Name: S Mohamed Roomi

Reg no: 192211658

Course Name: Cloud Computing

Course Code: 1540

Experiment - 1

Aim:

Create a simple Car Booking system using Zoho Creator or a cloud service provider to demonstrate software as a service (SaaS) model for efficient and accessible car reservation.

Procedure

Sign up for Zoho Creator: Create an account on Zoho Creator

Create a application: Build new application for car reservation

Database Design: Define tables for cars, customers, and reservations.

Form Design: Create forms for booking, customer registration.

Workflow Automation: Set up workflows for tasks like email.

User Access Control: Configure roles and permission for secure access.

UI Customization: Customize the user interface for user-friendly experience.

Cloud Service Integration: connect to cloud service like Google Maps or payment gateways.

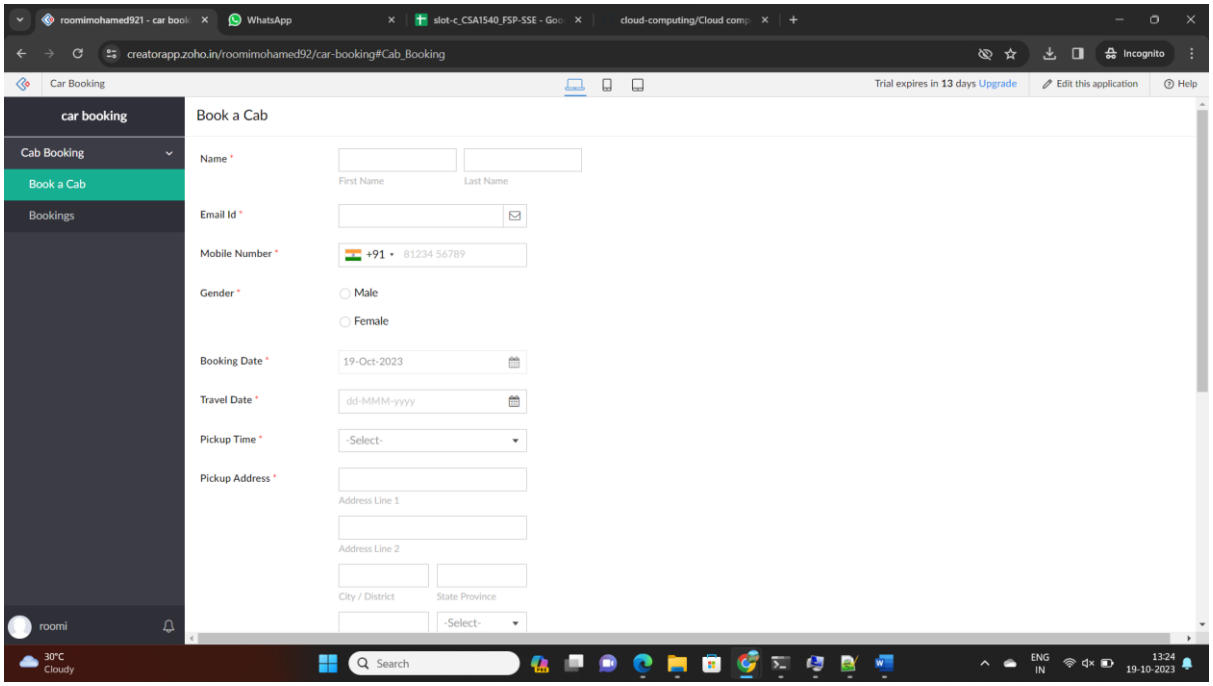
Testing and Debugging: Thoroughly test and fix any issues

Deployment: Publish the system on the cloud

User training: Train staff or users on system usage.

Outcome:

The application named car booking has been successfully created and deployed using Zoho Creator.


roomimohamed921 - car book
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Edit this application
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Pickup Address *
Address Line 1
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Experiment - 2

Aim:

Develop a simple flight Reservation system using Zoho creator as a cloud service provider to demonstrate software as a service (SaaS) model for efficient and accessible flight booking.

Procedure:

Sign up for Zoho Creator: Register for a Zoho creator account and set up your flight Reservation system application.

Data configuration: Define your data structure with tables for flights, Passengers and Reservations.

Form Development: Create user friendly forms for flight booking passenger registration and reservation management.

Workflow Automation: Implement automated workflows for tasks like sending confirmations, updating flight availability and management reminders.

Access control: Ensure data security by configuring user roles and permissions for controlled users.

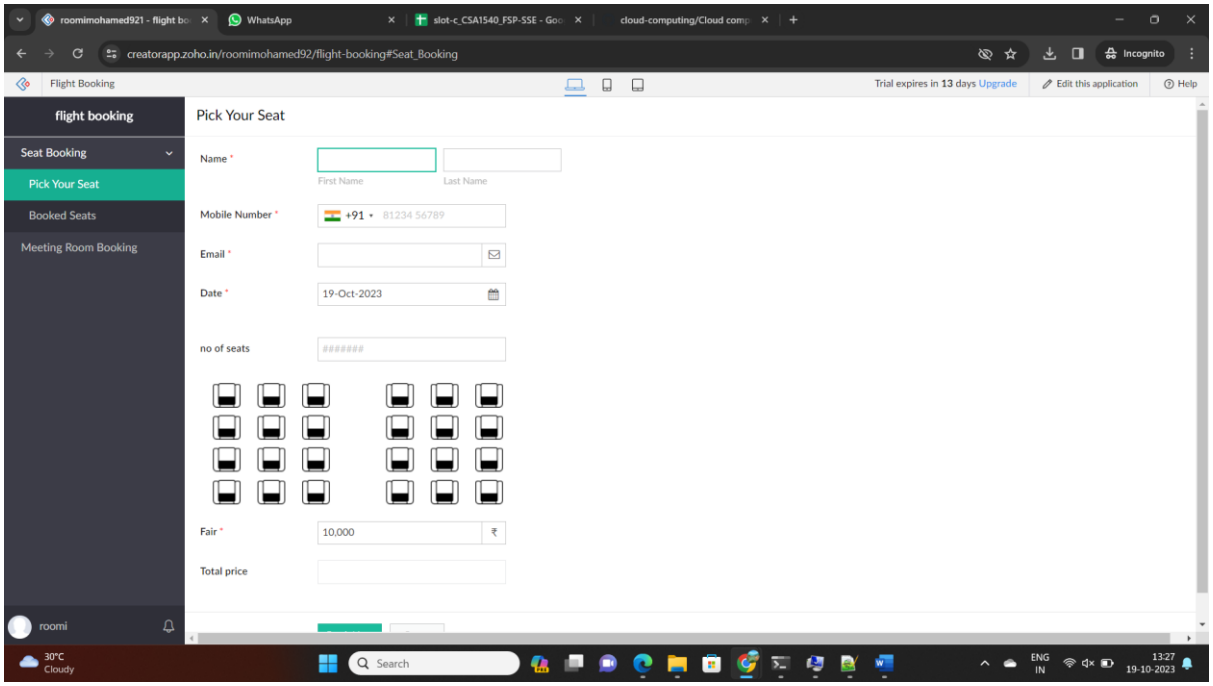
User Interface Enhancement: Customize the UI to deliver an intuitive and branded user experience.

