EXPERIMENT 12

Demonstration of Virtualization by Installing a Type-2 Hypervisor and Creating a Virtual Machine using VMware Workstation

Aim

To demonstrate virtualization by installing a Type-2 Hypervisor (VMware Workstation) on a host machine and creating, configuring, and running a virtual machine with a guest operating system (Windows/Linux).

Procedure
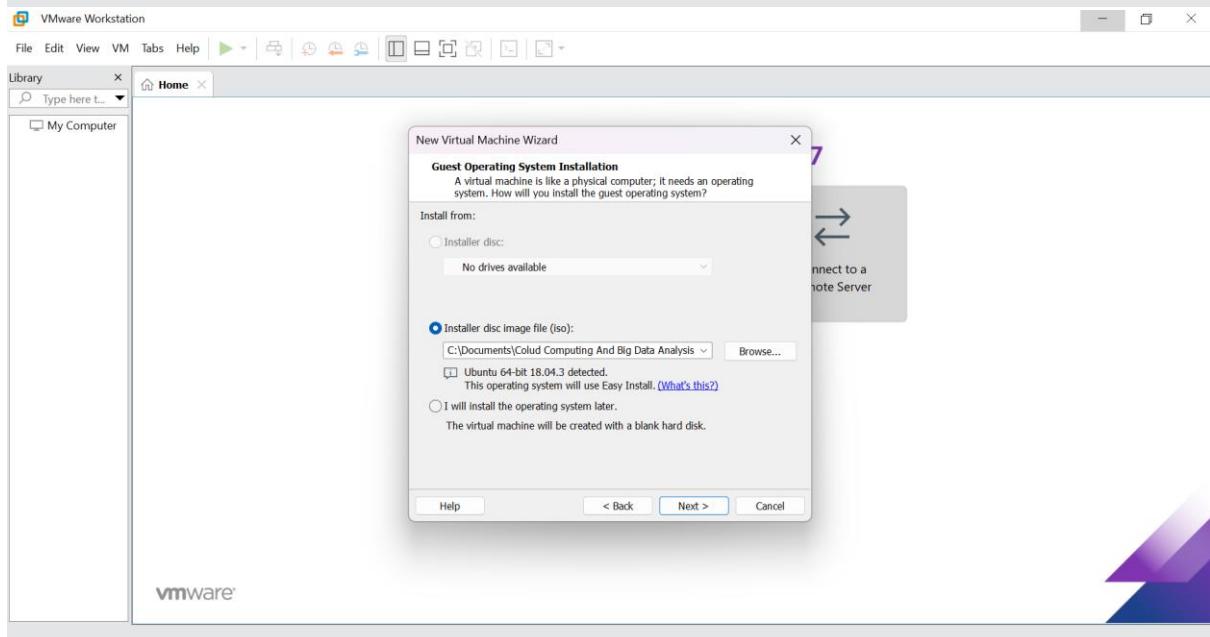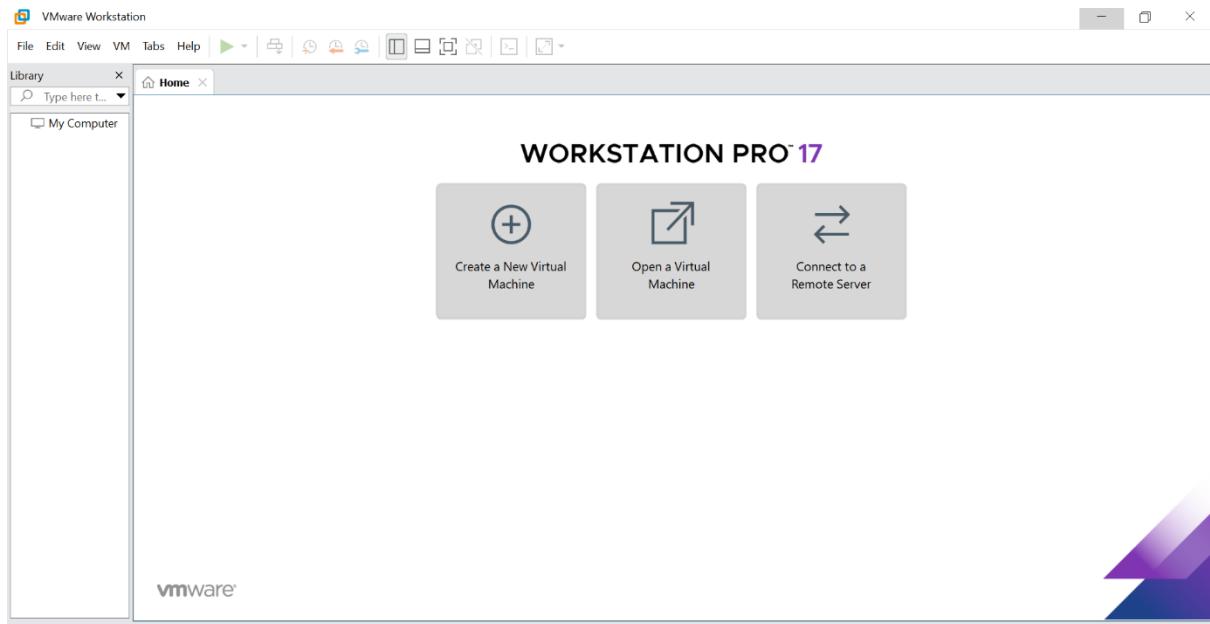
1. Download VMware Workstation from the official VMware website.

