Lecture 1

- **What is linux:** Linux is a kernel. A kernel is the core of an operating system. A linux distribution is any OS that uses linux kernel. It is multitasking OS. Largest collaborative project in history It's a modular system, which means all its components are separated from each other. There are 2 main linux distributions: Debian and Redhat (Total more than 150) Its free
- **Architecture of linux**

> Kernel: the core Daemons: programs run in the background independently Shells: interface that accepts user input and translate into machine language for kernel

- **Graphical Desktop Environment:**

> Collection of software that user can see and use Linux file structure: Hierarchical treelike structure Device files Directory files Binary files

- **Regular files** Highest point of the structure is called root (/)

- **GNU public license** The GPL is a free, copyleft license for software that guarantees end users the freedom to run, study, share and modify the softweare. 3 versions of GPL: v1, v2, v3 Linux is released under the GNU GPL v2 Linux is considered to be open source and Free soft.

- **UBUNTU** It is a linux distribution, free for everyone. It is suitable for both desktop and server use it is shipped in a stable and regular release cycle: Regular or Not-LTS: Shipped every 6 months and supported for 9 months LTS (Long-Term Support): Shipped every years with the support of 5 years. Examples of distribution based on UBUNTU: Linux Lite, linux mint, Elementary OS, Pop OS, Parrot OS, SteamOS. Kali Linux, linux deepin. Linux is modelled on the Unix operating system.