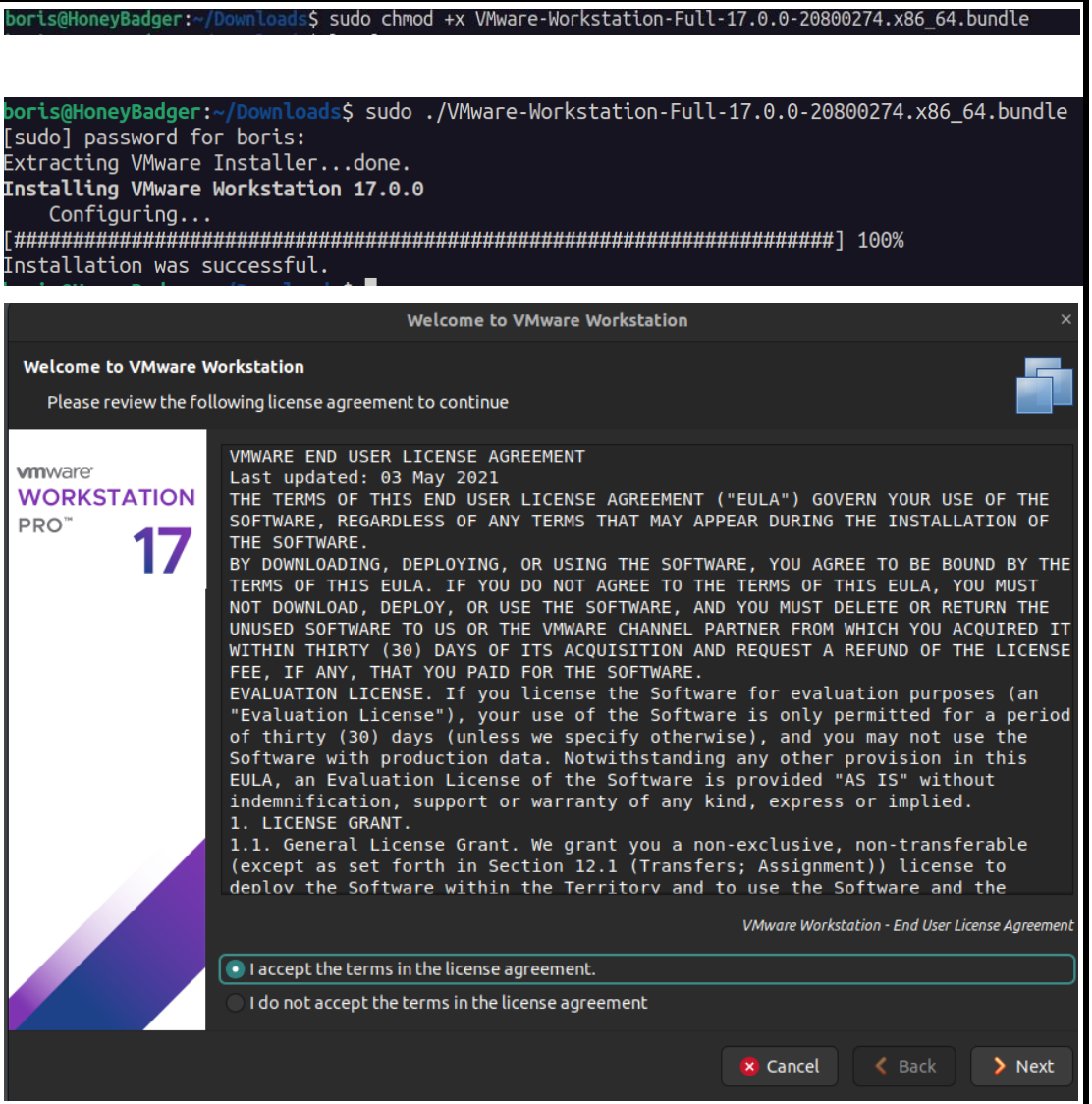
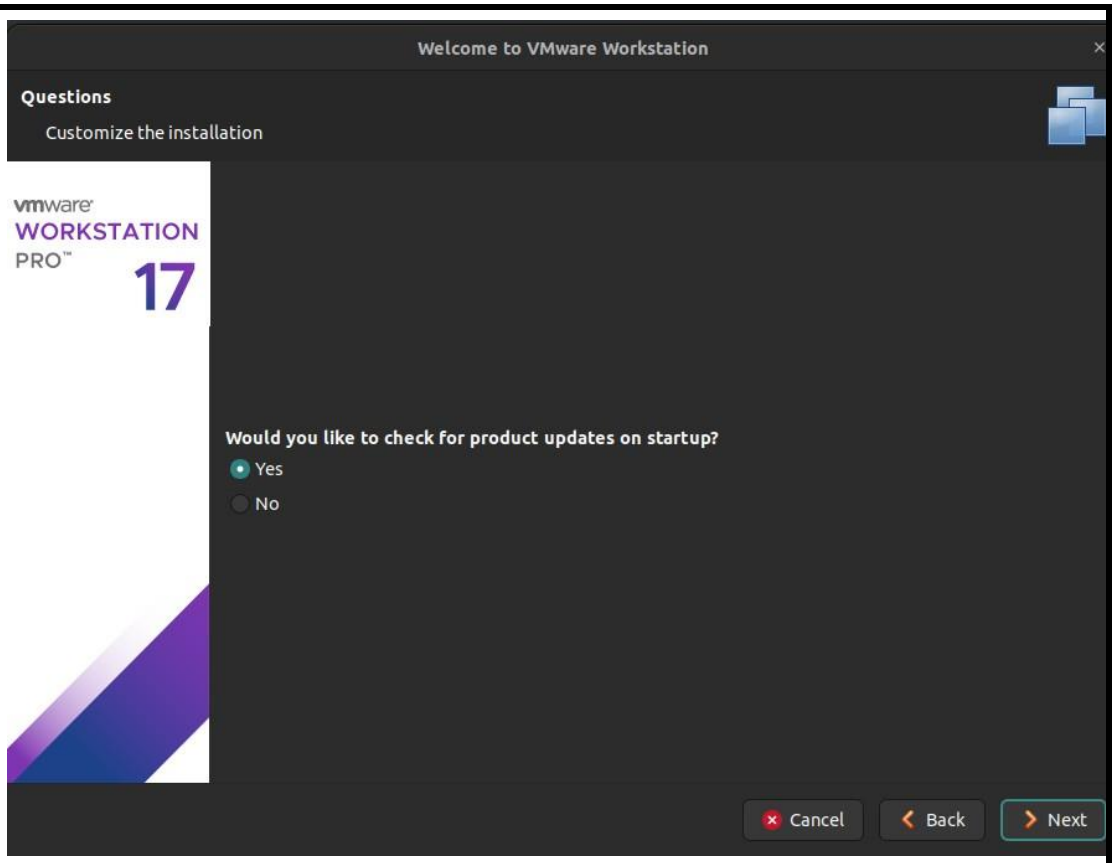