Testing and optimization: Rigorously test the system and optimize it to resolve any issues

Deployment and Accessibility: Deploy your flight Reservation system on the chosen cloud service provider.

Output:

The application named flight booking has been successfully created and deployed using Zoho creator.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Booked Seats
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Experiment - 3

Aim:

Develop a cloud based software application for the Property Buying and Rental process in demand. Harness software as a service (SaaS) to streamline property transaction and enhance the user experience.

Procedure:

Cloud Service Provider Selection: Choose a cloud service provider (eg: AWS, Azure) for hosting your property management application.

Design Database: Create a database schema to store property details, user profiles, rental agreements and transaction records.

User registration: Develop user registration and authentication features to ensure secure access to the application.

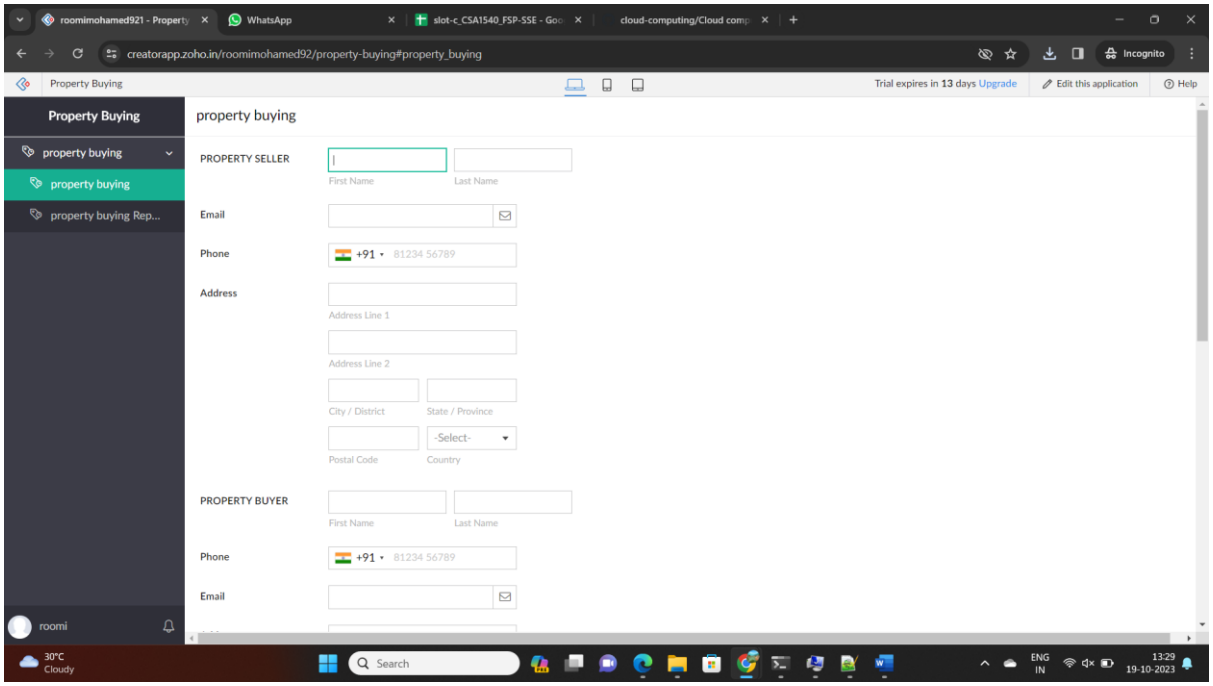
Property listing: Design a user friendly interface for property listing, enabling users to search filter.

Geographic and location: Integrate geolocation and map features to provide users with the location of properties.

Deployment: Deploy the application on your chosen cloud service provider.

Outcome:

The application ~~based~~ Property Buying and rental has be successfully created.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PROPERTY SELLER
First Name
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Address
Address Line 1
Address Line 2
City / District
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Postal Code
-Select-
Country
PROPERTY BUYER
First Name
Last Name
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19-10-2023

Experiment - 4

4) Aim:

Create a cloud-based software application for the library Book Reservation System of SIMATS library using cloud Providers to showcase.

Procedure:

Select a cloud Service Provider: Choose a cloud service provider (eg: AWS, Azure, Google cloud) to host the library Book Reservation system

Design Database: Create a database schema for managing library resources, user accounts, reservations and checkouts.

Users Control: Design user registration and users control features to ensures secure users to the application.

