**Jonathan Dinh - Linux Writing Assignment**

1. **What is the Linux Operating System?**

* Linux is an operating system, which is software that helps a user operate a computer’s systems.

1. **Name at least 3 major parts of what makes up the Operating System?**

* The Linux Kernel, The GNU Utilities, the graphical desktop environment, and the application software.

1. **The Kernel is the heart of the Linux Operating System. How can you tell what version of the kernel you are running?**

* The command uname -r

1. **What are the parts of the Kernel and what do they do?**

* System memory management, Software program management, Hardware management, Filesystem management

1. **What is a Process?**

* A running program.

1. **What does running in the foreground and running in the background means?**

* Running in the foreground means that the output of a program is on display while running in the background means something is running without displaying.

1. **What is the name of the first process that the Linux system creates?**

* The first process is called the init process, which starts all other processes.

1. **Kernel communicate with devices through Drivers ( True or False )**\_True\_.
2. **There is no need to rebuild the kernel when you install new devices because Modules allow you to insert and remove Driver code in the Live Kernel. ( True or False)**\_False\_.
3. **All devices in Linux are identified by the kernel as Files. The types of files are Character, Block and Network.(True or False)**\_True\_.
4. **Describe what a character device is and give one example.**

* Character Device files relate to devices that only have the capability of only handle data a single character at a time.

1. **Block devices handles data blocks at a time--example are Disk Drives--(True or false)**

* True

1. **Which kind of file type will be used to send packets?**

* The network file types use packets to send data

1. **What is the name of the special device files created by Linux for all devices on the system and makes use of a Major number and a Minor Number? (Nodes)**

* These device files are called nodes, which are created for each device on the system. They use major device numbers to group similar devices together and they use minor numbers to identify specific devices within a major device group.

1. **What is a File System?**

* File systems are used by operating systems like Linux to read and write data on hard drives as well as from hard drives onto other things.

1. **List at least 3 Linux file system types?**

* ext : the original Linux filesystem
* ncp : Netware filesystem
* ufs: BSD filesystem

1. **What is GNU? Who started the concept?**

* A complete set of utilities that were like the Unix utilities, and instead used the kernel from Linux to operate. It was started by the GNU organization (GNU’s Not Unix).

1. **Describe the purpose of the SHELL**

* The SHELL allows users to start programs as well as manage files and processes on Linux.

1. **What piece of software works directly with your Video card and Monitor in the PC when it comes to presenting graphics?**

* The X widow software

1. **List at least 2 Desktops for Linux.**

* The KDE desktop and the Unity Desktop

1. **What do you call a complete Linux system package?**

* A distribution

1. **What is a Live CD and name at least 3 live Distros.**

* A Live CD allows you to run a sample Linux system through a CD instead of a hard drive.
* PCLinuxOS, Ubuntu, and Puppy

1. **What is a Console?**

* A Console is a terminal that allowed users to enter shell commands and text inputs while also viewing text outputs.

1. **When Linux starts, it creates many virtual consoles. ( True or False)\_**True**\_.**
2. **CLI (command line interface) was the only means of accessing Linux before the Graphical User Interfaces were developed(True or False) \_**True**\_.**
3. **How to access the virtual console: CTRL + ALT + { F1 to F7 } Depending on the virtual console you want to use.**

* Ubuntu uses F7, Rhel uses F1

1. **What two things must every user have to log onto a Linux system?**

* You must enter your user ID and then your password

1. **How do you see what shell you are in?**

* ps -p $$

1. **Linux is an operating system and has a hierarchical file system that begins with the root directory '/'. All files and directories are created relative to the '/' directory( True or False)?**

* True

1. **How do you switch user from one user to another?**

* The su command