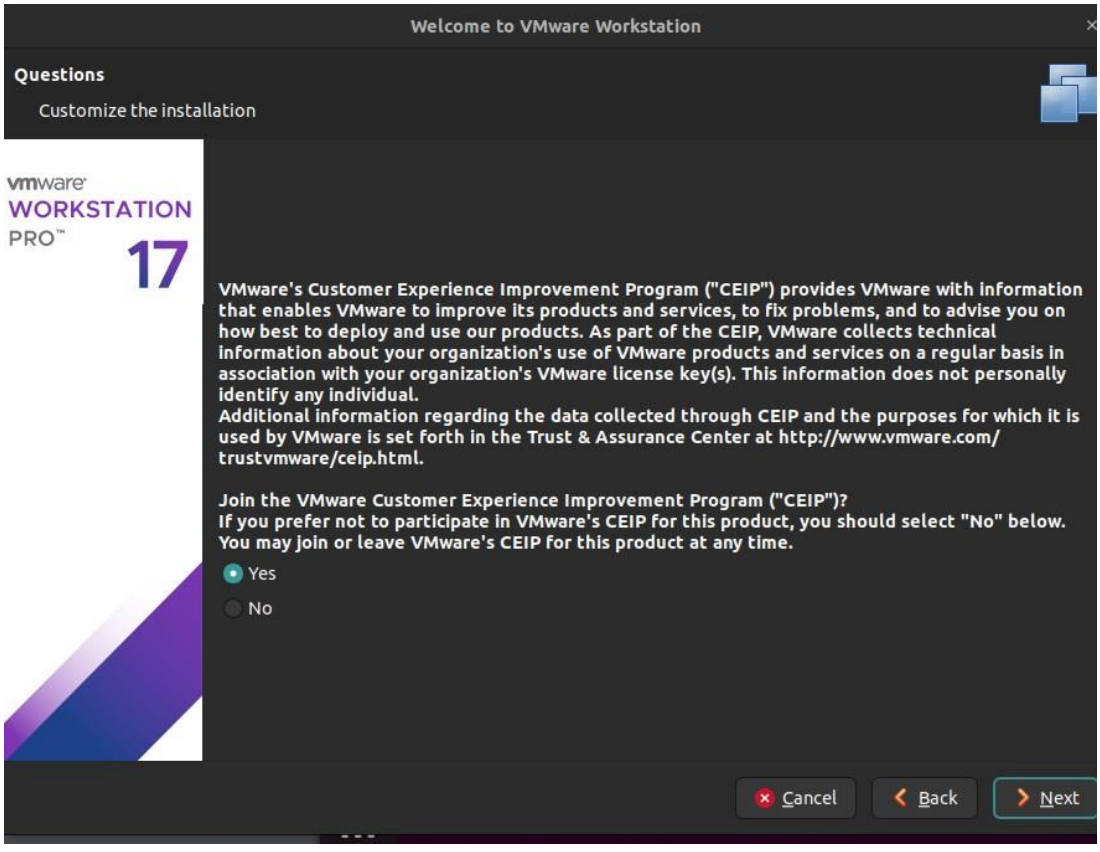
Experiment – 3

