**Linux**

Linux is an open-source, Unix-like operating system kernel that serves as the foundation for various operating systems called Linux distributions (or distros). It was created by **Linus Torvalds** in 1991 and is widely used in servers, desktops, embedded systems, and mobile devices

* It provides the environment to create the applications run, the application and to access the applications.

**Types of operating system**

1. Linux
2. Unix
3. Mac
4. Android
5. Windows

**Windows**

* Developed by Microsoft company in the year 1985
* It is having GUI (Graphical user interface)
* It is not a open source
* It is a single user operating system
* Less security features
* Limited to personal usage

**Linux**

* Developed by linus tordvalds in the year 1991
* Linux operating system is built up on linux kernel
* Linux kernel is the brain of the operating system
* Multiple user can operate this operating system
* Very high security features when compared with the other operating system
* Linux is a distributed operating system
* Linux can perform all the tasks evenly if it is having less space on it hard disk

**Disadvantages**

* It is not user friendly
* It is having very small peripherals

**Commands**

**Check system information**

Uname -a

**Show the current directory**

Pwd

**changing directory**

cd linux

**Making a directory**

Mkdir linux

**Creating a file**

Touch file name

**Run a command on the instance**

ls -1

**create a new directory**

mkdir foldername

**move into a directory**

cd foldername

**edit a file using nano**

nano filename

**view file content**

cat filename

**delete a directory**

rm -r filename

**check system uptime**

uptime

**display free disk space**

df -h

**Show running processes**

Top

**Exit the AWS instance**

Exit

**Create an empty file**

Touch filename

**Open a file**

Open filename

**Open directory**

Open directory

**Once you have a file, you can move it around using**

**the mv command.**

touch test

mv pear new\_pear

**You can copy a file using the cp command:**

touch test

cp apple another\_apple

**The open command lets you open a file using this**

open <filename>

**The find command can be used to find files or folders matching a particular search pattern.**

find . -name '\*.js'

**The ln command is part of the Linux file system**

**commands.**

Ln

**You can compress a file using the gzip compression**

gzip filename

**The tar command is used to create an archive,grouping multiple files in a single file.**

tar -cf archive.tar file1 file2

**alias**

alias ll='ls -al'

**cat**

cat file

**You can print the content of multiple files:**

cat file1 file2

**The less command is one I use a lot. It shows youthe content stored inside a file, in a nice and interactive UI.**

less <filename>

**The wc command gives us useful information about a file or input it receives via pipes.**

echo test >> test.txt wc test.txt

**sort**

ls | sort

**uniq is a command useful to sort lines of text.**

uniq dogs.txt

**diff**

diff file1.txt and file2