**What is Linux?**

Linux is an operating system based on UNIX and was first introduced by Linus Torvalds. It is based on the Linux Kernel and can run on different hardware platforms manufactured by Intel, MIPS, HP, IBM, SPARC, and Motorola. Another popular element in Linux is its mascot, a penguin figure named Tux.

**2) 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.

**3) 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.

**4) 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.

**5) What is LILO?**

LILO is a boot loader for Linux. It is used mainly to load the Linux operating system into main memory so that it can begin its operations.

**6) What is a swap space?**

Swap space is a certain amount of space used by Linux to temporarily hold some programs that are running concurrently. This happens when RAM does not have enough memory to hold all programs that are executing.

**7) What is the advantage of open source?**

Open source allows you to distribute your software, including source codes freely to anyone who is interested.

**8 ) 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 an application program.

**9) Does it help for a Linux system to have multiple desktop environments installed?**

In general, one desktop environment, like KDE or Gnome, is good enough to operate without issues. It’s all a matter of preference for the user, although the system allows switching from one environment to another. Some programs will work in one environment and not work on the other, so it could also be considered a factor in selecting which environment to use.

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

The key differences between the BASH and DOS console lie 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 characters for the extension. BASH follows no such convention.

**11) What is Ansible?**

Ansible is developed in Python language.

It is a software tool. It is useful while deploying any application using ssh without any downtime. Using this tool one can manage and configure software applications very easily.

**12) What are the advantages of using Ansible?**

The main three advantages of using this tool is,i.e. Ansible

1. Agentless
2. Very low overhead
3. Good performance

**13) What is a shell?**

Shell is an interface between the user and the kernel. Even though there can be only one kernel; a system can have many shell running simultaneously. So, whenever a user enters a command through the keyboard, the shell communicates with the kernel to execute it and then display the output to the user.

**14) What is the equivalent of a file shortcut that we have a window on a Linux system?**

Shortcuts are created using “links” on Linux. There are two types of links that can be used namely “soft link” and “hard link”