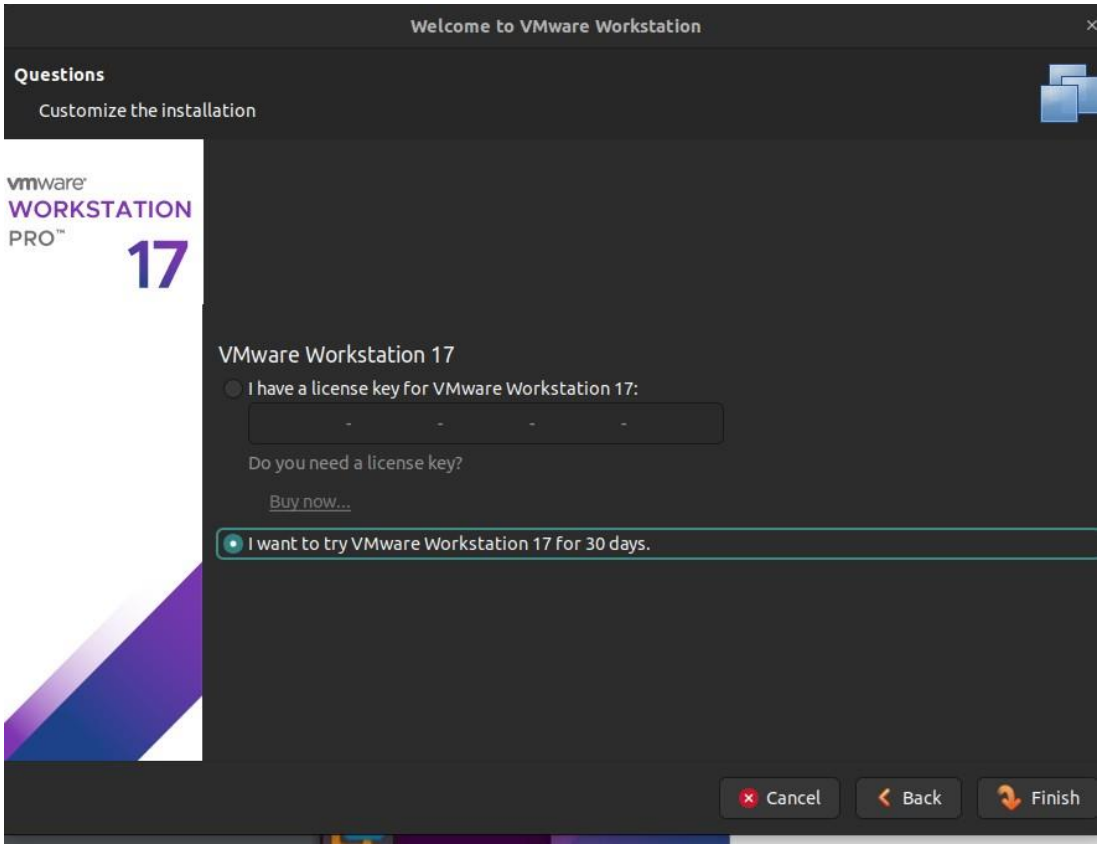
NAME: Ronak Surve
ROLL NO: 64
YEAR : 2023
SUBJECT NAME AND CODE: CSL605 Cloud Computing

