**Linux Interview Questions**

**1) What is the difference between UNIX and LINUX?**

Unix originally began as a propriety operating system from Bell Laboratories, which later on spawned into different commercial versions. On the other hand, Linux is free, open source and intended as a non-propriety operating system for the masses.

**2) What is BASH?**

BASH is short for Bourne Again SHell. It was written by Steve Bourne as a replacement to the original Bourne Shell (represented by /bin/sh). It combines all the features from the original version of Bourne Shell, plus additional functions to make it easier and more convenient to use. It has since been adapted as the default shell for most systems running Linux.

**3) What is Linux Kernel?**

The Linux Kernel is a low-level systems software whose main role is to manage hardware resources for the user. It is also used to provide an interface for user-level interaction.

**4) What are the basic components of Linux?**

Just like any other typical operating system, Linux has all of these components: kernel, shells and GUIs, system utilities, and application program. What makes Linux advantageous over other operating system is that every aspect comes with additional features and all codes for these are downloadable for free.

**5) What is the basic difference between BASH and DOS?**

The key differences between the BASH and DOS console lies in 3 areas:  
– BASH commands are case sensitive while DOS commands are not;  
– under BASH, / character is a directory separator and \ acts as an escape character. Under DOS, / serves as a command argument delimiter and \ is the directory separator  
– DOS follows a convention in naming files, which is 8 character file name followed by a dot and 3 character for the extension. BASH follows no such convention.

**6) Describe the root account.**

The root account is like a systems administrator account, and allows you full control of the system. Here you can create and maintain user accounts, assigning different permissions for each account. It is the default account every time you install Linux.

**7) What is CLI?**

CLI is short for Command Line Interface. This interface allows user to type declarative commands to instruct the computer to perform operations. CLI offers an advantage in that there is greater flexibility. However, other users who are already accustom with using GUI find it difficult to remember commands including attributes that come with it.

**8) What is GUI?**

GUI, or Graphical User Interface, makes use of images and icons that users click and manipulate as a way of communicating with the computer. Instead of having to remember and type commands, the use of graphical elements makes it easier to interact with the system, as well as adding more attraction through images, icons and colors.

**9) How can you find out how much memory Linux is using?**

From a command shell, use command: cat /proc/meminfo for memory usage information. You should see a line starting something like: Mem: 64655360, etc. This is the total memory Linux thinks it has available to use.

**10) What is the pwd command?**

The pwd command is short for print working directory command. It’s counterpart in DOS is the cd command, and is used to display the current location in the directory tree.

**11) What are the kinds of permissions under Linux?**

There are 3 kinds of permissions under Linux:  
– Read: users may read the files or list the directory  
– Write: users may write to the file of new files to the directory  
– Execute: users may run the file or lookup a specific file within a directory

**12) What are the different modes when using vi editor?**

There are 3 modes under vi:  
– Command mode – this is the mode where you start in  
– Edit mode – this is the mode that allows you to do text editing  
– Ex mode – this is the mode wherein you interact with vi with instructions to process a file

**13) How you can run an Linux program in the background simultaneously when you start your Linux Server?**

By using **nohup.**It will stop the process receiving the **NOHUP** signal and thus terminating it you log out of the program which was invoked with.  **&** runs the process in the background.