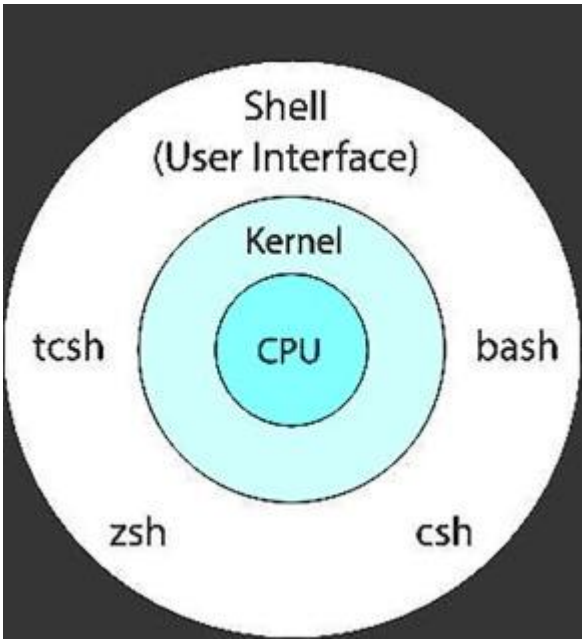
What is shell script



Types of shell and comparison of Shells

- Bourne Shell (sh)
- C Shell (csh)
- TENEX C Shell (tcsh)
- KornShell (ksh)
- Debian Almquist Shell (dash)
- Bourne Again Shell (Bash)
- Z Shell (zsh)
- Friendly Interactive Shell (fish)

Commands:

cat: It is generally used to concatenate the files. It gives the output on the standard output.

more: It is a filter for paging through text one screenful at a time.

less: It is used to viewing the files instead of opening the file.Similar to more command but it allows backward as well as forward movement.

ls : To get the list of all the files or folders.

ls -l: Optional flags are added to ls to modify default behavior, listing contents in extended form -l is used for “long” output

ls -a : To show all the hidden files in the directory, use ‘-a option’. Hidden files in Unix starts with ‘.’ in its file name.It will show all the files including the ‘.’ (current directory) and ‘..’ (parent directory).

ls -A : To show the hidden files, but not the '.' (current directory) and '..' (parent directory).

ls -i: Sometimes you may want to know the inone number of a file for internal maintenance. Use -i option as shown below to display inone number. Using inode number you can remove files that has special characters in it's name.

cd: Used to change the directory.

du: Show disk usage.

pwd: Show the present working directory.

man: Used to show the manual of any command present in Linux.

rmdir: It is used to delete a directory if it is empty.

locate: It is used to locate a file in Linux System

df: It is used to see the available disk space in each of the partitions in your system.

tar: Used to work with tarballs (or files compressed in a tarball archive)

mkdir : Used to create a directory if not already exist. It accepts the directory name as an input parameter.

cp : This command will copy the files and directories from the source path to the destination path. It can copy a file/directory with the new name to the destination path. It accepts the source file/directory and destination file/directory.

mv : Used to move the files or directories. This command's working is almost similar to cp command but it deletes a copy of the file or directory from the source path.

rm : Used to remove files or directories.

touch : Used to create or update a file.

date command is used to display the system date and time. date command is also used to set date and time of the system. By default the date command displays the date in the time zone on which unix/linux operating system is configured.You must be the super-user (root) to change the date and time.

Syntax of Date Command in Linux
date [OPTION]... [+FORMAT]
date [-u|--utc|--universal] [MMDDhhmm[[CC]YY][.ss]]

a) **date**

–used to check the date and time

Syn:$date

Format	Purpose	Example	Result
+%m	To display only month	$date+%m	06
+%h	To display month name	$date+%h	June
+%d	To display day of month	$date+%d	O1
+%y	To display last two digits of years	$date+%y	09
+%H	To display hours	$date+%H	10
+%M	To display minutes	$date+%M	45
+%S	To display seconds	$date+%S	55

b) **cal**

–used to display the calendar

Syn:$cal 2 2009

c)**echo**

–used to print the message on the screen.

Syn:$echo "text"

f)**man**

–used to provide manual help on every UNIX commands.

Syn:$man unix command

$man cat

g)**who** & **whoami**

–it displays data about all users who have logged into the system currently. The next command displays about current user only.

Syn:whowhoami

h)**uptime**

–tells you how long the computer has been running since its last reboot or power-off.

Syn:$uptime

i)**uname**

–it displays the system information such as hardware platform, system name and processor, OS type

Syn:$uname–a

j)**hostname**

–displays and set system host name

Syn:$ hostname

k)**bc**

–stands for 'best calculator'

```
$bc
10/2*3
15
```

```
$ bc
scale =1
2.25+1
3.35
quit
```

```
$ bc
ibase=2
obase=16
11010011
89275
1010
Ā
Quit
```

```
$ bc
sqrt(196)
14 quit
```

```
$bc
for(i=1;i<3;i=i+1)I
1
2
3 quit
```

```
$ bc-l
scale=2
s(3.14)
0
```

FILE MANIPULATION COMMANDS

a)**cat**–this create, view and concatenate files.

Creation:

Syn:$cat>filename

Viewing:

Syn:$cat filename

Add text to an existing file:

Syn:$cat>>filename

Concatenate:

Syn:$catfile1file2>file3

$catfile1file2>>file3 (no over writing of file3)