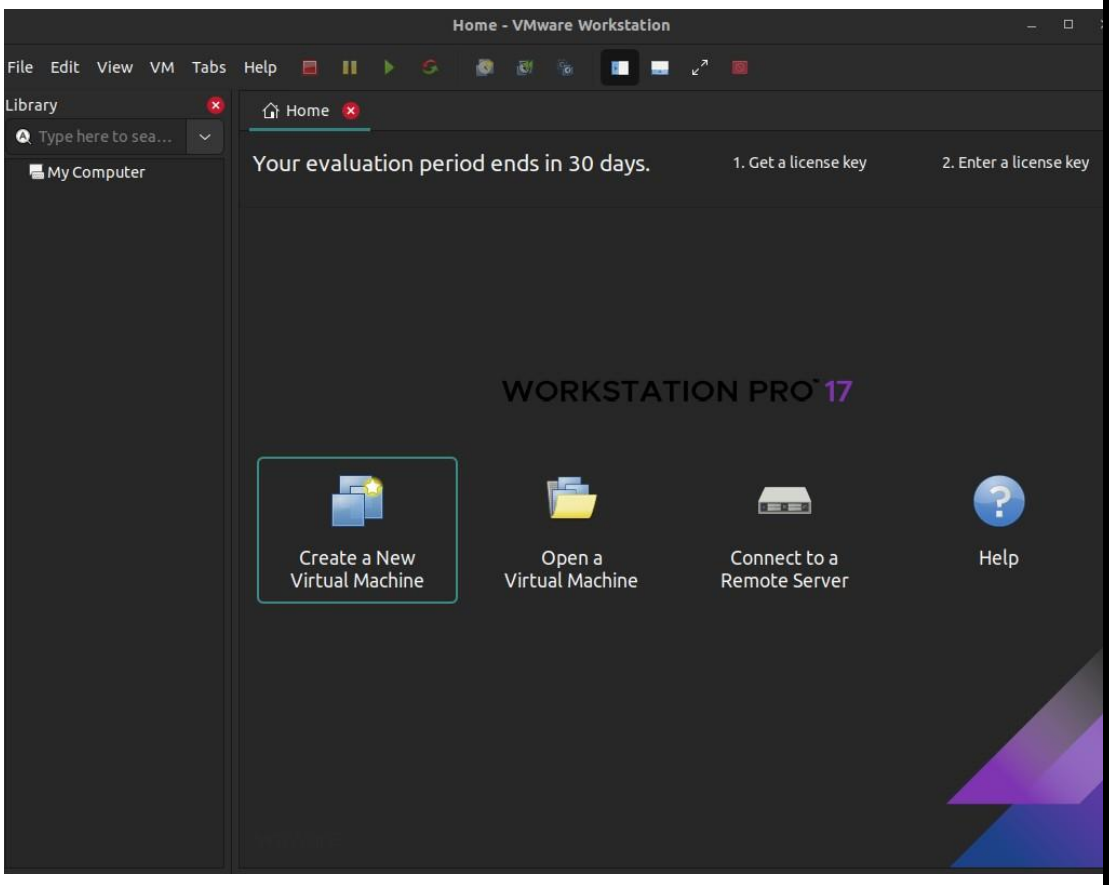
Title: To study and Implement Bare-metal Virtualization using Xen, HyperV or VMware Esxi.	
Learning Objective:	Students are able gain practical knowledge of bare-Metal Virtualization.
Learning Outcome:	Students will be able to understand the functionality of Bare-metal hypervisors and their relevance in cloud computing platforms.
Course Outcome:	**CSL605.1**
Program Outcome:	3.Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. 5.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
Bloom's Taxonomy Level:	Analysis,Apply.
Theory:	Explain Bare-metal hypervisors and their relevance in cloud computing platforms.
Procedure	Installation steps of VMware Esxi
Steps	Write Steps to create a virtual machine using VMWare. 1. Install VMware on your computer: You will need to install VMware Workstation, VMware Player or VMware Fusion depending on your operating system. 2. Launch VMware: Once installed, launch the VMware software and select "Create a New Virtual Machine" from the main menu. 3. Choose virtual machine type: You will be prompted to choose the type of virtual machine you want to create. You can choose "Typical" for a basic setup, or "Custom" for advanced options. 4. Select the operating system: You will then be prompted to select the operating system you want to install on the virtual machine. VMware supports a wide range of operating systems including Windows, Linux, and macOS. 5. Assign memory and storage: After you select the operating system, you will be prompted to assign memory and storage to the virtual machine. You can adjust the amount of memory and disk space allocated to the virtual machine.

