**1)Give me 15 commands which you use frequently**

Depends on the environment you work. Some examples are

**mkdir** — For creating folders( use -p option to create multiple folders at a time)  
[**ls**](http://www.linuxnix.com/2010/02/file-types-in-linux.html) –List folders/files( check what ls -1 do)

[**top**](http://www.linuxnix.com/2011/08/linux-top-command-explained-2.html) — To monitor system activities

[**lsof**](http://www.linuxnix.com/2009/05/lsof-command.html) –To check whats happening on the server and which process open which file.

[**netstat**](http://www.linuxnix.com/2008/04/linux-routing-basics.html) -tcp –Gives you complete picture about network connection details.

[**vnstat**](http://www.linuxnix.com/2009/09/how-to-use-vnstat-to-monitor-bandwidth-usage.html) –Gives you Network band width statics

[**sh**](http://www.linuxnix.com/2011/08/run-shell-script-linux.html) –For running shell scripts

[**history**](http://www.linuxnix.com/2009/12/bash_history_capabalities.html) –For monitoring the commands executed by users

**cd** –For changing directories

[**vi**](http://www.linuxnix.com/2010/04/notes-for-vi-editor.html)**–**-For editing configuration files.

**chmod** –To change permissions of folders and files.

**mount** –For mounting formated partitions.

**service** –For start/restart/stop a service.

**chkconfig** –For permanent on/off a service.

**fdisk -l** –To list all the partitions

This is my own list, you can have your list.

**2)Give me some commands for user management.**

last, chage, chsh, [lsof](http://www.linuxnix.com/2009/05/lsof-command.html), chown, chmod, useradd, userdel,[newusers](http://www.linuxnix.com/2011/08/create-multiple-users-linux.html).

**3)Give me syntax checking commands for following services**

[DNS, SAMBA, Apache etc](http://www.linuxnix.com/2009/07/server-configuration-file-syntax-checking-commands.html)

**4)What is the command to do password less logins to other machines.**

expect and ssh-keygen

**5)Give me some security monitoring related commands.**

lsof, netstat, top, ps -ef, tail, last, tcpdump, sestatus, history, w.

**6)What is the difference between man, info, whatis commands and a –help option for a command?**

whatis gives you one line answer.

–help option for a command gives you one line answers for each option supported by a command

man command gives you medium size info.

info command gives full details about a commands, lots and lots of information about a command.

**Q:1 How to check current run level of a linux server ?**  
Ans: ‘who -r’ & ‘runlevel’ commands are used to check the current runlevel of a linux box.

**Q:2 How to check the default gatway in linux ?**  
Ans: Using the commands “route -n” and “netstat -nr” , we can check default gateway. Apart from the default gateway info , these commands also display the current routing tables .

**Q:3 How to rebuild initrd image file on Linux ?**  
Ans: In case of CentOS 5.X / RHEL 5.X , mkinitrd command is used to create initrd file , example is shown below :

# mkinitrd -f -v /boot/initrd-$(uname -r).img $(uname -r)

If you want to create initrd for a specific kernel version , then replace ‘uname -r’ with desired kernel

In Case of CentOS 6.X / RHEL 6.X , dracut command is used to create initrd file example is shown below :

# dracut -f

Above command will create the initrd file for the current version. To rebuild the initrd file for a specific kernel , use below command :

# dracut -f initramfs-2.x.xx-xx.el6.x86\_64.img 2.x.xx-xx.el6.x86\_64

**Q:4 What is cpio command ?**  
Ans: cpio stands for Copy in and copy out. Cpio copies files, lists and extract files to and from a archive ( or a single file).

**Q:5 What is patch command and where to use it ?**  
Ans: As the name suggest patch command is used to apply changes ( or patches) to the text file. Patch command generally accept output from the diff and convert older version of files into newer versions. For example Linux kernel source code consists of number of files with millions of lines , so whenever any contributor contribute the changes , then he/she will be send the only changes instead of sending the whole source code. Then the receiver will apply the changes with patch command to its original source code.

Create a diff file for use with patch,

# diff -Naur old\_file new\_file > diff\_file

Where old\_file and new\_file are either single files or directories containing files. The r option supports recursion of a directory tree.

Once the diff file has been created, we can apply it to patch the old file into the new file:

# patch < diff\_file

**Q:6 What is use of aspell ?**  
Ans: As the name suggest aspell is an interactive spelling checker in linux operating system. The aspell command is the successor to an earlier program named ispell, and can be used, for the most part, as a drop-in replacement. While the aspell program is mostly used by other programs that require spell-checking capability, it can also be used very effectively as a stand-alone tool from the command line.

**Q:7 How to check the SPF record of domain from command line ?**  
Ans: We can check SPF record of a domain using dig command. Example is shown below :

linuxtechi@localhost:~$ dig -t TXT google.com

**Q:8 How to identify which package the specified file (/etc/fstab) is associated with in linux ?**  
Ans: # rpm -qf /etc/fstab

Above command will list the package which provides file “/etc/fstab”

**Q:9 Which command is used to check the status of bond0 ?**  
Ans: cat /proc/net/bonding/bond0

**Q:10 What is the use of /proc file system in linux ?**  
Ans: The /proc file system is a RAM based file system which maintains information about the current state of the running kernel including details on CPU, memory, partitioning, interrupts, I/O addresses, DMA channels, and running processes. This file system is represented by various files which do not actually store the information, they point to the information in the memory. The /proc file system is maintained automatically by the system.

