DATE: 21.08.2025

EXPERIMENT – 12 Demonstrate virtualization by Installing Type-2 Hypervisor in your device, create and configure VM image with a Host Operating system (Either Windows/Linux), using VMware workstation

Aim:

To demonstrate virtualization by installing a Type-2 Hypervisor (VMware Workstation) and creating/configuring a Virtual Machine (VM) with a host operating system (Windows/Linux).

Procedure:

1. Installed **VMware Workstation (Type-2 Hypervisor)** on the host device.

2. Launched VMware Workstation and selected **"Create a New Virtual Machine."**

3. Configured VM settings:

   o Allocated CPU cores and RAM.

   o Assigned virtual hard disk size.

   o Chose installation media (ISO image of Windows/Linux).

4. Installed the chosen operating system (e.g., Ubuntu Linux / Windows 10) inside the virtual machine.

5. Configured **network settings** (NAT/Bridged) for internet access inside the VM.

6. Installed **VMware Tools** for better performance and integration with the host.

7. Tested the VM by launching applications and verifying that it works independently of the host OS.

Output:

New Virtual Machine Wizard   ✕

Guest Operating System Installation
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

○ Installer disc:

[No drives available   ▾]

○ Installer disc image file (iso):

[▾] [Browse...]

● I will install the operating system later.

The virtual machine will be created with a blank hard disk.

[Help]   [< Back] [Next >] [Cancel]

New Virtual Machine Wizard   ✕

Select a Guest Operating System
Which operating system will be installed on this virtual machine?

Guest operating system
○ Microsoft Windows
● Linux
○ VMware ESX
○ Other

Version
[Ubuntu   ▾]

[Help]   [< Back] [Next >] [Cancel]

New Virtual Machine Wizard   ✕

Name the Virtual Machine
What name would you like to use for this virtual machine?

Virtual machine name:
[virtual machine 1234   ]

Location:
[C:\Users\RACHITHA\Documents\Virtual Machines\virtual machi] [Browse...]

The default location can be changed at Edit > Preferences.

[< Back] [Next >] [Cancel]

New Virtual Machine Wizard   ✕

Specify Disk Capacity
How large do you want this disk to be?

The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and become larger as you add applications, files, and data to your virtual machine.

Maximum disk size (GB):   20.0

Recommended size for Ubuntu: 20 GB

○ Store virtual disk as a single file
◉ Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help		< Back	Next >	Cancel

New Virtual Machine Wizard   ✕

Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Ubuntu.

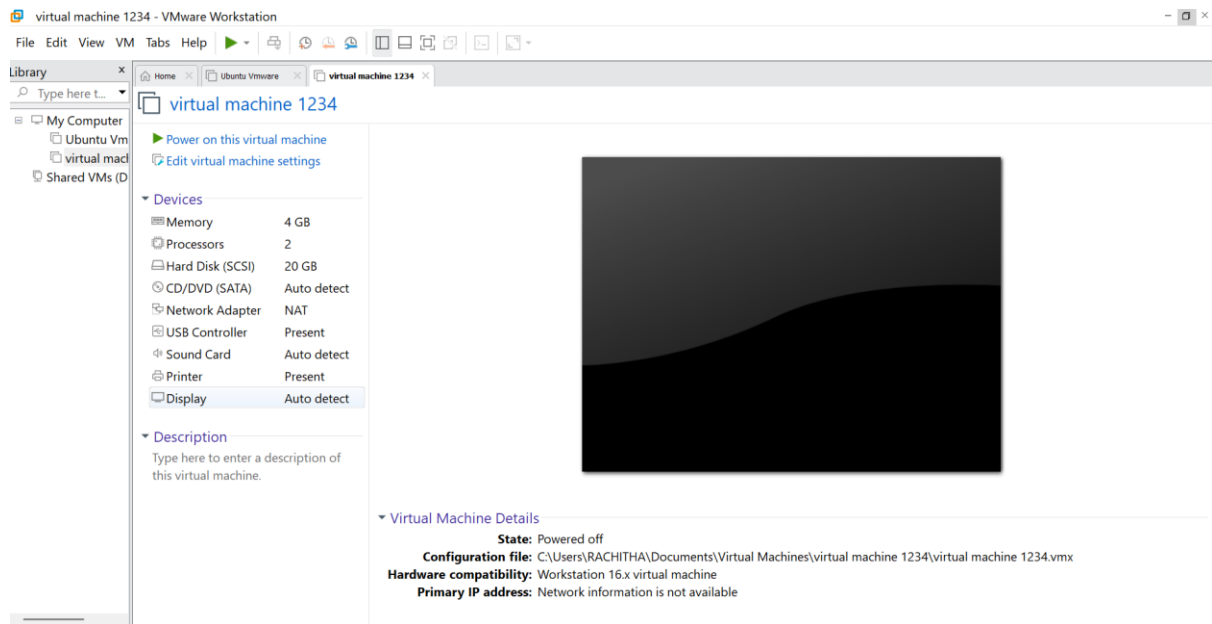The virtual machine will be created with the following settings:

Name:	virtual machine 1234
Location:	C:\Users\RACHITHA\Documents\Virtual Machines\virtua...
Version:	Workstation 16.x
Operating System:	Ubuntu
Hard Disk:	20 GB, Split
Memory:	4096 MB
Network Adapter:	NAT
Other Devices:	2 CPU cores, CD/DVD, USB Controller, Printer, Sound C...

Customize Hardware...

< Back	Finish	Cancel

Result:

Virtualization was successfully demonstrated using VMware Workstation (Type-2 Hypervisor). A fully functional virtual machine with the selected operating system was created and configured, proving the concept of running multiple OS environments on a single physical device.