17/10/23

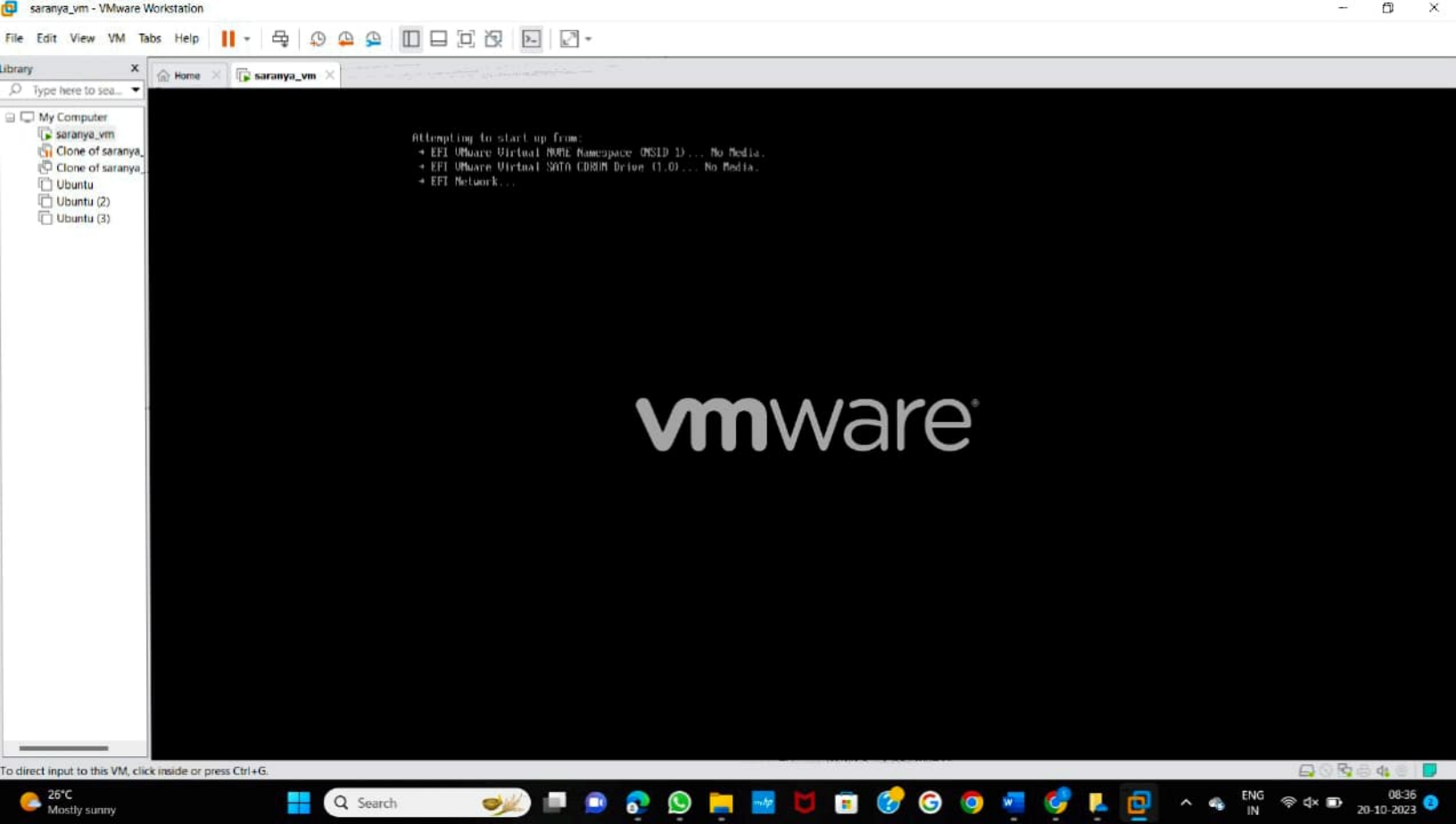
6. Demonstrate virtualization by installing Type-2 hypervisor in your device. Create and configure VM image with a host OS (either windows/linux)?

