**Ex No: 1(a) Roll no:231901002**

**Date:22.01.25**

**INSTALLATION AND CONFIGURATION OF LINUX**

**Aim:**

To install and configure Linux operating system in a Virtual Machine.

# Installation/Configuration Steps:

1. Install the required packages for

virtualization dnf install xen virt-manager qemu libvirt 2. Configure xend to start up on boot systemctl enable virt-manager.service

1. Reboot the machine Reboot
2. Create Virtual machine by first running virt-manager virt-manager &
3. Click on File and then click to connect to localhost
4. In the base menu, right click on the localhost(QEMU) to create a new VM 7. Select Linux ISO image
5. Choose puppy-linux.iso then kernel version
6. Select CPU and RAM limits
7. Create default disk image to 8 GB
8. Click finish for creating the new VM with PuppyLinu

# Output:

**Step 1: Install required virtualization packages**

Open a terminal and run:

bash Copy code

sudo dnf install xen virt-manager qemu libvirt -y **Step 2: Enable virt-manager to start on boot** sudo systemctl enable virt-manager.service

# Step 3: Reboot the system

sudo reboot

**Step 4: Launch Virtual Machine Manager** After reboot, open terminal and run: virt- manager &

# Step 5: Connect to localhost

* In the Virtual Machine Manager window, click **File** > **Add Connection** (if not already connected).
* Select **QEMU/KVM** > Click **Connect** to localhost.

# Step 6: Create a new Virtual Machine

* Right-click on localhost (QEMU) > **New**. **Step 7: Select Installation Media**

# Choose Local install media (ISO image or CDROM).

* Click **Forward**. **Step 8: Choose ISO image**
* Click **Browse**, then **Browse Local** to locate your puppy-linux.iso.
* Set **OS type** to **Linux** and **version** appropriately (e.g., Generic Linux 2020 or similar).
* Click **Forward**.

# Step 9: Allocate CPU and Memory

* Assign **RAM** (e.g., 1024 MB or more depending on your system).
* Assign **CPU** cores (e.g., 1 or 2).

# Step 10: Create disk image

* Choose **Create a disk image for the virtual machine**.
* Set disk size to **8 GB** (default disk image).
* Click **Forward**.

# Step 11: Final Settings and Create VM

* Name the VM (e.g., PuppyLinux).
* Check “Customize configuration before install” (optional for advanced users).
* Click **Finish**. **RESULT:**

LINUX operating system in a virtual machine is successfully installed and configured.