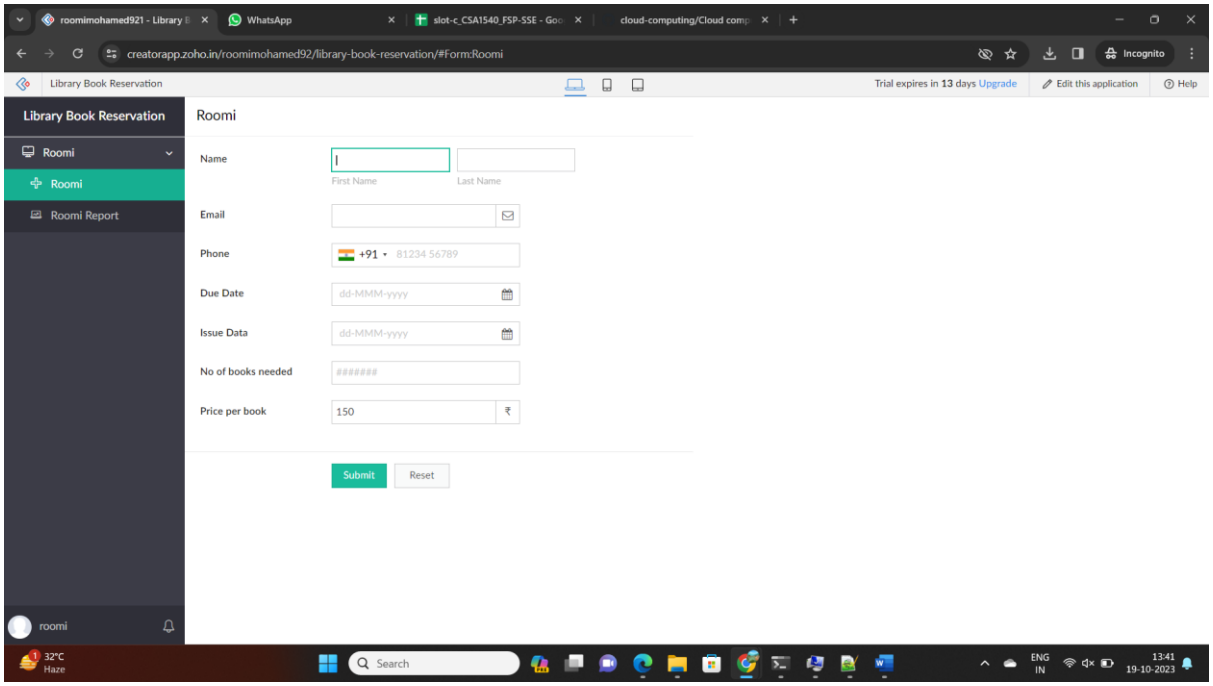
Reservation and Booking System: Create forms and workflows for booking and reserving books: Implement a booking system that allows users to request book online.

Testing and Quality Assurance: thoroughly test the application to ensure its functions smoothly and securely.

Deployment on cloud Platform: Deploy the library Book Reservation System on your choosen cloud service provider ensuring data security.

Aim:

Upon completion of the above procedure you will have a cloud based library Book Reservation System for SIMATS library that efficiently demonstrates the SaaS model.


roomimohamed921 - Library
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cloud-computing/Cloud comp
creatorapp.zoho.in/roomimohamed92/library-book-reservation/#Form:Roomi
Incognito
Library Book Reservation
Trial expires in 13 days Upgrade
Edit this application
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Roomi
Roomi Report
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Name
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Due Date
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Issue Data
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No of books needed
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19-10-2023

5) Creating Web API for Basic Pay System

Aim: To create web API for Basic Pay System

Procedure:

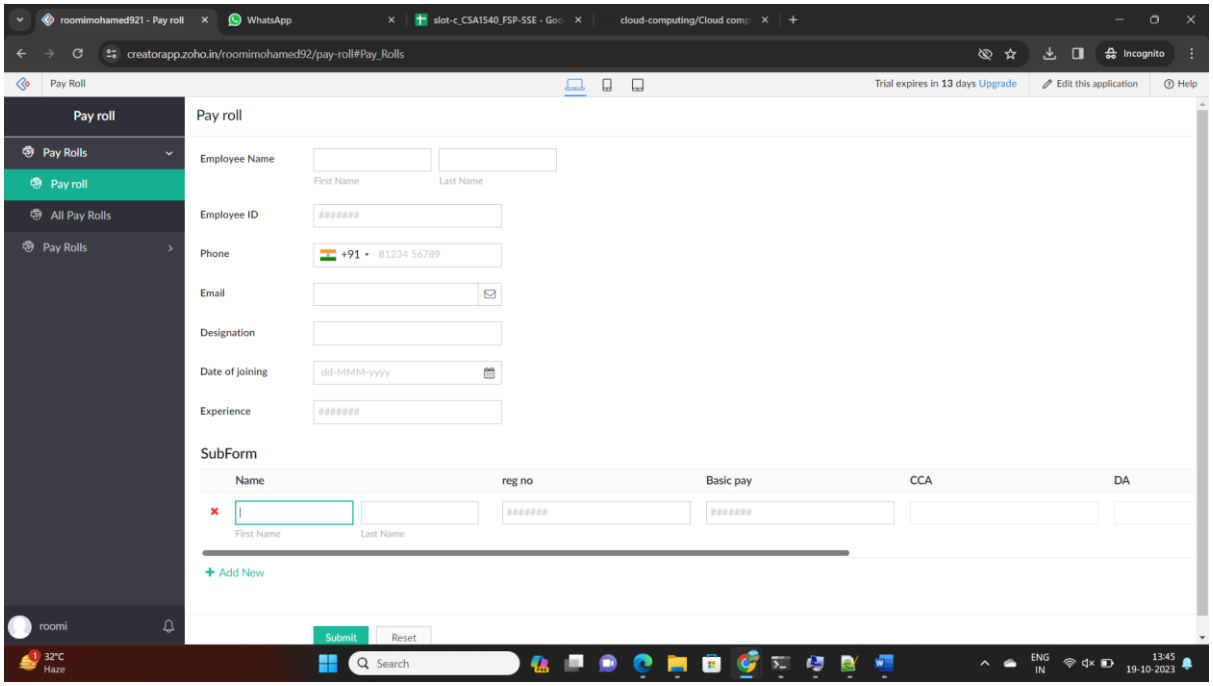
→ first open Zoho website and enter the credentials required
→ After creating account, click on creator option
→ Create an application for Basic Pay role system.
→ After creating application it open function page
→ Next add the functions like name, email, date of Joining, Employee ID, designation, Basic Pay, DA, CCA, TAX Total salary.

$$DA = Basic\ Pay \times 0.2$$
$$CCA = Basic\ Pay \times 0.3$$
$$TAX = Basic\ Pay \times 0.03$$
$$Total = ((Basic\ Pay \times 0.3) + (Basic\ Pay \times 0.2) + (Basic\ Pay)) - (Basic\ Pay \times 0.3)$$

→ After adding functions click on done and select accessing for application.
→ Next open the application and fill the details.
→ After filling the details click on submit.
→ Data is stored and can view it.