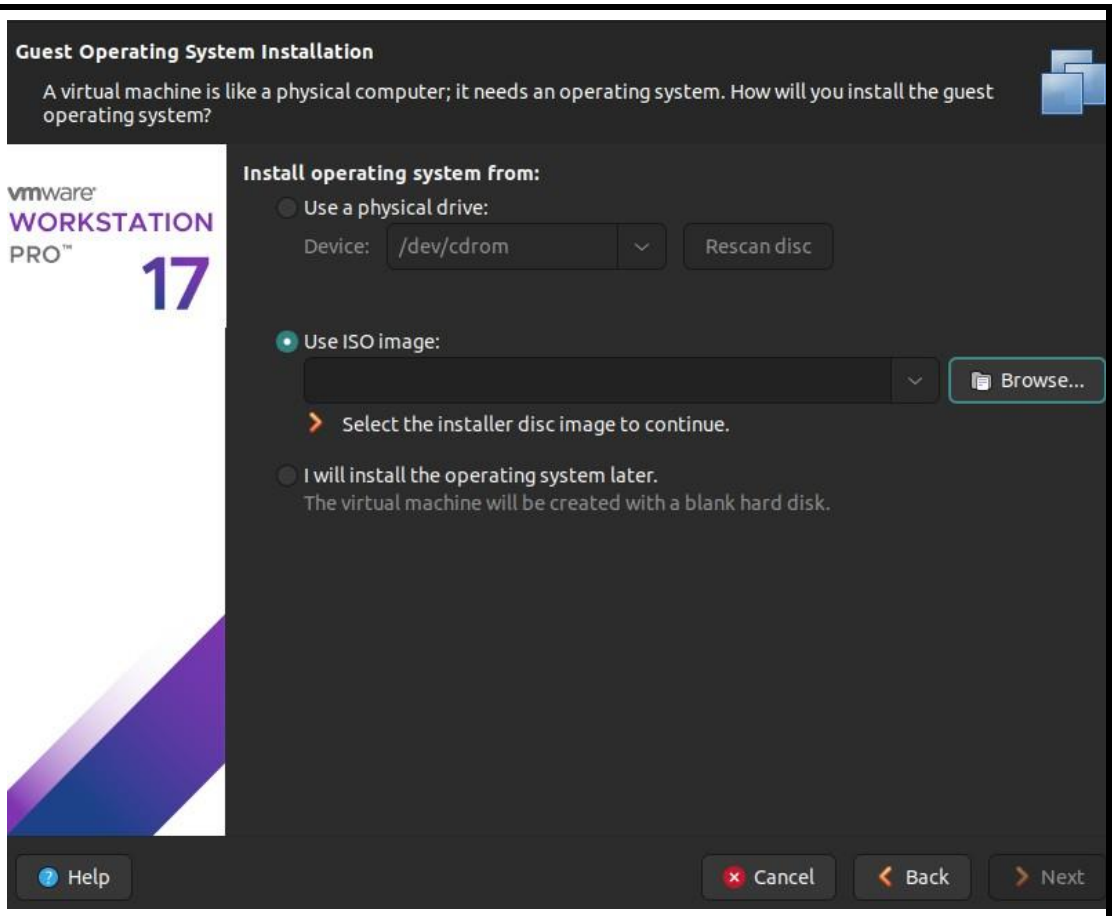
	6. Configure network settings: Next, you can configure the virtual machine's network settings. You can choose between bridged, NAT, or host-only networking. 7. Install the operating system: Once the virtual machine is created, you will be prompted to install the operating system. You will need to have a installation media (ISO image, CD/DVD) or the operating system files ready to proceed with the installation. 8. Install VMware tools: After the operating system is installed, you will need to install VMware tools. VMware tools provide enhanced performance, mouse integration, and improved video support for the virtual machine. 9. Power on the virtual machine: Once the installation is complete, you can power on the virtual machine. 10. Configure the virtual machine: You can configure the virtual machine's settings such as memory, CPU, and storage according to your requirements.
Outcome :	

