LINUX COMMANDS

cal

- Display the calendar
- SYNTAX:

cal [month] [year]

month is optional but year is not

cal is external command.

cal

OPTION	DESCRIPTION	EXAMPLE
cal -h	Turns off highlight of today's date	
cal mm yyyy	Display calendar for specific month	feburary
cal 2017	Display calendar for complete year	2017 calendar will be shown
cal –3	Display previous, current and next month in one go	July,aug,sep
cal –A2	display a specific number of months after the current month.	Aug, sep, oct
cal –B3	display a specific number of months preceding the current month	May, june, july, aug

cal

OPTIONS	DESCRIPTION	EXAMPLE
cal –B10 –A2	display calendar for oct 2016 to oct 2017,	
cal -j	Display julian days	
cal	Display calendar for current month of current year	
cal –d yyyy-mm	Display particular month and year	cal –d 2016-05
ncal	Display different layout	
cal 2015 more	Displays entire calendar on terminal screen	

- man is the system's manual viewer.
- It can be used to display manual pages, scroll up and down, search for occurrences of specific text, and other useful functions.
- Syntax:
 - man [command name]
 - Displays the information about following command.

- Man pages are generally written by the developer of the corresponding program.
- The man pages are divided into number of sections.
- Every section has a unique number and contains only a specific type of man pages.
- The following table shows various sections:

1	Executable programs or commands
2	System calls (functions provided by the kernel)
3	Library calls (functions provided by the library)
4	Special files
5	File formats and conventions (configuration files)
6	Games
7	Miscellaneous
8	System administration commands

- man page consists of several sections:
- 1. Name
- 2. Synopsis
- 3. Configuration
- 4. Description
- 5. Options
- 6. Exit status
- 7. Return value
- 8. Errors
- 9. Versions
- 10. Bugs
- 11. Examples and so on.

uname

- Prints system information
- When used without any options, uname reports the name.
- Syntax:
 - uname [option]

uname

OPTION	DESCRIPTION
-a,all	Prints all information,
- S	Print the kernel name.
-n	Print the network node hostname
-r	Print the kernel release
-v	Print the kernel version.
-m	Print the machine hardware name.
- p	Print the processor type
-I	Print the hardware platform
-0	Print the operating system

stty

- Change and print terminal line settings
- Without arguments, it prints baud rate, line discipline, and deviations from stty sane.
- Syntax:
 - stty [options]

stty

• stty –a:

 Display all the stty settings in a user friendly readable format.

tty

 Print the file name of the terminal connected to standard input

• SYNTAX:

tty [OPTION]...

who

 who command prints information about all users who are currently logged in.

• SYNTAX:

who [option]

who

OPTION	DESCRIPTION	
who	Tells username, device name of respective terminal, date and time logging in, machine name from where user logged in.	
who –H	Prints column heading	Name, Line, Time, Comment.
who –Hu	Prints column heading and when combined with –u gives more option	Name, Line, Time, Idle, PID, Comment.
whoami	Tells the user who invoked who command	

passwd

- The passwd command changes passwords for user accounts.
- A normal user may only change the password for his/her own account, while the super user may change the password for any account.

SYNTAX:

– passwd [option] [login]

passwd

- passwords should consist of 6 to 8 characters including one or more characters from each of the following sets:
 - lower case alphabetics
 - digits 0 9
 - punctuation marks

EXAMPLE1 FOR passwd

Change your own password:

```
$ passwd output:
```

\$ passwd

Changing password for ubuntu.

(current) UNIX password:

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

date

- Unix system maintains internal clock meant to run perpetually.
- When the system is shut down, a battery backups keeps the clock ticking.
- The command can also be used with specifiers as arguments.
- Format is preceded by + symbol, followed by %operator, and a single character describing the format.

SYNTAX

Date[option]

date

OPTION	DESCRIPTION	EXAMPLE
date	Display date and time	
date +%d	date of month	01
date +%m	month of the year(1-12)	0
date +%y	Display the last two digits of year	17
or +%g		
date +%D	display the date(mm/dd/yy)	08/20/17
date +%T	display the time(hh:mm:ss)	09:45:56
date +%H	display the hour part of the time	11
date +%M	display the minute part of the time	30
date +%S	display the second part of time	22
date +%F	display the date(yy/mm/dd)	2017-08-20

date

OPTION	DESCRIPTION	EXAMPLE
date +%b or +%h	month name in short	Jan
date +%B	month name in full	January
date +%A	Display full weekday name	Sunday
date +%a	Display abbreviated weekday name	Sun
date +%Y or +%G	Display full year	2017
date +%u	Day of week(17)	1 is Monday
date +%U	Week number of year, with Sunday as first day of week	34
date +%p	Tells either AM or PM	

bc

- Stands for basic calculator
- In this prompt gets disappear.
- Enter the expression and then use ctrl-d or type "quit" to exit calculator mode.
- SYNTAX:
 - -bc [option]

bc

OPTIONS	EXAMPLE	DESCRIPTION
Addition, subtraction of two numbers	20+8	Output is shown in next line
Division of two numbers	9/5	Truncate the decimal portions
Multiplication of two numbers	6*2, 6*2.3435	Shows the decimal part
To show floating point computation	Scale=2 9/4	Scale tells the number of precision
Variables can also be used to hold values	a=10 b=20 c=b-a	
	10	

bc

OPTIONS	EXAMPLE	DESCRIPTION
Text can be output on screen	a=30 "the output of variable a is";a;	Output: The value of variable a is 30
Multiple calculations in same line using; as delimiter	12*2;2^32 144 4294967296	Output will be in different line
Converting one number system to another	ibase=2 1101 13	ibase means input base