Result:

Therefore, API for Basic Pay System is successfully created and executed.


roomimohamed921 - Pay roll
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cloud-computing/Cloud comp
creatorapp.zoho.in/roomimohamed92/pay-roll#Pay_Rolls
Incognito
Pay Roll
Trial expires in 13 days Upgrade
Edit this application
Help
Pay roll
Pay Rolls
Pay roll
All Pay Rolls
Pay Rolls
roomi
Pay roll
Employee Name
First Name
Last Name
Employee ID
#######
Phone
+91
81234 56789
Email
Designation
Date of joining
dd-MMM-yyyy
Experience
#######
SubForm
Name
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Basic pay
CCA
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First Name
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19-10-2023

4) Creating Web API for Student information system

Aim: To create web API for student

Resources Required: Zoho website, Internet

Procedure:

→ First open Zoho website and enters the credentials required.

→ Next after creating account browse creator and open it.

→ Create an application form for student information.

→ After creating it, opens functions page.

→ Add functions like Name, Roll, ID, No of students, marks for each subjects, total, Age, Phone no, gender, Father name, mother name.

→ After adding function click on done and select owners application file.

→ Open application file and fill details

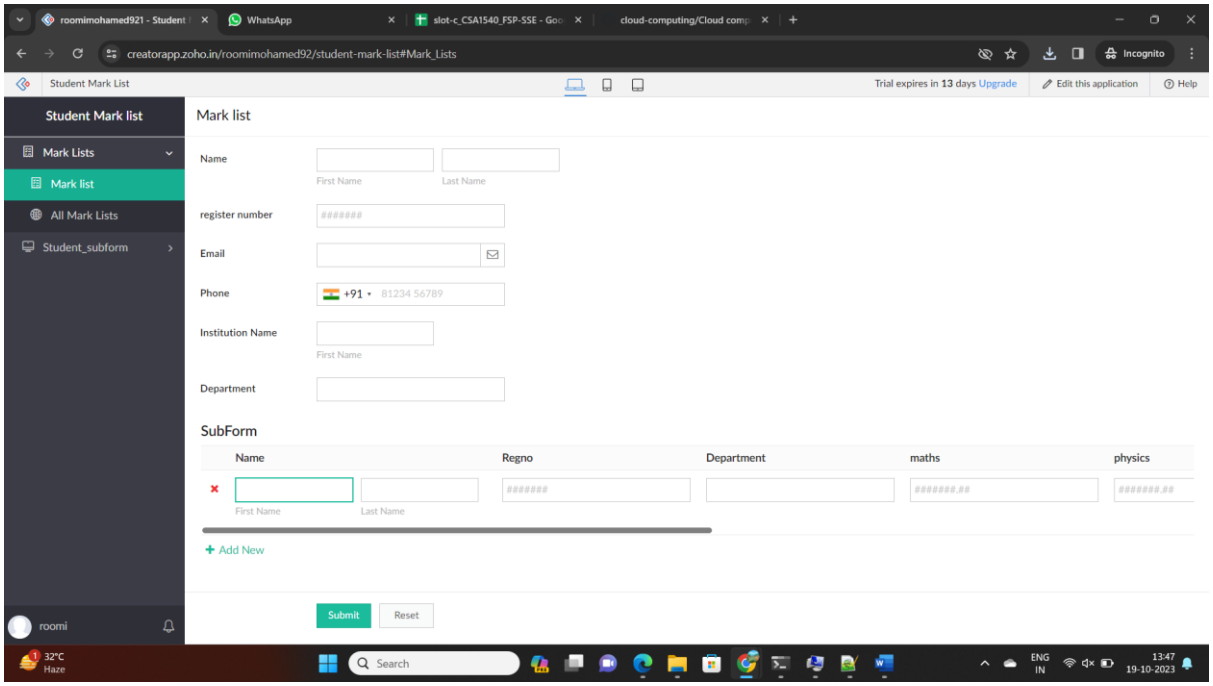
→ After filling details click on submit.

→ The data is stored and we view it.

→ API for student information system is successfully created.

Result:

Therefore the API for student information system is successfully created.


roomimohamed921 - Student
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cloud-computing/Cloud comp
creatorapp.zoho.in/roomimohamed92/student-mark-list#Mark_Lists
Incognito
Student Mark List
Trial expires in 13 days Upgrade
Edit this application
Help
Student Mark list
Mark Lists
Mark list
All Mark Lists
Student_subform
roomi
Mark list
Name
First Name
Last Name
register number
Email
Phone
+91
81234 56789
Institution Name
First Name
Department
SubForm
Name
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Department
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physics
First Name
Last Name
Add New
Submit
Reset
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19-10-2023

1) To install VM ware workstation and allocate the storage.

Aim: To install VM workstation software and create (or) allocate the storage.

Procedure:

→ Open browser and search VM ware workstation software.

→ Download and install the VM workstation software

→ Download the OS image of Kali linux and ubuntu

→ Open VM software and run software.

→ Provide Permission required to run software.

→ Create the new VM in software.

→ Next select type recommended for software

→ Browse the OS downloaded file in given option.

→ Select the operating system and click next.