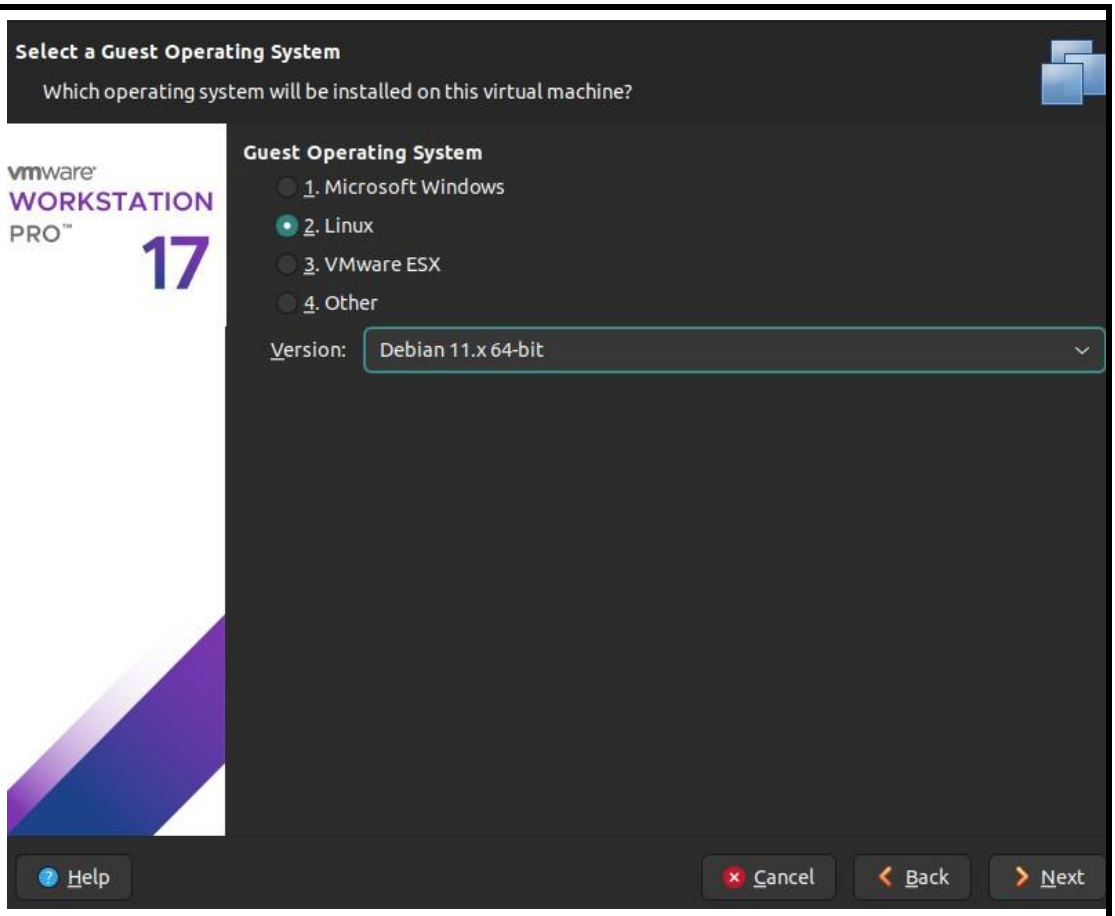

Welcome to VMware Workstation
Questions
Customize the installation
vmware
WORKSTATION
PRO™
17
Would you like to check for product updates on startup?
Yes
No
Cancel
Back
Next

