Red Hat Linux Server
Module – 7

- **What is KVM?**

Kernel-based Virtual Machine (KVM) is an open-source virtualization technology built into Linux. Specifically, KVM lets you turn Linux into a hypervisor that allows a host machine to run multiple, isolated virtual environments called guests or virtual machines (VMs).

- **What is Virtualization?**

Linux virtualization refers to a process where more than one virtual machine can be installed in the Linux operating system. It helps in the collaboration of the hardware and software resources of the Linux operating Software.

- **What are the key benefits of virtualization?**

Efficiency and Consolidation: Virtualization allows for better utilization of system resources. It enables multiple virtual machines to share the same physical resources, thus improving efficiency.
Isolation: Each virtual machine operates independently of the others, providing an isolated environment. This means that issues in one virtual machine do not affect the others.
Mobility: Virtual machines can be easily migrated from one physical machine to another, providing flexibility and ease of management.
Fast Startup: Virtual machines can start faster than a traditional installation on actual hardware.
Cloning: Virtual machines can be cloned, allowing for easy replication of a specific environment.
Testing Different Distros: Virtualization makes it easy to try out different Linux distributions without the need for repartitioning your hard drive.
Disaster Recovery: Virtualization offers better disaster recovery solutions as it's easier to take snapshots of virtual machines and restore them as needed.
Support for Larger Applications: Virtualization can support larger, more complex applications that need full OS functionality on a single server.

- **For building RHEL virtualizations which two packages are required?**

To build RHEL virtualizations, you need to install two packages:
virt: This is the RHEL 8 virtualization module1.
virt-install and **virt-viewer**: These are additional packages that are required.

- **What is nested virtualization?**

Nested virtualization is a feature that allows you to run a virtual machine (VM) inside another VM while still using the hardware acceleration from the host system. In other words, nested virtualization is a mechanism of running a hypervisor inside of a virtual machine (VM), which itself runs on a hypervisor.

- **Full form of LDAP is**

LDAP stands for Lightweight Directory Access Protocol.

- **What is LDAP?**

LDAP is an internet protocol that works on TCP/IP and is used to access information from directories. It's essentially a protocol that helps users find data about organizations, persons, and more. LDAP is a distributed directory service and can be used as storage for various types of information.

- **Which package is used for graphically access ldap configuration**

Kldap: A graphical LDAP client written for KDE.
LDAP Administration Tool: Available from the Ubuntu repositories.
GQ LDAP Client: Another graphical LDAP client.
phpLDAPadmin: A web-based LDAP client.
JXplorer: A Java-based LDAP browser and editor.