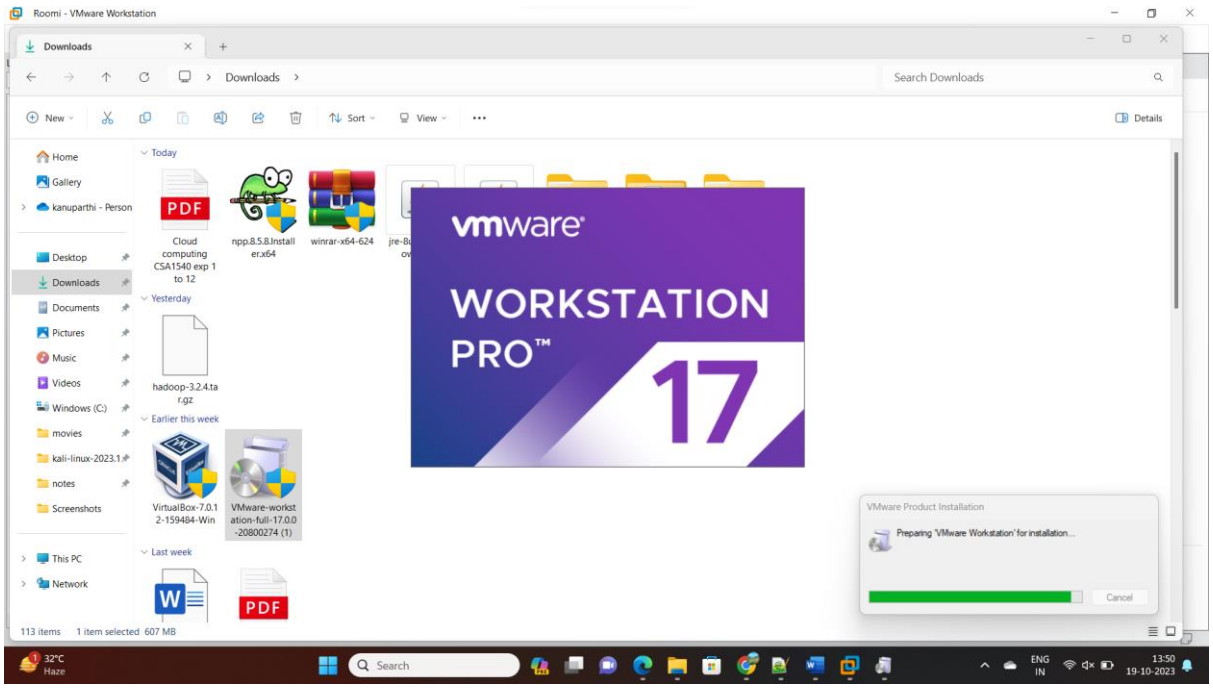
→ It displays the location file

→ Next select the maximum size for storage and click next.

→ Later click on the finish

Result:

We have successfully installed VM workstation software and created (or) allocated the storage.


Roomi - VMware Workstation
Downloads
Search Downloads
New
Sort
View
Details
Home
Gallery
kanuparthi - Person
Desktop
Downloads
Documents
Pictures
Music
Videos
Windows (C:)
movies
kali-linux-2023.1
notes
Screenshots
This PC
Network
Today
Cloud computing CSA1540 exp 1 to 12
npp.8.5.8.Installer.x64
winrar-x64-624
Yesterday
hadoop-3.2.4.tar.gz
Earlier this week
VirtualBox-7.0.12-159484-Win
VMware-workstation-full-17.0.0-20800274 (1)
Last week
113 items
1 item selected 607 MB
vmware
WORKSTATION
PRO™
17
VMware Product Installation
Preparing 'VMware Workstation' for installation...
Cancel
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13:50
19-10-2023

1) Create a virtual machine with 1 CPU, 2 GB Ram and 15 GB storage disk using type 2 virtualization software.

Aim: To create a VM using VM ware workstation without box with 1 vCPU, 2 GB ram and 15 GB storage and launch it.

Procedure

→ Install the virtualization software VM ware workstation as type 2.

→ Download os a image file

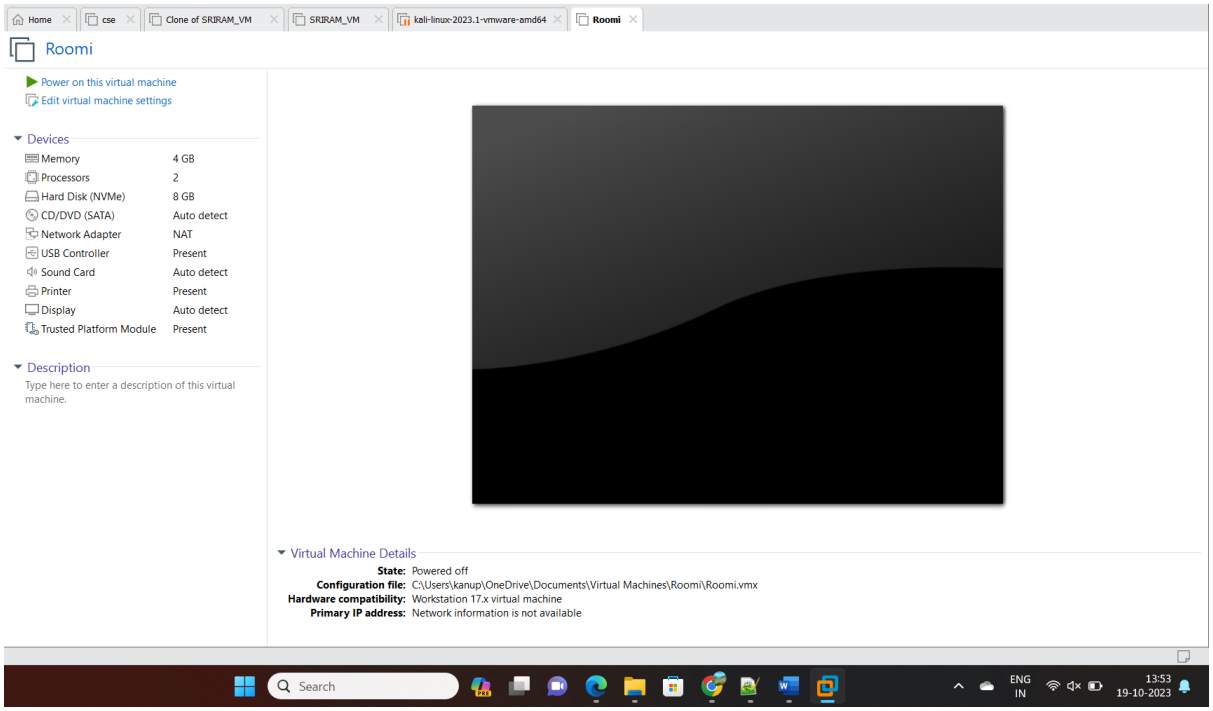
→ Start VM ware.