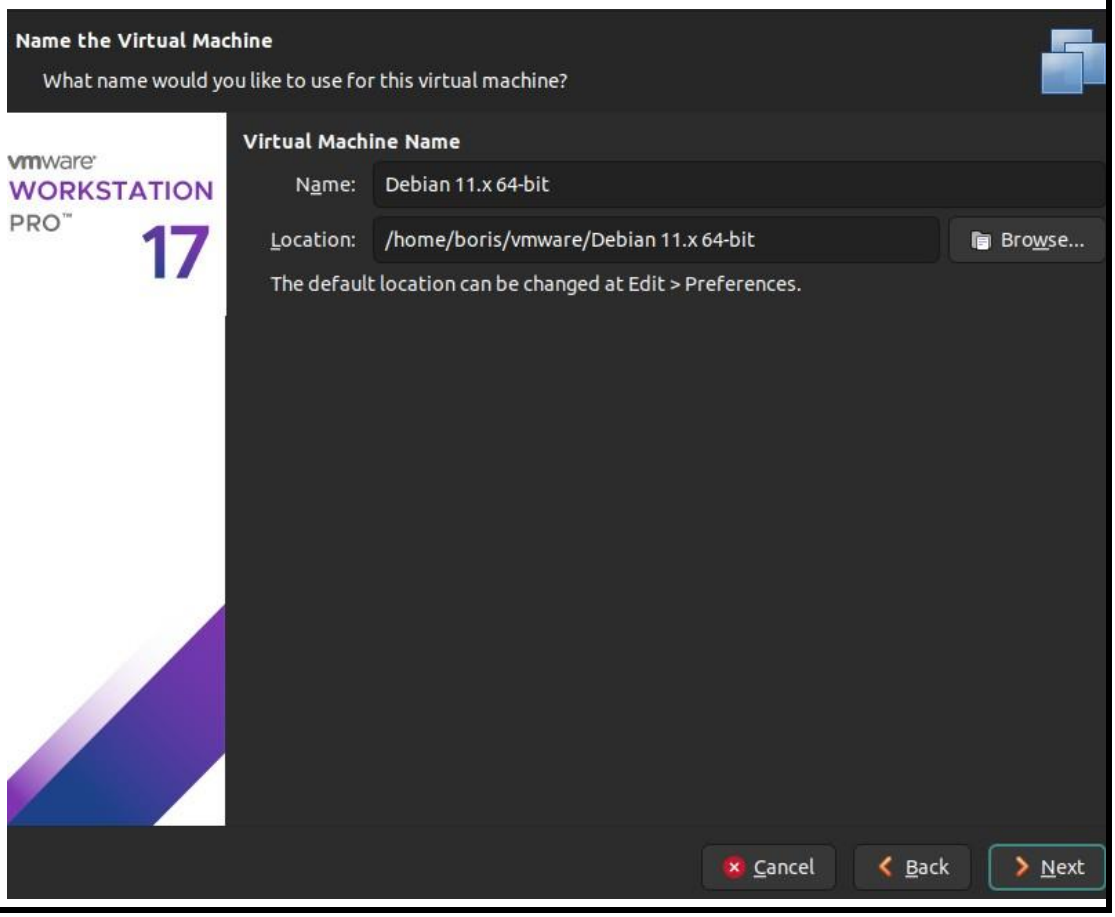

Welcome to VMware Workstation
Questions
Customize the installation
vmware
WORKSTATION
PRO™
17
VMware's Customer Experience Improvement Program ("CEIP") provides VMware with information that enables VMware to improve its products and services, to fix problems, and to advise you on how best to deploy and use our products. As part of the CEIP, VMware collects technical information about your organization's use of VMware products and services on a regular basis in association with your organization's VMware license key(s). This information does not personally identify any individual.
Additional information regarding the data collected through CEIP and the purposes for which it is used by VMware is set forth in the Trust & Assurance Center at http://www.vmware.com/trustvmware/ceip.html.
Join the VMware Customer Experience Improvement Program ("CEIP")?
If you prefer not to participate in VMware's CEIP for this product, you should select "No" below. You may join or leave VMware's CEIP for this product at any time.
Yes
No
Cancel
Back
Next