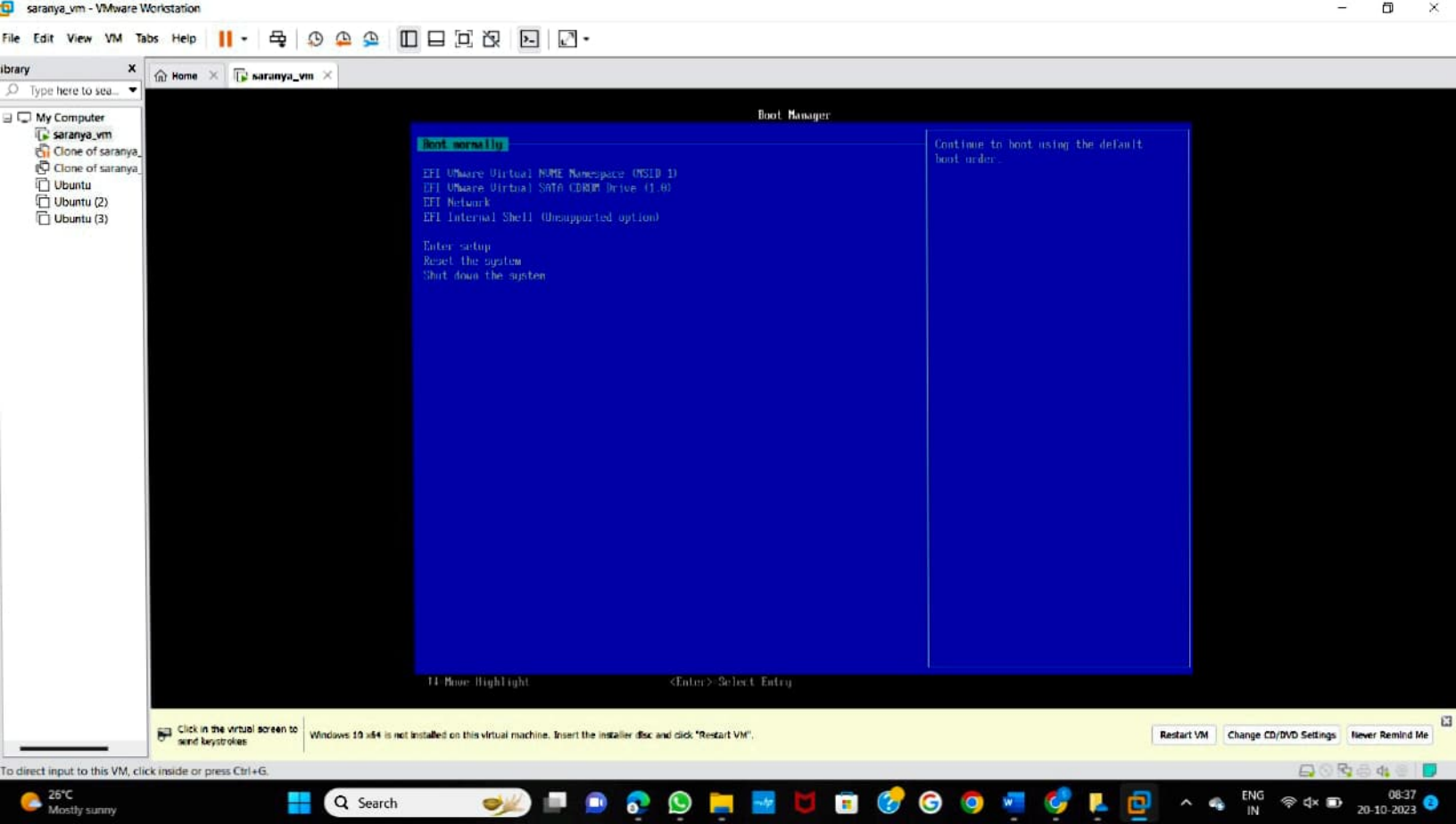
Aim:- To determine virtualization by installing Type-2 hypervisor in device, create and configure VM image with a host OS.

Procedure:-

(i) Prepare your computer for virtualization.
(ii) Install hypervisor (virtualization tool)
(iii) Download and install virtual box.
(iv) Create a virtual machine
(v) Allocate memory
(vi) Set up the hard drive.
(vii) Select hard drive file type.
(viii) Select storage on physical hard drive.
(ix) Setup file location and size.
(x) Install the os and Guest additions.
(xi) And then Run the VM.

