**Where is linux?**

* TV,
* Mobile Phones.
* Self Driving Car.
* Plane.
* Rocket.
* Many websites are hosted on Linux.

**Who Uses Linux?**

* US Government
* Top Tech Companies like Google, Microsoft, Amazon by various means.
* Hackers.
* Financial Institutes.
* Computer Programmers and Researchers.
* Those who want to acquire high technical knowledge.

**Some Linux Distro:**

* Ubuntu
* Fedora
* Elementory OS
* Red Hat OS
* Cent OS
* Kali Linux
* Arch Linux

**Linux Vs Windows**

* Linux is Free But Windows is Paid.
* Linux runs for months or years without reboot, but in windows often reboot is required.
* Most of the software is available for windows but not in linux.
* Linux is Secure than windows.
* Linux is Fully Customizable but Windows is not.

**Points to Remember**

* Folder in linux called directory.
* Linux is a case sensitive System. A is different than a.
* Avoid using filename as space.
* Super Admin is also called root who can do anything.
* Software is called a package.

**Are all linux based OS free?**

No, not all linux based OS are free. Enterprise level linux based operating systems are paid. E.g Red Hat is a paid OS, if we have a problem the Red Hat team will support and provide us a solution.

**Basic Tour Of Ubuntu**

Background Change, Datetime Settings, Wifi, Bluetooth etc.

**Everyday Commands**

| **Command** | **Meaning** |
| --- | --- |
| whoami | Your current user name. |
| hostname | Your current host name. |
| pwd | Print working directory. |
| ls | List directory contents. |
| ls -l | List directory contents in long format. |
| touch | Create a file. |
| cat | Concatenate files and print on output i.e. read file. |
| users | Display currently logged in users. |
| cp | Copy file. E.g: cp file1.txt file2.txt |
| mv | Move file. E.g: mv file1.txt file2.txt |
| mkdir | Create a directory. E.g: mkdir work |
| rmdir | Remove directory. E.g: rmdir work |
| rm | Remove files or directory. |
| rm -R | Remove directory will contain all content. |
| cd | Change directory. |
| cd .. | One step back. |
| touch ch{1..9}.txt | Create file ch1 to ch9. |
| rm ch\* | Delete all files starting from ch. |
| locate | find your file by name [Fast]. sudo updatedb |
| sudo | Forcefully do a job. |
| find | Find or search in file. [Slow]. E.g find -name "brp.txt" |
| date | Show date and time |
| sudo reboot | Restart computer |
| clear | Clear screen |

**User Management Command In Linux**

| **Command** | **Meaning** |
| --- | --- |
| sudo passwd username | Change password of user. |
| useradd username | Add new user without home directory. |
| useradd -m username | Add new user with home directory. |
| userdel username | Delete user without his/her user directory. |
| userdel -r username | Delete user with his/her user directory. |
| groupadd groupname | Add new user group. |
| groupdel groupname | Delete user group. |
| usermod -aG groupname username | Add user to group. |
| su username | Switch to specific user. |
| id username | Display user and group information. |

**Files**

* /etc/passwd => to get user lists.
* /etc/group => to get groups details.
* /etc/shadow => to get hash password.