2. Install VMware Workstation on the host operating system (Windows/Linux).

3. Launch VMware Workstation after successful installation.

4. Select **Create a New Virtual Machine**.

5. Choose the installer disk image file (ISO) of the guest operating system.

6. Configure virtual machine settings such as:

   o Virtual CPU

   o Memory (RAM)

   o Storage (Virtual Hard Disk)

   o Network Adapter

7. Complete the virtual machine creation wizard.

8. Start the virtual machine.

9. Install the guest operating system inside the virtual machine.

10. Verify successful virtualization by accessing the guest OS within VMware Workstation.
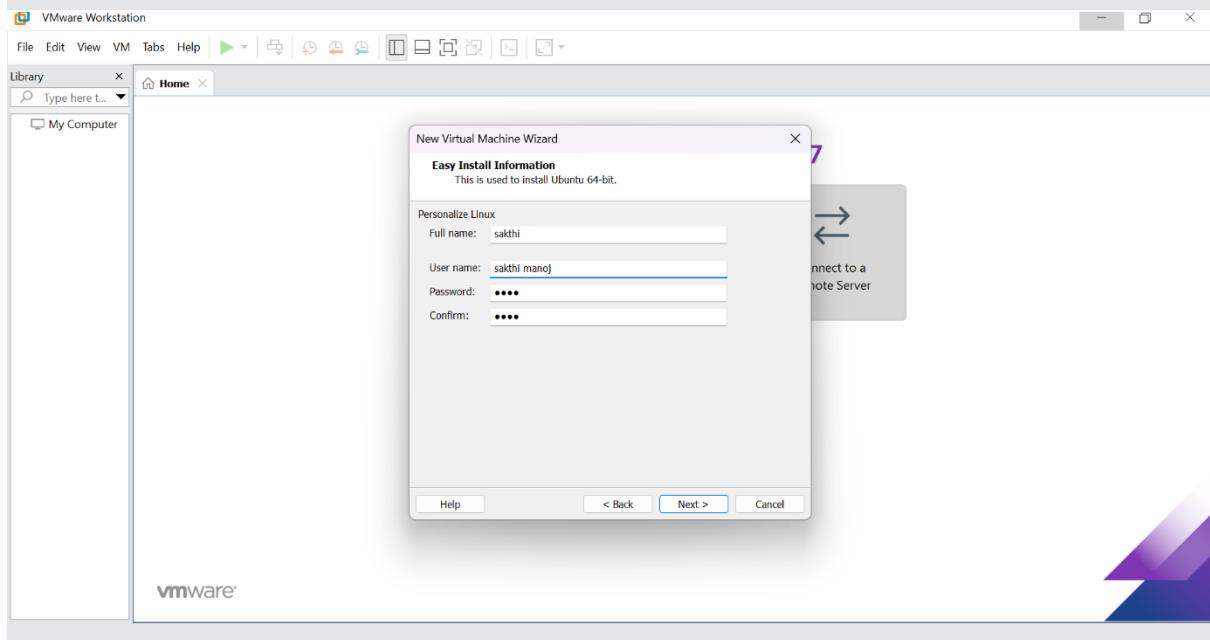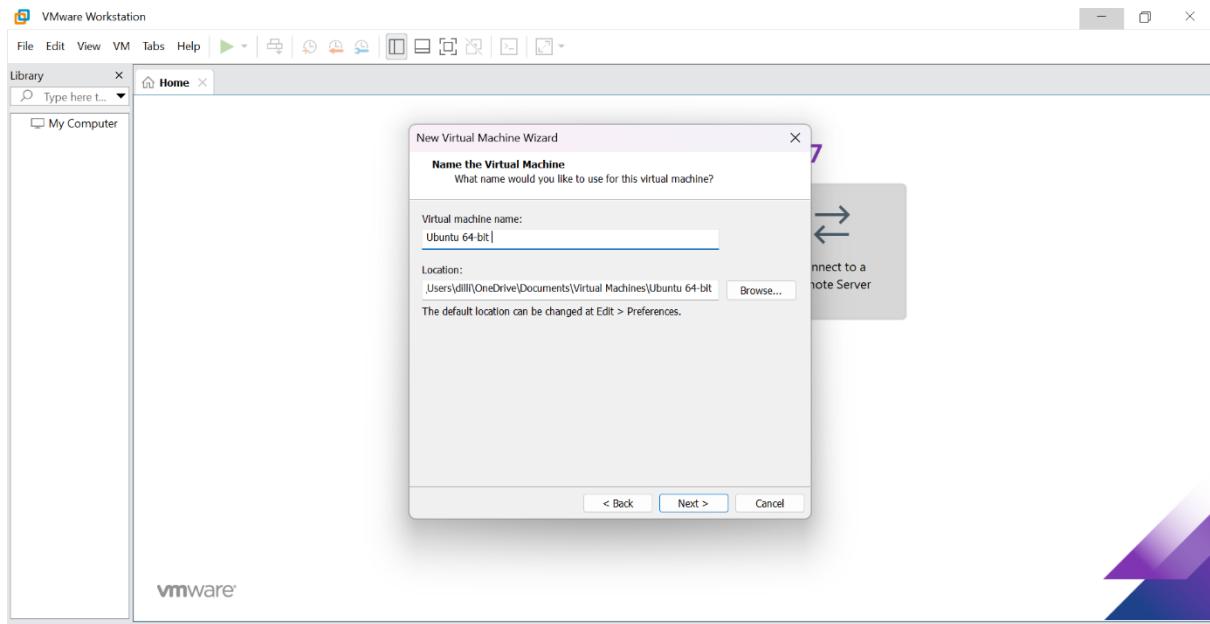