Result:-
Virtual machine is installed sucessfully and tested with Iaas, Saas, Paas.


saranya_vm - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
saranya_vm
Clone of saranya_
Clone of saranya_
Ubuntu
Ubuntu (2)
Ubuntu (3)
Home
saranya_vm
Attempting to start up from:
→ EFI VMware Virtual NVME Namespace (NSID 1)... No Media.
→ EFI VMware Virtual SATA CDROM Drive (1.0)... No Media.
→ EFI Network...
vmware
To direct input to this VM, click inside or press Ctrl+G.
26°C
Mostly sunny
Search
ENG
IN
08:36
20-10-2023


saranya_vm - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
saranya_vm
Clone of saranya_
Clone of saranya_
Ubuntu
Ubuntu (2)
Ubuntu (3)
Home
saranya_vm
Boot Manager
Boot normally
EFI VMware Virtual NVME Namespace (NSID 1)
EFI VMware Virtual SATA CDROM Drive (1.0)
EFI Network
EFI Internal Shell (Unsupported option)
Enter setup
Reset the system
Shut down the system
Continue to boot using the default boot order.
↑↓ Move Highlight
<Enter> Select Entry
Click in the virtual screen to send keystrokes
Windows 10 x64 is not installed on this virtual machine. Insert the installer disc and click "Restart VM".
Restart VM
Change CD/DVD Settings
Never Remind Me
To direct input to this VM, click inside or press Ctrl+G.
26°C
Mostly sunny
Search
ENG
IN
08:37
20-10-2023

(7) Create a virtual machine with 1 CPU, 2 GB RAM and 15 GB storage disk using Type 2 Software.

Aim:- Install VM workstation Software Create (or) locate the Storage

Software Apparatus required:- VM Software, internet.

Procedure:-

→ First open browser and search VM workstation Software for windows.
→ Download and install the VM work Station Software.
→ Download the OS image of kali linux and ubuntu
→ open the VM Software and run the Software
→ Create the new virtual Machine on the Software.
→ Next Select type recommended for Software.
→ place the OS image downloaded file in the given option.
→ Select the operating system and click next.
→ It displays the location of file.
→ Next Select the maximum size for storage and click next
→ Later click on the finish.

Result:- The creation of windows has been Successfully Configured and installed on virtual Machine Software.

saranya_vm - VMware Workstation

File Edit View VM Tabs Help

Library

Type here to sea...

- My Computer
  - saranya_vm
  - Clone of saranya_
  - Clone of saranya
  - Ubuntu
  - Ubuntu (2)
  - Ubuntu (3)

Home | saranya_vm | My Computer

saranya_vm

Power on this virtual machine

Edit virtual machine settings

Devices

Memory	2 GB
Processors	2
Hard Disk (NVMe)	60 GB
CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Description

Type here to enter a description of this virtual machine.

Virtual Machine Details

State: Powered off
Snapshot: Snapshot for Clone of saranya_vm (2)
Configuration file: C:\Users\ns890\OneDrive\Documents\Virtual Machines\Windows 10 x64\Windows 10 x64.vmx
Hardware compatibility: Workstation 17.x virtual machine
Primary IP address: Network information is not available

26°C Mostly sunny

Search

ENG IN

08:49 20-10-2023

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8. Create a snapshot and test it by the previous version.

Aim:- To create a snapshot and test to see if the deleted content are restored after reloading the saved version of the os.

Procedure:-

→ Create a snap shot of the VM.

→ Deleted few files and restore the snap shot by launching the snapshot version of the VM.

→ To create (or) take snapshot go to windows (created VM)

→ Give right click on it, then click on snapshot.

