the answer from your last calculation. so you can go like this:

$10 + 2 = 12$

`ans*10`

`ans * 10 = 1200`

3)bc command is also used for calculation.bc means basic calculation

Q3.Commands used for finding memory usage?

ans:- Commands are used for finding memory usage:-

1. free command:-

Syntax:- free -m

the m option displays all the data in MBs.

Syntax:- free

It gives all memory details of the total ram,used ram, free memory and cached amount of memory with buffers etc.

2. /proc/meminfo:-

the next way to check memory usage is to read the /proc/meminfo file. Know that the /proc file system does not contain real files. They are rather virtual files that contains dynamic information about the kernel and the system.

Check the values of Memtotal, Memfree, Buffers, Cached, SwapTotal, SwapFree. They indicates same values of memory usage as free command.

Syntax:- cat /proc/meminfo

3. vmstat:-

The vmstat command with the s option, lays out the memory usage statistics much like the proc command.

Syntax:-vmstat

Q4. Write a command to find a file with particular extension and contains particular word(String) in the file?

ans:- We can find the particular extension and contains particular word in file using:

```
find . -name "String" | grep -R "Extension_name"
```

so it can find all the files of that extension which contain the required name.

Q5. Create a directory and move in the directory. Create another directory inside this directory and move in it. Write a single command to come out in original directory.

ans:-

```
# mkdir directory_name (making directory)
```

```
# cd directory_name
```

```
# mkdir new_dir
```

```
# cd new_dir
```

```
# cd ../../ (move in original directory)
```

as much add ../ use you will come out that from that much directory

Q6. Why linux is more secured than other operating system? Find certain parameters comparing with other operating system?

Ans:-

Linux is an operating system like iOS and windows. it is an open source, the biggest reasons behind the enormous increase in the popularity of Linux is considered the high tech security system of the Linux. Linux is an open source operating system whose code can be easily read out by the users, it has very secure operating system, which protects the important files from viruses and malware and also there is no need to install anti virus and it is very difficult to hack its code specially the wifi password which is very easy in windows operating system. Certain parameters comparing with other operating system:-

- a. Different working environment
- b. strong community
- c. IPtables

- d. A perk of accounts
- e. Recording in Linux

Q8. If you forget password how will you reset it?

ans:-the following steps should be followed:-

- a. reboot to grub menu
- b. From reboot menu,select recovery mode and hit enter.
- c. You'll be presented with few options. Select the 'Drop to root shell Prompt' option and press enter.
- d. Once you're at the root shell prompt, if you have forgotten as username as well typr:-ls/home.this will list all the users accounts in your system.
- e. To reset password username where username is the username you want to reset.Ex:- passwd User
- f. you'll then be prompted for a new password. Type your new password and then hit enter. g. now password should be reset.type exit to rreturn to the recovery menu.
- h. After you get back to the recovery menu,select resume normal boot, and your password should work now.

Q9.

- 1). Which command must be used to search the command without knowing its exact name?  
We can go in its manual file, like

```
# man -k
# man cat
# man crontab etc.
```



2.What is umask?

ans:- Umask is used to determine the file permission for newly created files. It can be used to control the default file permission for new files.

Syntax:-umask [-S] [mask]

3.Write the syntax for the command to delete a non empty directory and simultaneously all the files inside the directory must be deleted and write the syntax for moving file from anywhere to everywhere?

ans:-

Syntax:

# mkdir directory\_name (making directory)

# cd directory\_name

# mkdir new\_dir

# cd new\_dir

# rm -r name

//rm -r Directory\_name

\*Syntax for moving file from anywhere to everywhere

mv -v source\_address destination\_address

ex:-mv -v /home/user/new /home/user/project