Sample Configuration Details
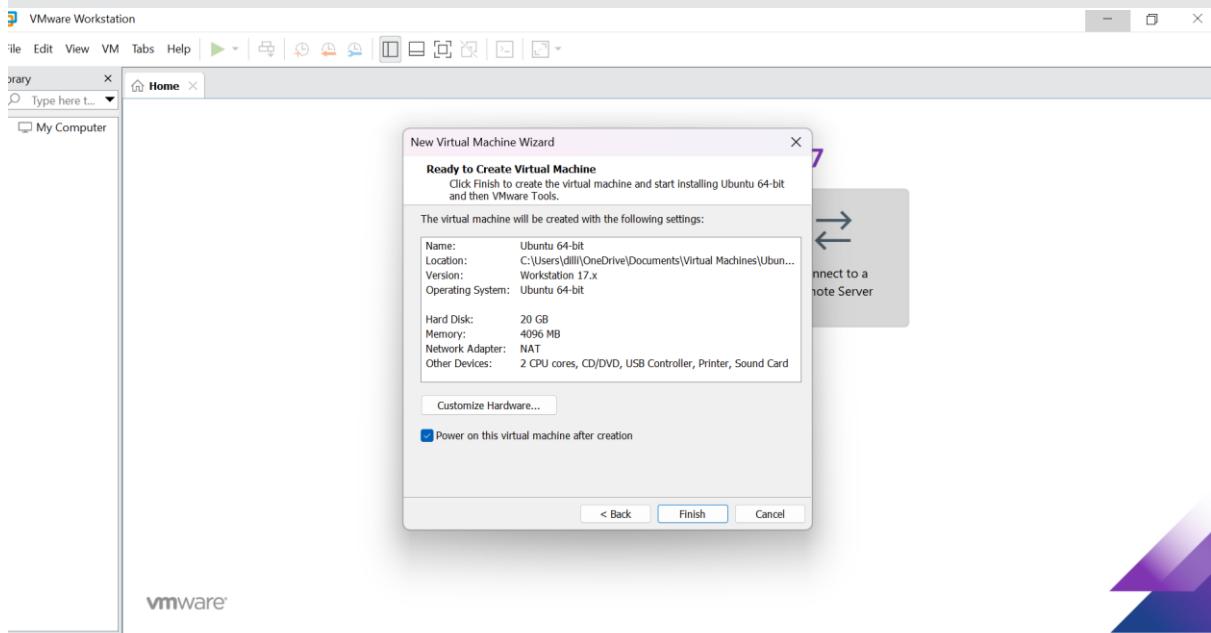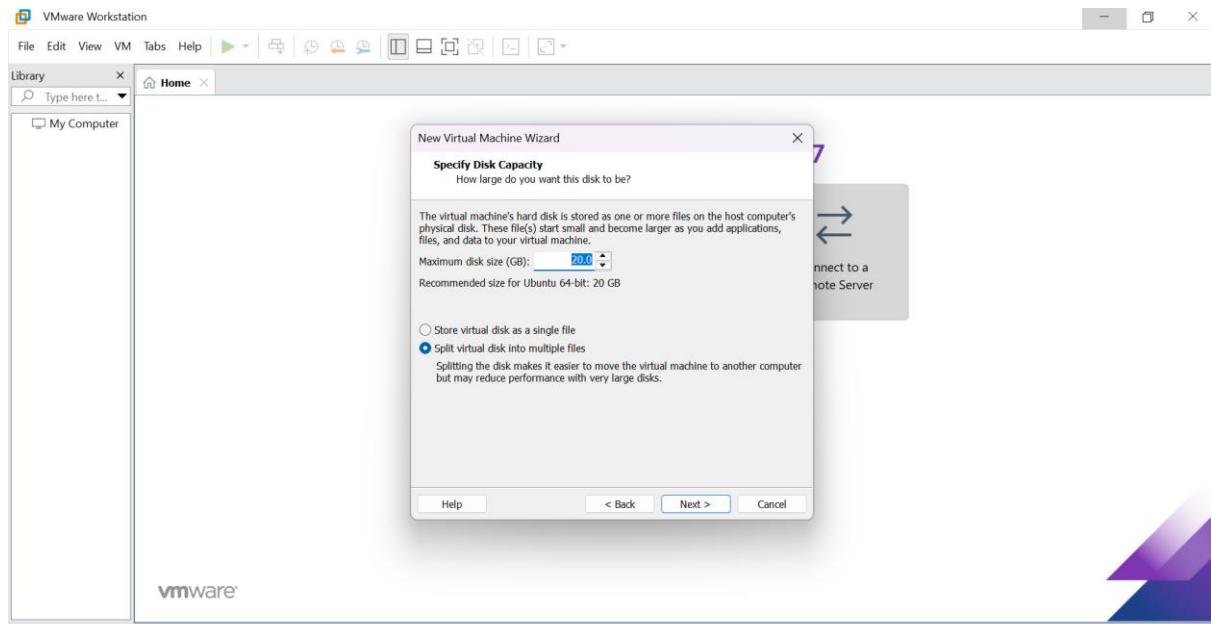
• **Host Operating System:** Windows 10
• **Hypervisor:** VMware Workstation
• **Guest Operating System:** Ubuntu Linux / Windows 10
• **RAM Allocated:** 4 GB
• **Virtual Hard Disk:** 40 GB
• **Processor:** 2 Virtual CPUs
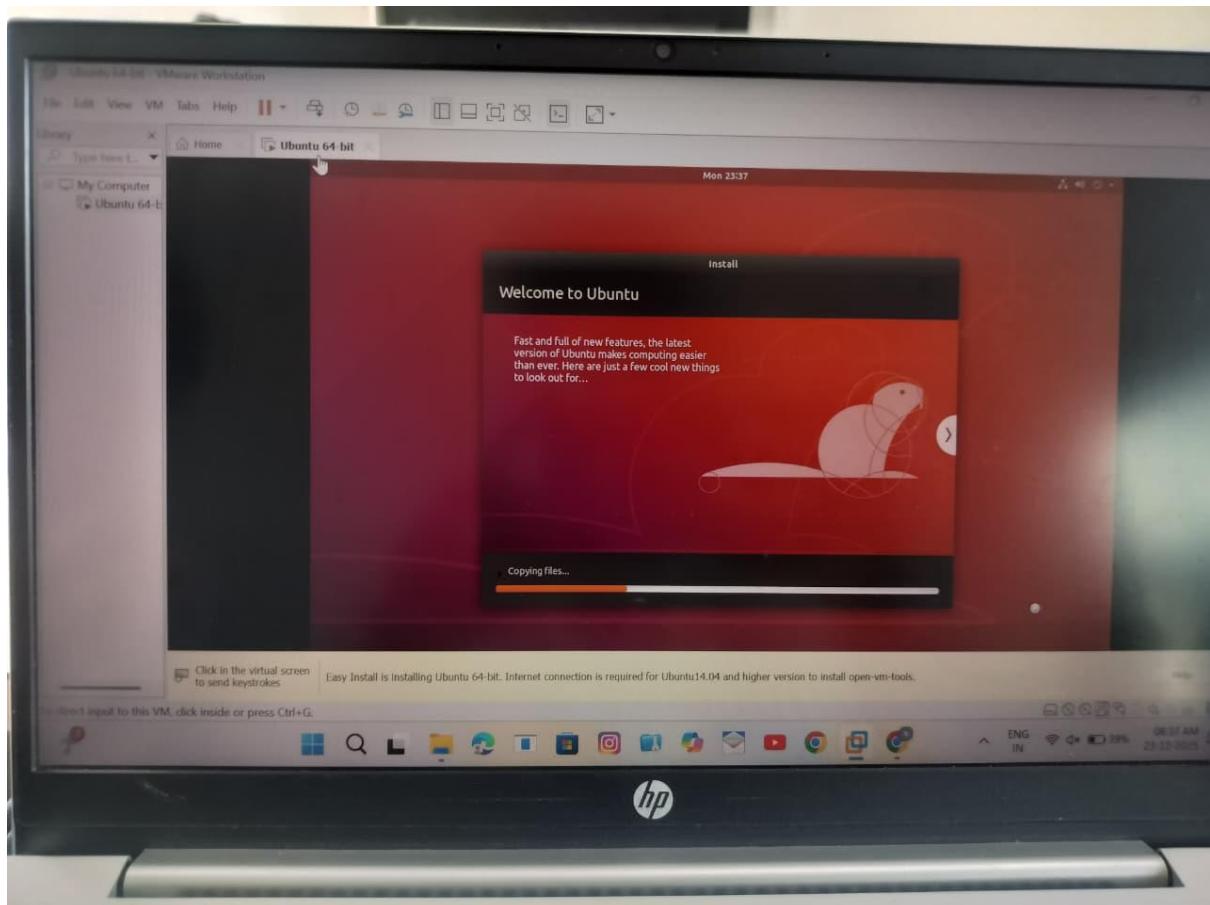
Output

