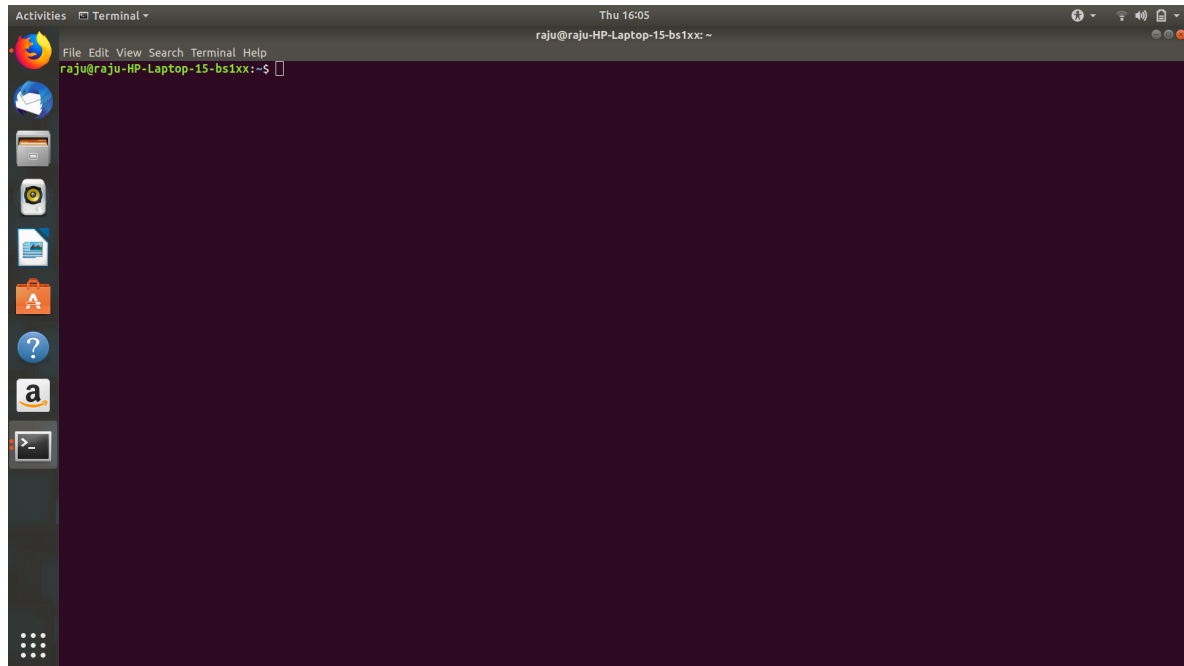
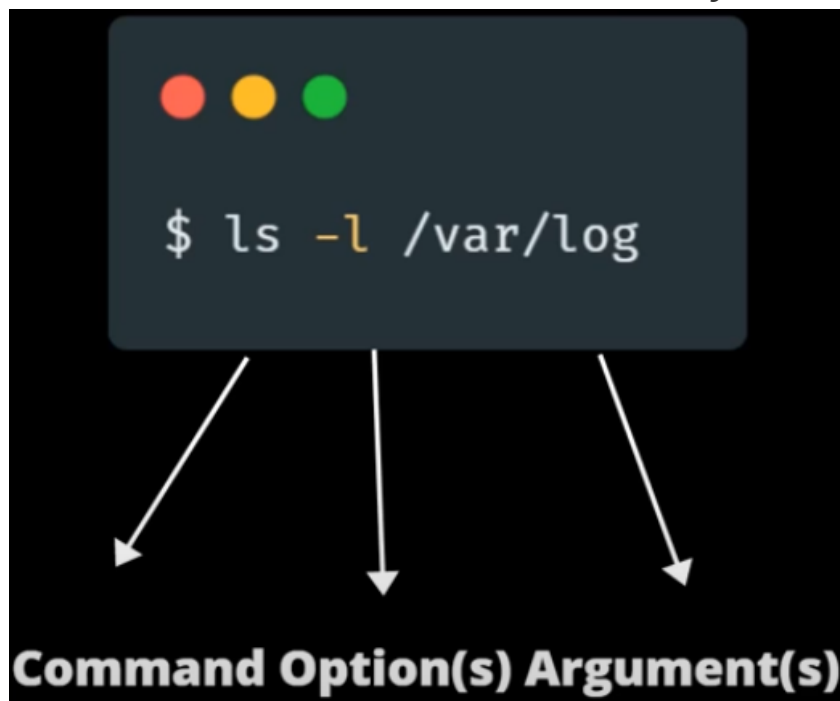


Introduction to Linux & Shell Scripting

Command line interface



General command syntax



Command: The program run by the user.