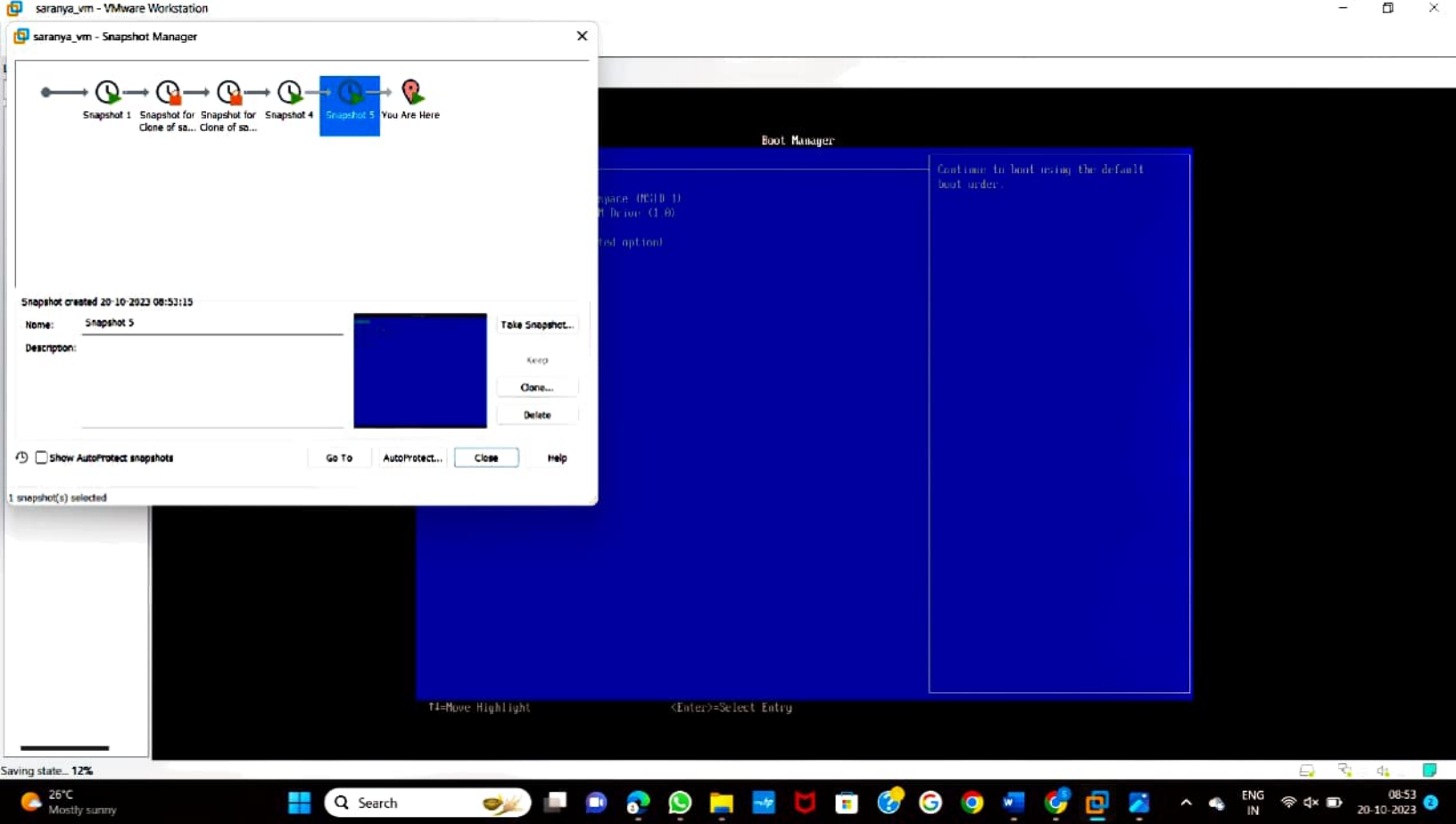
→ In snapshot select take a snapshot.

→ Then go to snapshot manger which on top of the page.

→ Select the snapshot which we have named above.

→ The snapshot is created

Result:- The snapshot of the VM has been implemented and tested Sucessfully.


saranya_vm - VMware Workstation
saranya_vm - Snapshot Manager
Snapshot 1
Snapshot for Clone of sa...
Snapshot for Clone of sa...
Snapshot 4
Snapshot 5
You Are Here
Snapshot created 20-10-2023 08:53:15
Name:
Snapshot 5
Description:
Take Snapshot...
Keep
Clone...
Delete
Show AutoProtect snapshots
Go To
AutoProtect...
Close
Help
1 snapshot(s) selected
Boot Manager
Continue to boot using the default boot order.
↑↓=Move Highlight
<Enter>=Select Entry
Saving state... 12%
26°C
Mostly sunny
Search
ENG
IN
08:53
20-10-2023

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9. Create a cloning of a VM and test it by loading the previous version.

Aim:- To create clone version of the existing virtual Machine & open it from the Storage space.

Procedure:-

→ Create a clone version of the VM.
→ Stop the running process.
→ Goto window (newly created VM) select Snapshot.
→ Click on "Revert to Snapshot".
→ Then again shut down the process "Guest.
→ Goto manage and Select Clone.
→ Give Next → Next → Finish → close.
→ The Clone of Sarang-VM is created.

Result:- Thus the clone of the VM has been implemented and tested successfully.

Clone of saranya_vm - VMware Workstation

File Edit View VM Tabs Help

Library

Type here to sea...