• VMware Workstation successfully installed on host system.

• Virtual Machine created and configured with selected resources.

• Guest operating system installed and running inside the virtual environment.

• Host and guest operating systems running simultaneously, demonstrating virtualization.

VMware Workstation

File Edit View VM Tabs Help

Library ×
Type here t...

Home ×

My Computer

New Virtual Machine Wizard ×

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

Virtual machine name:

Ubuntu 64-bit

Location:

:\Users\dilli\OneDrive\Documents\Virtual Machines\Ubuntu 64-bit   Browse...

The default location can be changed at Edit > Preferences.

< Back   Next >   Cancel

vmware

VMware Workstation

File Edit View VM Tabs Help

Library ×
Type here t...

Home ×

My Computer

New Virtual Machine Wizard ×

Easy Install Information
This is used to install Ubuntu 64-bit.

Personalize Linux

Full name: sakthi

User name: sakthi manoj

Password: ●●●●

Confirm: ●●●●

Help   < Back   Next >   Cancel

vmware

VMware Workstation

File Edit View VM Tabs Help

Library

Type here t...

My Computer

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 64-bit: 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

vmware

VMware Workstation

File Edit View VM Tabs Help

Library

Type here t...

My Computer

New Virtual Machine Wizard

Ready to Create Virtual Machine
Click Finish to create the virtual machine and start installing Ubuntu 64-bit and then VMware Tools.

The virtual machine will be created with the following settings:

Name:	Ubuntu 64-bit
Location:	C:\Users\dilli\OneDrive\Documents\Virtual Machines\Ubun...
Version:	Workstation 17.x
Operating System:	Ubuntu 64-bit
Hard Disk:	20 GB
Memory:	4096 MB
Network Adapter:	NAT
Other Devices:	2 CPU cores, CD/DVD, USB Controller, Printer, Sound Card

Customize Hardware...

☑ Power on this virtual machine after creation

< Back   Finish   Cancel

vmware

Result

Thus, virtualization was successfully demonstrated by installing a Type-2 Hypervisor (VMware Workstation) and creating and configuring a virtual machine with a guest operating system.