→ Configure the H/W settings

→ Install the VM and launch.

Result:

The VM using ubuntu image has been configured and installed on a type 2 hypervisor using VM ware workstation.


Home
cse
Clone of SRIRAM_VM
SRIRAM_VM
kali-linux-2023.1-vmware-amd64
Roomi
Roomi
Power on this virtual machine
Edit virtual machine settings
Devices
Memory 4 GB
Processors 2
Hard Disk (NVMe) 8 GB
CD/DVD (SATA) Auto detect
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Trusted Platform Module Present
Description
Type here to enter a description of this virtual machine.
Virtual Machine Details
State: Powered off
Configuration file: C:\Users\kanup\OneDrive\Documents\Virtual Machines\Roomi\Roomi.vmx
Hardware compatibility: Workstation 17.x virtual machine
Primary IP address: Network information is not available
Search
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13:53
19-10-2023

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 a configuration to increase and decrease the screen size.

→ Select "enter setup" in Boot manager.

→ After that select "configure screen size" in Boot maintenance manager and press enter.

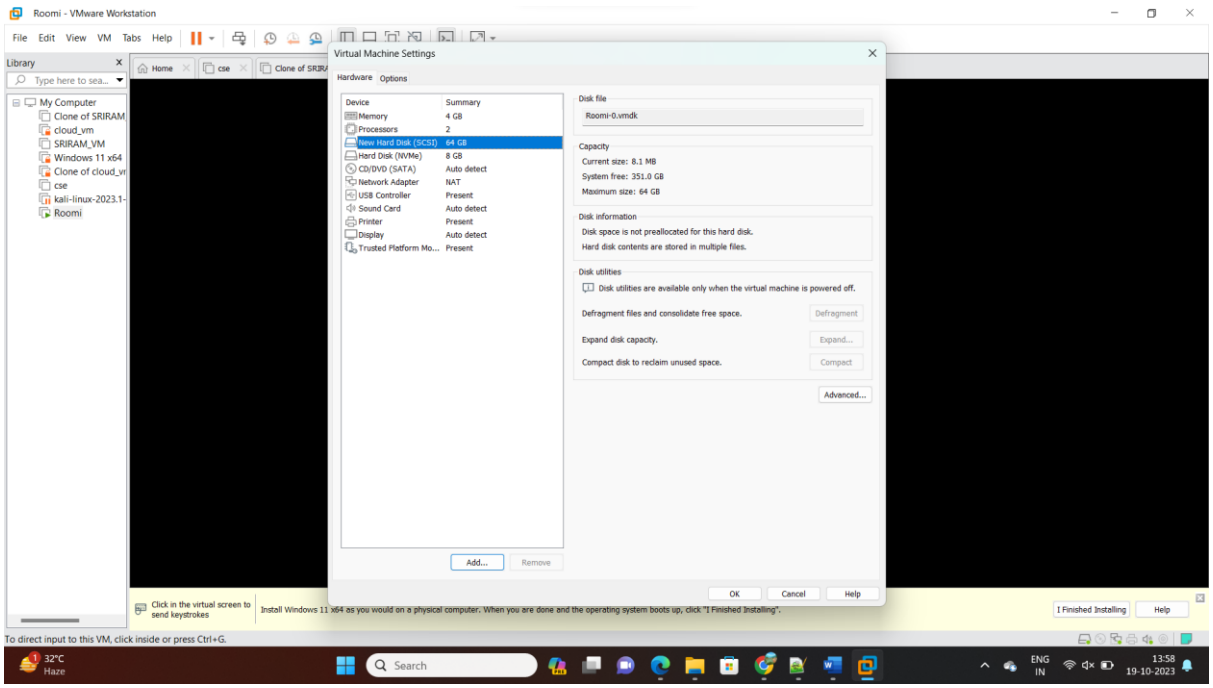
→ Set screen size and press enter.

→ Select save changes and exit.

→ The screen size is increased.

Result:

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


Roomi - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
Clone of SRIRAM
cloud_vm
SRIRAM_VM
Windows 11 x64
Clone of cloud_vm
cse
kali-linux-2023.1-
Roomi
Home
cse
Clone of SRIRAM
Virtual Machine Settings
Hardware Options
Device Summary
Memory 4 GB
Processors 2
New Hard Disk (SCSI) 64 GB
Hard Disk (NVMe) 8 GB
CD/DVD (SATA) Auto detect
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Trusted Platform Mo... Present
Add... Remove
Disk file
Roomi-0.vmdk
Capacity
Current size: 8.1 MB
System free: 351.0 GB
Maximum size: 64 GB
Disk information
Disk space is not preallocated for this hard disk.
Hard disk contents are stored in multiple files.
Disk utilities
Disk utilities are available only when the virtual machine is powered off.
Defragment files and consolidate free space.
Defragment
Expand disk capacity.
Expand...
Compact disk to reclaim unused space.
Compact
Advanced...
OK Cancel Help
Click in the virtual screen to send keystrokes
Install Windows 11 x64 as you would on a physical computer. When you are done and the operating system boots up, click "I Finished Installing".
I Finished Installing
Help
To direct input to this VM, click inside or press Ctrl+G.
32°C
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Search
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13:58
19-10-2023

8) Create a snapshot and test it by Previous Version.