My Computer
- saranya_vm
- Clone of saranya_
- Clone of saranya_
- Ubuntu
- Ubuntu (2)
- Ubuntu (3)

Home | saranya_vm | My Computer | Clone of saranya_vm

Clone of saranya_vm

Resume this virtual machine

Edit virtual machine settings

Devices

Memory	4 GB
Processors	2
Hard Disk (NVMe)	60 GB
CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Description

Type here to enter a description of this virtual machine.

Virtual Machine Details

State: Suspended
Snapshot: Snapshot 2
Configuration file: C:\Users\ns890\OneDrive\Documents\Virtual Machines\Clone of saranya_vm\Clone of saranya_vm.vmx
Clone of: C:\Users\ns890\OneDrive\Documents\Virtual Machines\Windows 10 x64\Windows 10 x64.vmx
Hardware compatibility: Workstation 17.x virtual machine
Primary IP address: Network information is not available

26°C Mostly sunny

Search

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10 Create a configuration to increase and decrease the Screen Size.

Aim:- To create a configuration to increase and decrease the screen size

Procedure:-

→ create configuration to increase and decrease the Screen Size.

→ Select "enter set up" in boot manager.

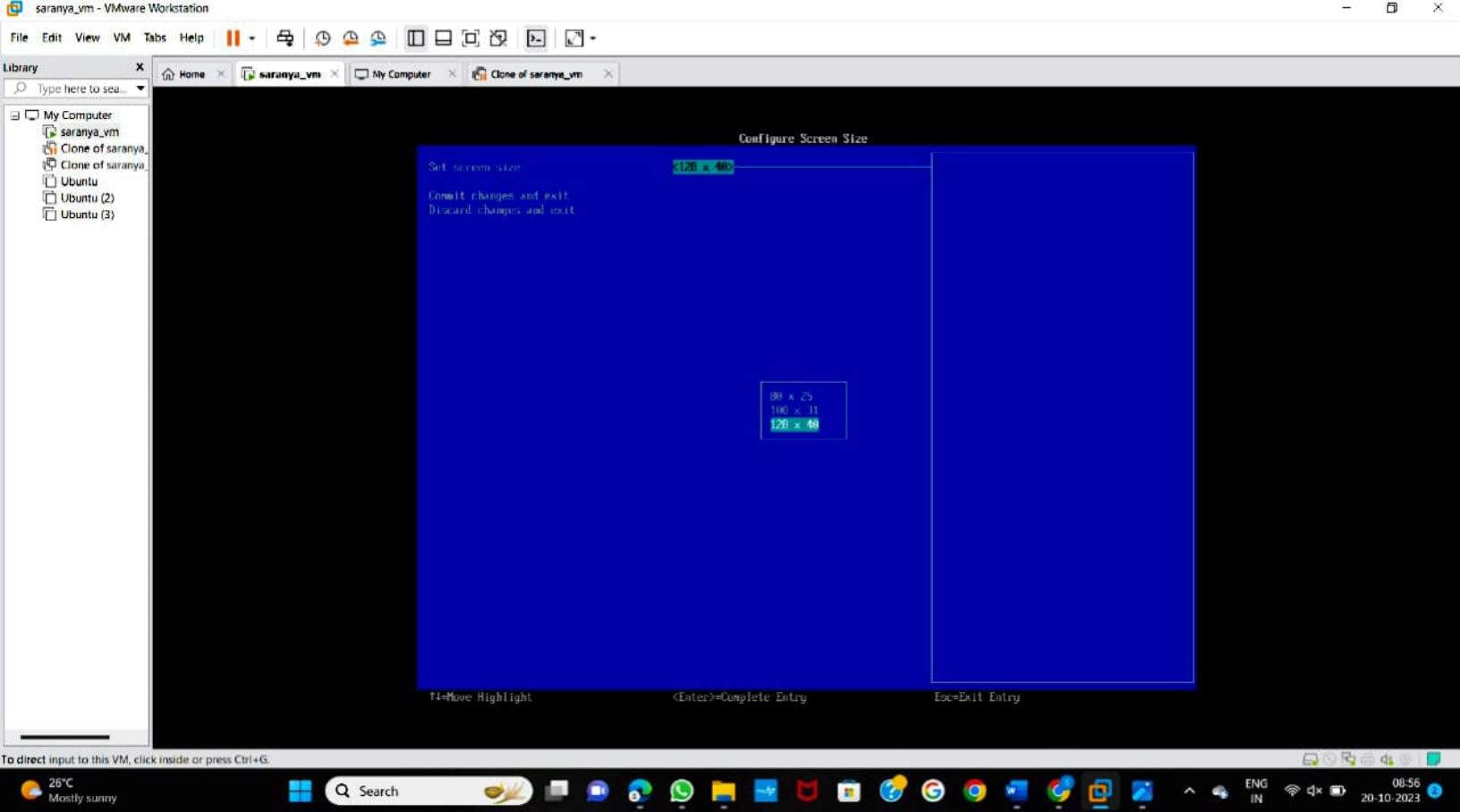
→ After that select "configure screen size" in boot maintenance manager and give enter.

