**What is Linux System Administration?**

Linux is an operating system or a kernel created by Linus Torvalds with other contributors. It was first released on September 17, 1991. The main advantage of Linux is that it is distributed under an open-source license means programmers can use the Linux Kernel to design their own custom operating systems. Most of Linux code is written in C Programming Language.

Some of the most popular operating systems that use Linux as kernel are Debian, Knoppix, Ubuntu, and Fedora.

**Introduction to Linux System Administration:**

Linux is a major strength in computing technology. Most of the webserver, mobile phones, personal computers, supercomputers, and cloud-servers are powered by Linux. The job of a Linux systems administrator is to manage the operations of a computer system like maintain, enhance, create user account/report, taking backups using Linux tools and command-line interface tools. Most computing devices are powered by Linux because of its high stability, high security, and open-source environment.

***There are some of the things that a Linux system administrator should know and understand:***
1.Linux File Systems
2.File System Hierarchy
3.Managing Root/super User
4.Basic Bash Command
5.Handling File, Directories and Users

**Duties of a Linux Administrator:**

System Administration has become a solid criterion for an organization and institute that requires a solid IT foundation. Hence, the need for efficient Linux administrators is the requirement of the time. The job profile might change from each organization as there may be added responsibilities and duties to the role.

***Below are some duties of a Linux Administrator:***

1.Maintain all internet requests inclusive to DNS, RADIUS, Apache, MySQL, PHP.
2.Taking regular back up of data, create new stored procedures and listing back-up is one of the duties.
3.Analyzing all error logs and fixing along with providing excellent customer support for Webhosting, ISP and LAN Customers on troubleshooting increased support troubles.
4.Communicating with the staff, vendors, and customers in a cultivated, professional manner at all times has to be one of his characteristics.
5.Enhance, maintain and creating the tools for the Linux environment and its users.
6.Detecting and solving the service problems ranging from disaster recovery to login problems.
7.Installing the necessary systems and security tools. Working with the Data Network Engineer and other personnel/departments to analyze hardware requirements and makes acquiring recommendations.
8.Troubleshoot, when the problem occurs in the server.

***In short***, the main role of the Linux Systems Administrator is to manage the operations like install, observe the software and hardware systems and taking backup. And also have a good ability to describe an In-depth understanding of technical knowledge.