Lecture 2 Introduction to Linux Notes

1. What is an Operating System?

- An operating system provides all fundamental software features of a computer. The operating system enables you to use the computer's hardware providing you 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, including the following managing system hardware, memory allocation, CPU time, and program to program interaction.

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

- Command-Line Shells, graphical user interfaces, utility and productivity programs, and libraries identify an OS.

4. What is linux and linux distribution?

- Linux is a Unix-like operating system popular in academic and business environments. Linux consists of a kernel, libraries, and utilites that make up the entire operating system.

5. List at least 4 linux characteristics:

- Linux is an open source software, is available for free, highly scalable and customizable, and you can install Linux on almost any system as it supports almost every processor architecture.

6. What is Debian?

- Debian is an all-volunteer organization dedicated to developing free software and promoting the ideals of the Free Software community.

7. 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 is free software but the source code is not available. Shareware is software that 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 fee.

8. What is Free Software? Define the 4 freedoms.

- Free software: the software is distributed with the source code. The software can be free of charge or obtained by a fee.

- Freedom 0: use the software for any purpose
- Freedom 1: examine the source code and modify it as you see fit
- Freedom 2: redistribute the software
- Freedom 3: redistribute your modified software

9. What is virtualization?

- Virtualization is defined as creating virtual versions of something.