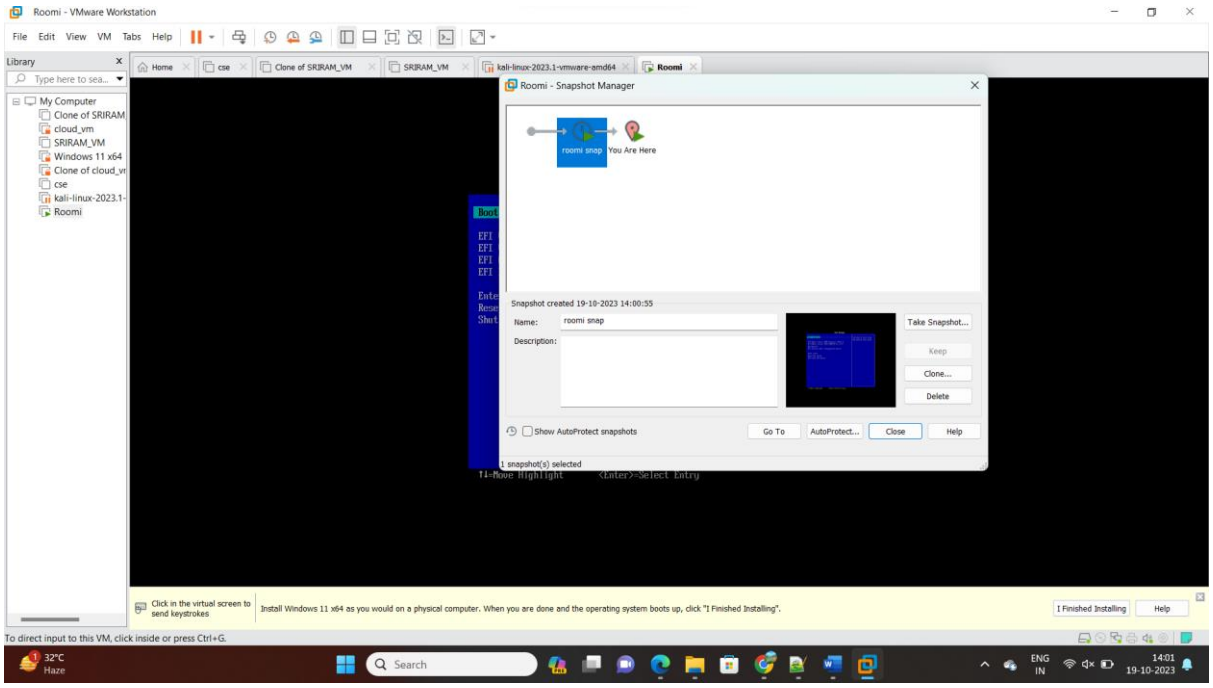
Aim: To create a snapshot and test so as if deleted content are restored after reloading saved version of the OS

Procedure:

→ Create a snap shot of VM
→ Deleted few files and restore the snapshot to launch shortcut first so to window.
→ Given right click . then we will get option snapshot.
→ In snapshot select take a snapshot save it
→ Then go to snapshot manager which on top of the page
→ Select snapshot which we have saved.
→ The snapshot is created.

Result:

The snapshot of the VM has been implemented and tested successfully.


Roomi - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
Clone of SRIRAM
cloud_vm
SRIRAM_VM
Windows 11 x64
Clone of cloud_vm
cse
kali-linux-2023.1-
Roomi
Home
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Clone of SRIRAM_VM
SRIRAM_VM
kali-linux-2023.1-vmware-amd64
Roomi
Roomi - Snapshot Manager
roomi snap
You Are Here
Snapshot created 19-10-2023 14:00:55
Name:
roomi snap
Description:
Take Snapshot...
Keep
Clone...
Delete
Show AutoProtect snapshots
Go To
AutoProtect...
Close
Help
1 snapshot(s) selected
↑↓=Move Highlight
<Enter>=Select Entry
Click in the virtual screen to send keystrokes
Install Windows 11 x64 as you would on a physical computer. When you are done and the operating system boots up, click "I Finished Installing".
I Finished Installing
Help
To direct input to this VM, click inside or press Ctrl+G.
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19-10-2023

a) Create a cloning of VM and test it by loading previous versions?

Aim: To create a clone version of existing virtual machine and open it from storage.

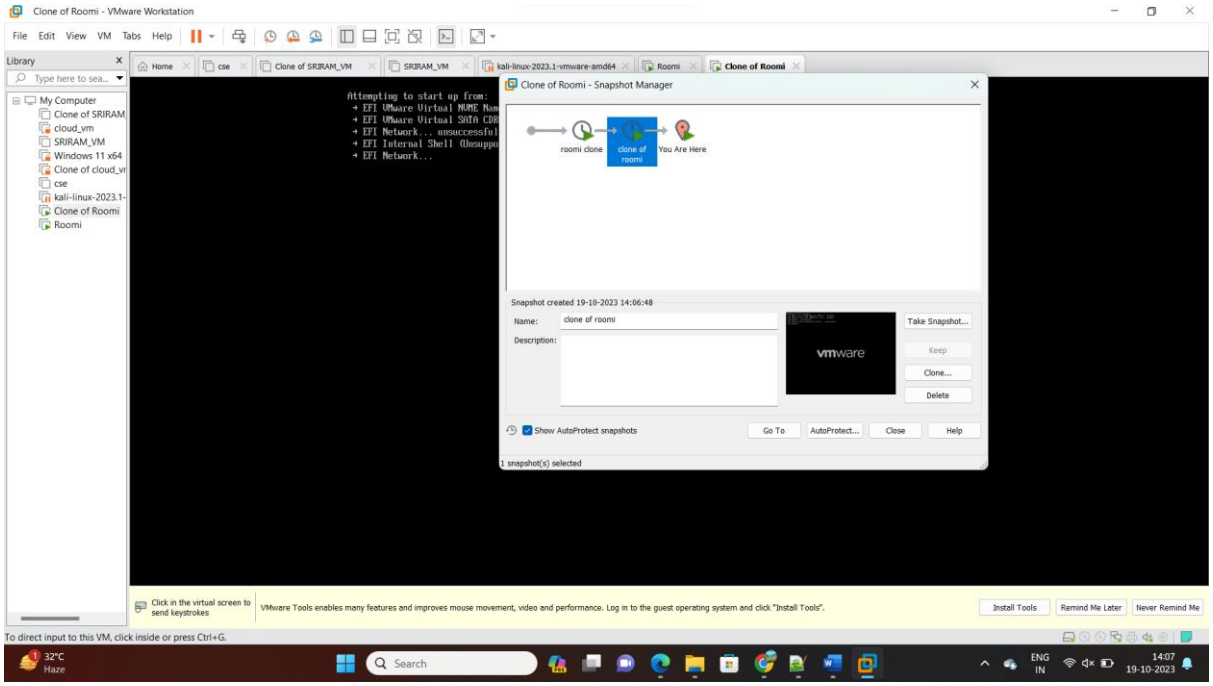
Procedure

→ VM is shut down → Initial → created VM.