Option(s): Tell the command how to operate, it always starts with "-" character and has a single letter.

Argument: Tells the command what to operate on

Famous general commands

ls ---> list a folder's content.

man ls ---> it's a manual, in this case for ls.

file file_name.ext ---> It's used to find the details of a file name.

stat file_name.ext ---> It's used to display ownership and modification information.

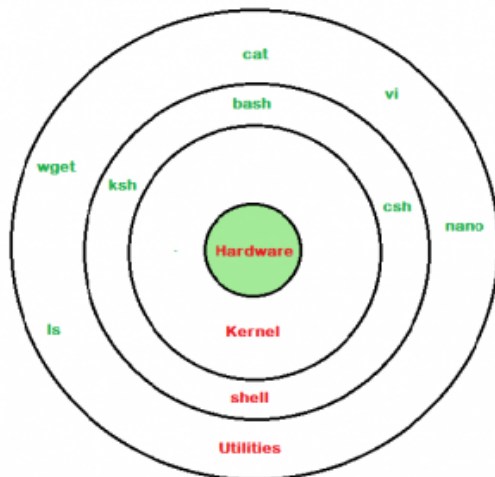
Linux Architecture - Kernel & Shell

Kernel: Is a computer program that's the core of a computer's operating system, it has complete control over everything in the system. It also manages the following resources of the Linux system:

- File management
- Process management
- I/O management
- Memory management
- Device management
- ETC.

Shell: A special user program which provides an interface to the user to use operating system services. It is a command language interpreter that executes commands read from input devices such as keyboards or from files. It gets started when the user logs in or starts the terminal.

SHELL -> Kernel

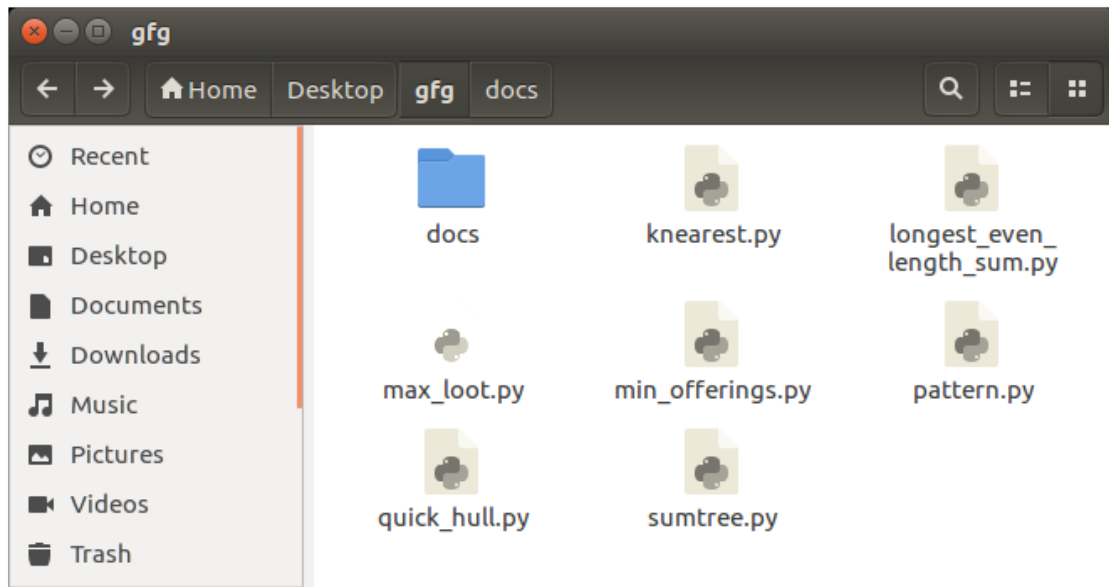


Command-Line Shell

Shell can be accessed by the user using a command-line interface.

Graphical Shell

Graphical shells provide means for manipulating programs based on graphical user interface (GUI).



Types of shell

- **BASH (Bourne Again SHell)** - It is most widely used shell in Linux systems. It is used as default login shell in Linux systems and in macOS. It can also be installed on Windows OS.
- **CSH (C SHell)** - The C shell's syntax and usage are very similar to the C programming language.
- **KSH (Korn SHell)** - The Korn Shell also was the base for the POSIX Shell standard specifications etc.

Shell relationship

It creates a parent-child relationship where your login shell is always the most senior.

Command Prompt

Are found on the command line interface of any operating system that provides a command-line interface.

```
[sandra@localhost work]$
```

The tilde ~ is short-cut for home directory.