→ Set screen size and press enter.

→ Select commit changes and exit.

→ The screen size is increased

Result: Thus the size of the screen is increased and decreased successfully.


saranya_vm - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
saranya_vm
Clone of saranya_
Clone of saranya_
Ubuntu
Ubuntu (2)
Ubuntu (3)
Home
saranya_vm
My Computer
Clone of saranya_vm
Configure Screen Size
Set screen size
[120 x 40]
Commit changes and exit
Discard changes and exit
80 x 25
100 x 31
120 x 40
↑↓=Move Highlight
<Enter>=Complete Entry
Esc=Exit Entry
To direct input to this VM, click inside or press Ctrl+G.
26°C
Mostly sunny
Search
ENG
IN
08:56
20-10-2023

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11. Create a virtual machine with 1CPU, 2GB Ram and 15GB storage disk using a Type 2 Virtualization Software.

Aim:- To Create a VM using VMware workstation Virtual box with 1CPU, 2GB RAM and 15GB storage and launch it.

Procedure:-

→ Install the Virtualization Software-VM ware. Workstations as Type 2.

→ Download OS image file.

→ Start VM ware.

→ Configure the settings.

→ Install the virtual machine & launch.

Result

Outcome:- Thus the VM using OS image has been Configured and installed on a Type-2 Hypervisor using VM ware workstation.

Ubuntu - VMware Workstation

File Edit View VM Tabs Help

Library

Type here to sea...

My Computer
- saranya_vm
- Clone of saranya_
- Clone of saranya_
- Ubuntu
- Ubuntu (2)
- Ubuntu (3)

Home | saranya_vm | My Computer | Clone of saranya_vm | Ubuntu (2) | Ubuntu | Ubuntu (3)

Ubuntu

Power on this virtual machine

Edit virtual machine settings

Devices

Memory	2 GB
Processors	2
Hard Disk (SCSI)	15 GB
CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Description

Type here to enter a description of this virtual machine.

Virtual Machine Details

State: Powered off

Configuration file: C:\Users\ns890\OneDrive\Documents\Virtual Machines\Ubuntu\Ubuntu.vmx

