Roll no: 18

Practical 5 – KVM:

Aim: To install and configure virtualization using KVM.

Steps:

Step 1: Check Hardware Virtualization Support:

Ensure that your CPU supports hardware virtualization (Intel-VT or AMD-V) and that is enabled in the BIOS settings

Step 2: Install KVM Packages:

1) Update your package repository: sudo apt update
2) Install the KVM and QEMU packages: sudo apt install qemu -kvm libvirt-daemon-system libvirt-clients bridge-utils

Step 3: Start and Enable Libvirt Service:

1) Start the libvirt service: sudo systemct1 start libvirtd
2) Enable libvirt to start on boot: sudo systemct1 enable libvirtd

Step 4: Configure Networking:

1) Create the network bridge interface: sudo nano/etc/network/interfaces
2) Add the following lines: auto br0 iface br0 inet dhcp bridge_ports enp0s3
3) Restart the networking service: sudo systemct1 restart networking

Step 5: Create a Virtual Machine:

You can create and manage virtual machines using tools like virt-manager or virsh.

Step 6: Install Virt-Manager:

If you prefer GUI tool for managing virtual machine, you can install virt-manager: sudo apt install virt-manager

Step 7: Launch Virt-Manager:

You can launch Virt-Manager from the application menu or using the command virt-manager in the terminal.

Step 8: Create Virtual Machine:

Using Virt-Manager, you can create, configure and manage virtual machines on your KVM hypervisor