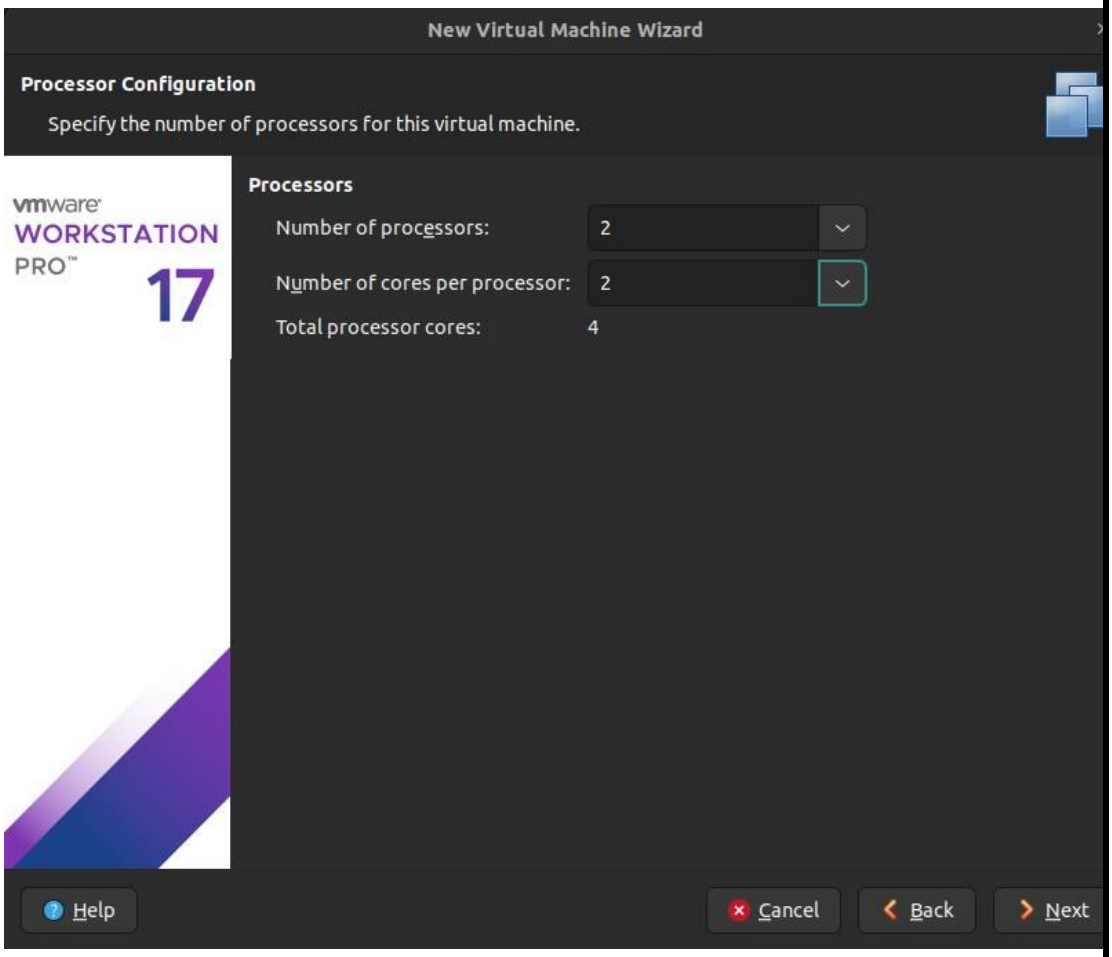

Welcome to VMware Workstation
Questions
Customize the installation
vmware
WORKSTATION
PRO™
17
VMware Workstation 17
I have a license key for VMware Workstation 17:
Do you need a license key?
Buy now...
I want to try VMware Workstation 17 for 30 days.
Cancel
Back
Finish

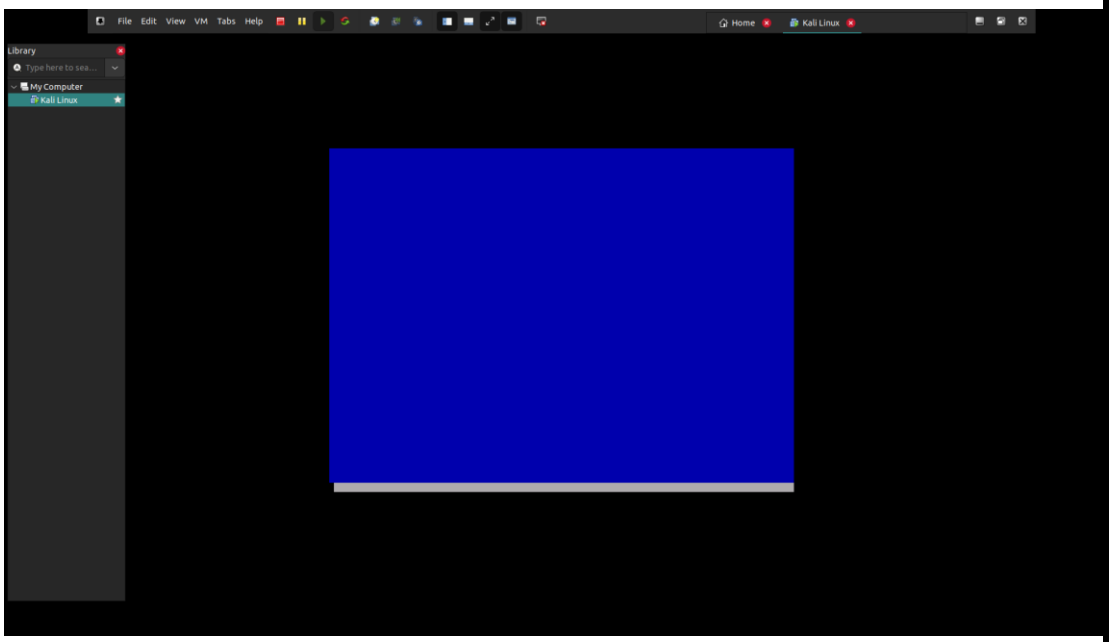

Home - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
Home
Your evaluation period ends in 30 days.
1. Get a license key
2. Enter a license key
WORKSTATION PRO 17
Create a New Virtual Machine
Open a Virtual Machine
Connect to a Remote Server
Help


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?
vmware
WORKSTATION
PRO™
17
Install operating system from:
Use a physical drive:
Device:
/dev/cdrom
Rescan disc
Use ISO image:
Browse...
Select the installer disc image to continue.
I will install the operating system later.
The virtual machine will be created with a blank hard disk.
Help
Cancel
Back
Next


Select a Guest Operating System
Which operating system will be installed on this virtual machine?
vmware
WORKSTATION
PRO™
17
Guest Operating System
1. Microsoft Windows
2. Linux
3. VMware ESX
4. Other
Version:
Debian 11.x 64-bit
Help
Cancel
Back
Next


Name the Virtual Machine
What name would you like to use for this virtual machine?
vmware
WORKSTATION
PRO™
17
Virtual Machine Name
Name:
Debian 11.x 64-bit
Location:
/home/boris/vmware/Debian 11.x 64-bit
Browse...
The default location can be changed at Edit > Preferences.
Cancel
Back
Next





Conclusion :	Understanding and implementing Bare-metal Virtualization using Xen, HyperV or VMware Esxi.

References:	Give References: https://www.youtube.com/watch?v=BHpRTVP8upg&t=8s