Hardware compatibility: Workstation 17.x virtual machine

Primary IP address: Network information is not available

29°C Mostly sunny

Search

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08:57 20-10-2023

12. Create a virtual Hard Disk and allocate the Storage using VM ware workstation.

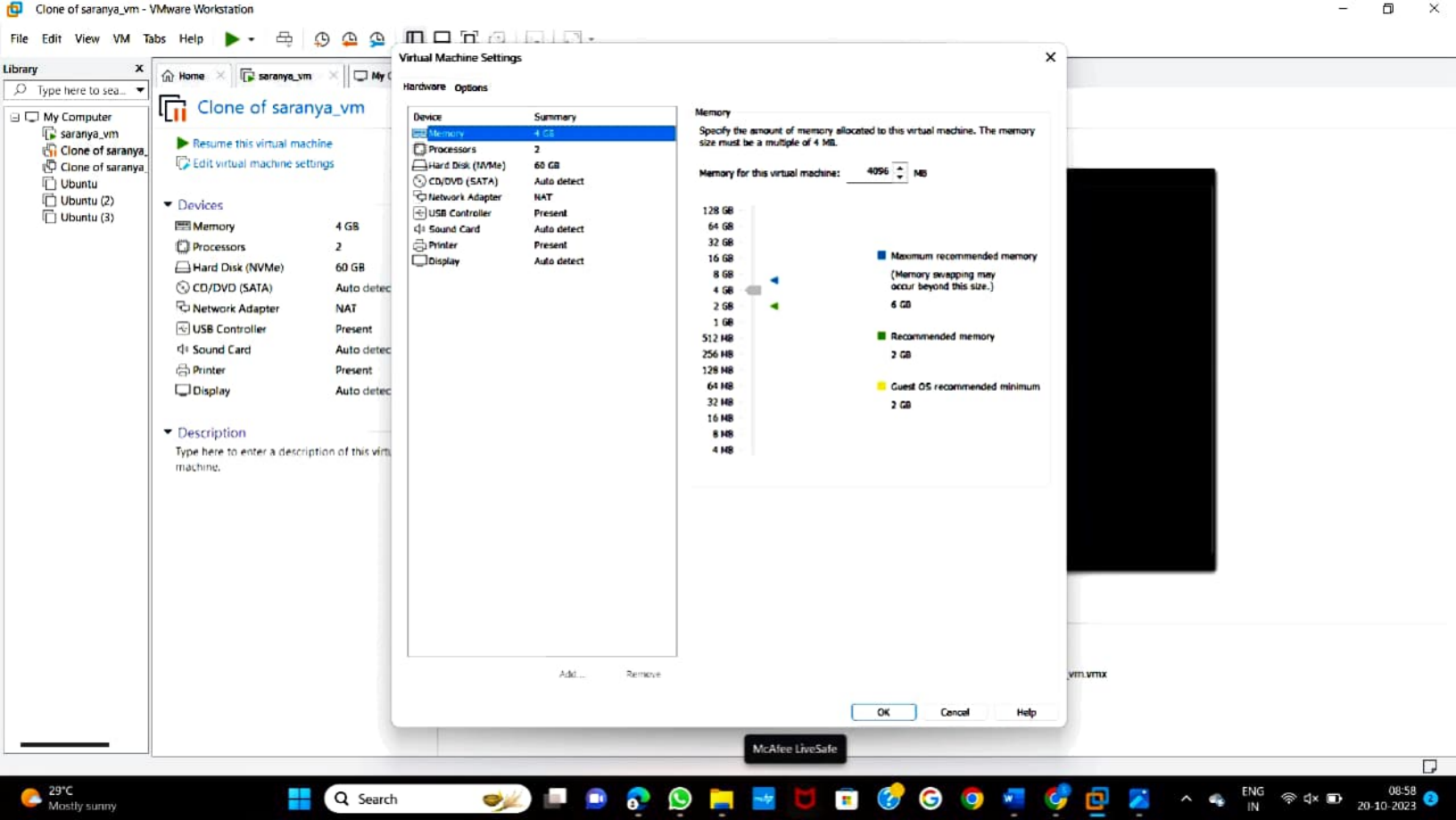
Aim:- To create a virtual Hard disk for the given Virtual Machine and allocate around 10GB of storage from the physical HDD.

Procedure:-

→ Launch the VM using VMware workstation
→ Under Customize hardware Add Storage
→ Select appropriate storage types
→ Finish the Configuration of Storage.
→ Check to see if the addition of hard disk is added in the VM.

Result

~~Outcome~~:- An virtual Hard Disk has been added inside the VM Machine.


Clone of saranya_vm - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
saranya_vm
Clone of saranya_
Clone of saranya_
Ubuntu
Ubuntu (2)
Ubuntu (3)
Home
saranya_vm
Clone of saranya_vm
Resume this virtual machine
Edit virtual machine settings
Devices
Memory 4 GB
Processors 2
Hard Disk (NVMe) 60 GB
CD/DVD (SATA) Auto detec
Network Adapter NAT
USB Controller Present
Sound Card Auto detec
Printer Present
Display Auto detec
Description
Type here to enter a description of this vir
machine.
Virtual Machine Settings
Hardware Options
Device Summary
Memory 4 GB
Processors 2
Hard Disk (NVMe) 60 GB
CD/DVD (SATA) Auto detect
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Add... Remove
Memory
Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.
Memory for this virtual machine: 4096 MB
128 GB
64 GB
32 GB
16 GB
8 GB
4 GB
2 GB
1 GB
512 MB
256 MB
128 MB
64 MB
32 MB
16 MB
8 MB
4 MB
Maximum recommended memory
(Memory swapping may occur beyond this size.)
6 GB
Recommended memory
2 GB
Guest OS recommended minimum
2 GB
OK
Cancel
Help
McAfee LiveSafe
vm.vmx
29°C
Mostly sunny
Search
ENG
IN
08:58
20-10-2023