

# Lecture 2: Introduction to Linux Notes

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## 1. What is an Operating System?

**An operating system is one if not the most important software that runs the computer.**

## 2. What is a kernel?

**A kernel is "like" an operating system, which is a system software; but it has different functions, like turning user commands into machine language.**

## 3. Which other parts aside from the kernel identify an OS?

**The OS has different parts that identify it, like the *user interface* for example or the *file system***

## 4. What is linux and linux distribution?

**Linux is an Open-Source operating system, meaning is free to use for the public; meanwhile, Linux distribution is a version of the Linux operating system.**

## 5. List at least 4 linux characteristics:-

**4 Linux characteristics include: its Open-Source availability, its customization, its security, and the support of the community that uses it.**

## 6. What is Ubuntu?

**Ubuntu is a *free*, open-source linux operating system that runs on computers and server.**

## 7. What is Debian?

**Debian is a *free*, open-source operating system(OS) that's based based on the linux *kernel***

## 8. List and define the different types of licensing agreements

**Types of licensing agreements:** Confidentiality: Protects a company's trade secrets and other information that are generally unavailable to the public. Identification: Refers to the extent to which the licensor and license will be responsible if the contract is not honored. Shrinkwrap license: A traditional term used for software that comes in a physical package.

## 9. What is Free Software? Define the 4 freedoms.

**A free software that users can freely use, study, share, and modify; the 4 freedoms are: Run: The freedom, to use the software for any purposes. Study: The freedom to study how the software works. Share: The freedom to copy and share the software at little to no cost. Improve: The freedom to change the software and share those changes with others.**

## 10. What is virtualization?

**Virtualization is a technology that allows users to create virtual computers, and or networks**