-) Create a clone version of the VM
-) Start the process of running.
-) Go to window move select Snapshot.
-) Select "Revert to snapshot"
-) Then system shut down the guest.
-) Go to manage and select clone.
-) Give Next → Next → Finish → close.
-) The clone of VM is created.

Result,

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


Clone of Roomi - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to sea...
My Computer
Clone of SRIRAM
cloud_vm
SRIRAM_VM
Windows 11 x64
Clone of cloud_vi
cse
kali-linux-2023.1-
Clone of Roomi
Roomi
Home
cse
Clone of SRIRAM_VM
SRIRAM_VM
kali-linux-2023.1-vmware-amd64
Roomi
Clone of Roomi
Attempting to start up from:
→ EFI VMware Virtual NVME Nam
→ EFI VMware Virtual SATA CDR
→ EFI Network... unsuccessful
→ EFI Internal Shell (Unsuppo
→ EFI Network...
Clone of Roomi - Snapshot Manager
roomi clone
clone of roomi
You Are Here
Snapshot created 19-10-2023 14:06:48
Name:
clone of roomi
Description:
vmware
Take Snapshot...
Keep
Clone...
Delete
Show AutoProtect snapshots
Go To
AutoProtect...
Close
Help
1 snapshot(s) selected
Click in the virtual screen to send keystrokes
VMware Tools enables many features and improves mouse movement, video and performance. Log in to the guest operating system and click "Install Tools".
Install Tools
Remind Me Later
Never Remind Me
To direct input to this VM, click inside or press Ctrl+G.
32°C
Haze
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ENG
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14:07
19-10-2023

12) Create a Virtual Hard Disk for virtual machine allocate space of 10GB of storage physical HDD.

Aim: To create a virtual Hard disk for the given virtual machine and allocate a space of 10GB of storage from Physical HDD.

Procedure:

→ Launch the VM using VM ware → workstation window customize hardware Add storage

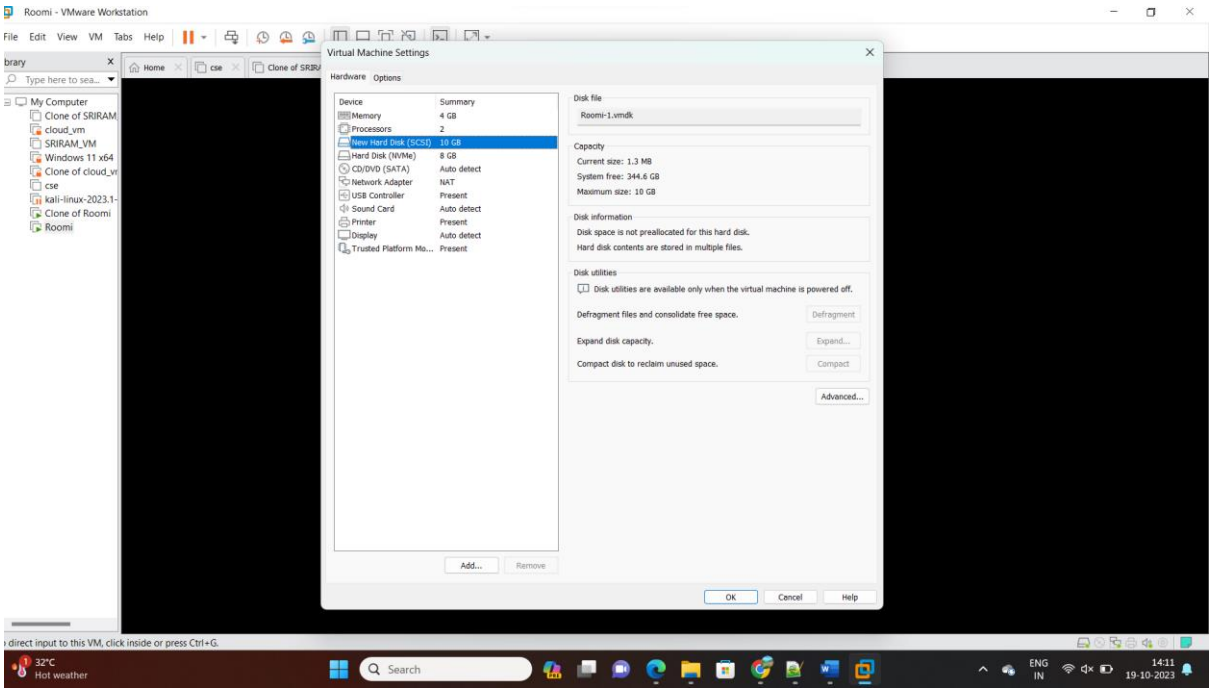
→ Select appropriate Storage types.

→ Finish the configuration of storage.

→ Check to see if the additional Hard disk is added to the VM.

Result:

An Virtual Hard disk has been added inside the VM machine.


Roomi - VMware Workstation
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Virtual Machine Settings
Hardware Options
Device Summary
Memory 4 GB
Processors 2
New Hard Disk (SCSI) 10 GB
Hard Disk (NVMe) 8 GB
CD/DVD (SATA) Auto detect
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Trusted Platform Mo... Present
Add... Remove
Disk file
Roomi-1.vmdk
Capacity
Current size: 1.3 MB
System free: 344.6 GB
Maximum size: 10 GB
Disk information
Disk space is not preallocated for this hard disk.
Hard disk contents are stored in multiple files.
Disk utilities
Disk utilities are available only when the virtual machine is powered off.
Defragment files and consolidate free space.
Defragment
Expand disk capacity.
Expand...
Compact disk to reclaim unused space.
Compact
Advanced...
OK Cancel Help
direct input to this VM, click inside or press Ctrl+G.
32°C
Hot weather
Search
ENG
IN
14:11
19-10-2023