Lecture 2 Introduction to Linux Notes

1. What is an Operating System?

An operating system provides all fundamental software features of a computer. An OS enables you to use the computer's hardware providing the basic tools that make the computer useful.

2. What is a kernel?

An OS kernel is a software component that's responsible for managing low level features of the computer.

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

Three key components of an operating system (OS) include the hardware, kernel and shell.

4. What is linux and linux distribution?

Linux is a Unix-like Operating System. Linux distribution is a complete Linux system package.

5. List at least 4 linux characteristics:

- Linux is open source software
- Linux is free of charge
- Linux is highly scalable and customizable
- You can install Linux on almost any system

6. What is Ubuntu?.

Ubuntu is a Linux distribution, freely available with both community and professional support.

7. What is Debian?

Debian is an all-volunteer organization dedicated to developing free software.

8. List and define the different types of licensing agreements

- ***Open Source:*** The software may be distributed for a fee or free. The source code is distributed with the software.
- ***Closed Source:*** The software is not distributed with the source code. The user is restricted from modifying the code.
- ***Freeware:*** The software is free but the source code is not available.
- ***Shareware:*** The software is free on a trial basis.
- ***Free software:*** The software is distributed with the source code. The software can be free of charge or obtained by a free.

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

Free software is a critical force in the open source world.

- ***Freedom 0:*** Use the software for any purpose
- ***Freedom 1:*** Examine the source code and modify as you see fit
- ***Freedom 2:*** Redistribute the software
- ***Freedom 3:*** Redistribute your modified software

10. ## What is virtualization?

Virtualization is a technology that creates virtual versions of physical hardware, operating systems, and storage devices.