

# Lecture 2 Introduction to Linux Notes

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## 1. What is an Operating System?

An OS allows you to use the computer's hardware providing basic tools that make the computer useful.

## 2. What is a kernel?

Software component that manages low level features on a computer.

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

Command Line Shells, Graphical User Interfaces, Utility and Productivity Programs, Libraries

## 4. What is linux?

Linux is a open source software

## 5. What is a linux distribution?

It is a open source/ free software packages.

## 6. List at least 4 linux characteristics:

Open source OS, Linux is more configurable than Windows, Can be installed on almost any system, and is free of charge.

## 7. What is Ubuntu?

Is a Linux distribution freely available

## 8. What is Debian?

An All-Volunteer organization dedicated to developing free software and promoting the ideals of the Free Software community

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

Open source- software that can be distributed for a fee/ free. Closed source- software is not distributed with the source code. Freeware- software is free but source code is not available.

Shareware- software is free on a trial basis.

Free software- software is distributed with source code. Can be a gotten for a fee/ free.

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

Use the software for any purpose, examine the source code and modify it as you see fit, redistribute the software, redistribute your modified software.

## 11. What is virtualization?

Creating a virtual version of something.

## 12. List 3 benefits of virtualization

Can run multiple Oss on one physical machine, Save states, Can be used to run legacy applications past their lifetime.

13. What is a hypervisor? Include definitions of the 2 types

Software/ Hardware in charge of creating, managing, and running virtual machines. Type 1 runs directly on the hardware. Type 2 runs on top of an OS.

14. What is the difference between Guest OS and Host OS?

For Host the Os is running in the computer where the hypervisor is installed. For Guest the OS is being virtualized in the the virtual machine.

15. What is virtualbox?

It is a x86 and AMD64/Intel54 virtualization product for enterprise and home use. Also an Open source software.