**Q:11 How to find files larger than 10MB in size in /usr directory ?**  
Ans: # find /usr -size +10M

**Q:12 How to find files in the /home directory that were modified more than 120 days ago ?**  
Ans: # find /home -mtime +l20

**Q:13 How to find files in the /var directory that have not been accessed in the last 90 days ?**  
Ans: # find /var -atime -90

**Q:14 Search for core files in the entire directory tree and delete them as found without prompting forconfirmation**  
Ans: # find / -name core -exec rm {} \;

**Q:15 What is the purpose of strings command ?**  
Ans: The strings command is used to extract and display the legible contents of a non-text file.

**Q:16 What is the use tee filter ?**  
Ans: The tee filter is used to send an output to more than one destination. It can send one copy of the output to a file and another to the screen (or some other program) if used with pipe.

linuxtechi@localhost:~$ ll /etc | nl | tee /tmp/ll.out

In the above example, the output from ll is numbered and captured in /tmp/ll.out file. The output is also displayed on the screen.

**Q:17 What would the command export PS1 = ”$LOGNAME@`hostname`:\$PWD: do ?**  
Ans: The export command provided will change the login prompt to display username, hostname, and the current working directory.

**Q:18 What would the command ll | awk ‘{print $3,”owns”,$9}’ do ?**  
Ans: The ll command provided will display file names and their owners.

**Q:19 What is the use of at command in linux ?**  
Ans: The at command is used to schedule a one-time execution of a program in the future. All submitted jobs are spooled in the /var/spool/at directory and executed by the atd daemon when the scheduled time arrives.

**Q:20 What is the role of lspci command in linux ?**  
Ans: The lspci command displays information about PCI buses and the devices attached to your system. Specify -v, -vv, or -vvv for detailed output. With the -m option, the command produces more legible output.

**Q.1: What is the core of Linux Operating System?**

1. Shell
2. Kernel
3. Command
4. Script
5. Terminal

Answer : Kernel is the core of Linux Operating System. Shell is a command Line Interpreter, Command is user Instruction to Computer, Script is collection of commands stored in a file and Terminal is a command Line Interface

**Q.2: What Linus Torvalds Created?**

1. Fedora
2. Slackware
3. Debian
4. Gentoo
5. Linux

Answer : Linux Torvalds created Linux, which is the kernel (heart) of all of the above Operating System and all other Linux Operating System.

**Q.3: Torvalds, Wrote most of the Linux Kernel in C++ programming Language, do you agree?**

Answer : No! Linux Kernel contains 12,020,528 Lines of codes out of which 2,151,595 Lines are comments. So remaining 9,868,933 lines are codes and out of 9,868,933 Lines of codes 7,896,318 are written in C Programming Language.

The remaining Lines of code 1,972,615 is written in C++, Assembly, Perl, Shell Script, Python, Bash Script, HTML, awk, yacc, lex, sed, etc.

Note : The Number of Lines of codes varies on daily basis and an average of more than 3,509 lines are being added to Kernel.

**Q.4: Linux initially was developed for intel X86 architecture but has been ported to other hardware platform than any other Operating System. Do you agree?.**

Answer : Yes, I do agree. Linux was written for x86 machine, and has been ported to all kind of platform. Today’s more than 90% of supercomputers are using Linux. Linux made a very promising future in mobile phone, Tablets. In-fact we are surrounded by Linux in remote controls, space science, Research, Web, Desktop Computing. The list is endless.

**Q.5: Is it legal to edit Linux Kernel?**

Answer : Yes, Kernel is released under General Public Licence (GPL), and anyone can edit Linux Kernel to the extent permitted under GPL. Linux Kernel comes under the category of Free and Open Source Software (FOSS).

**Q.6: What is the basic difference between UNIX and Linux Operating System.**

Answer : Linux Operating System is Free and Open Source Software, the kernel of which is created by Linus Torvalds and community. Well you can not say UNIX Operating System doesn’t comes under the category of Free and Open Source Software, BSD, is a variant of UNIX which comes under the category of FOSS. Moreover Big companies like Apple, IBM, Oracle, HP, etc. are contributing to UNIX Kernel.

**Q. 7: Choose the odd one out.**

1. HP-UX
2. AIX
3. OSX
4. Slackware
5. Solaris

Answer : Slackware is the odd in the above list. HP-UX, AIX, OSX, Solaris are developed by HP, IBM, APPLE, Oracle respectively and all are UNIX variant. Slackware is a Linux Operating System.

**Q.8: Is Linux Operating system Virus free?**

Answer : No! There doesn’t exist any Operating System on this earth that is virus free. However Linux is known to have least number of Viruses, till date, yes even less than UNIX OS. Linux has had about 60-100 viruses listed till date. None of them actively spreading nowadays. A rough estimate of UNIX viruses is between 85 -120 viruses reported till date.

**Q.9: Linux is which kind of Operating System?**

1. Multi User
2. Multi Tasking
3. Multi Process
4. All of the above
5. None of the above

Answer : All of the Above. Linux is an Operating System which supports Multi User, Running a Number of Processes performing different tasks simultaneously.

**Q.10: Syntax of any Linux command is:**

1. command [options] [arguments]
2. command options [arguments]
3. command [options] [arguments]
4. command options arguments

Answer : The correct Syntax of Linux Command is Command [options] [arguments].

**Q.11: Choose the odd one out.**

1. Vi
2. vim
3. cd
4. nano

Answer : The odd one in the above list is cd. Vi, vim and nano are editors which is useful in editing files, while cd command is used for changing directory.