EXP NO 1: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION AND PROVIDE IT AS A SERVICE USING ANY CLOUD SERVICE PROVIDER TODEMONSTRATE SOFTWARE AS A SERVICE (SAAS).

DATE:

AIM:

To create a simple cloud software application and provide it as a service using any cloud service provider todemonstrate software as a service (saas).

PROCEDURE:

STEP1: GOTO ZOHO.COM

STEP 2: LOGIN TO THE ZOHO.COM

STEP 3: SELECT ONE APPLICATION

STEP 4: ENTER APPLICATION NAME

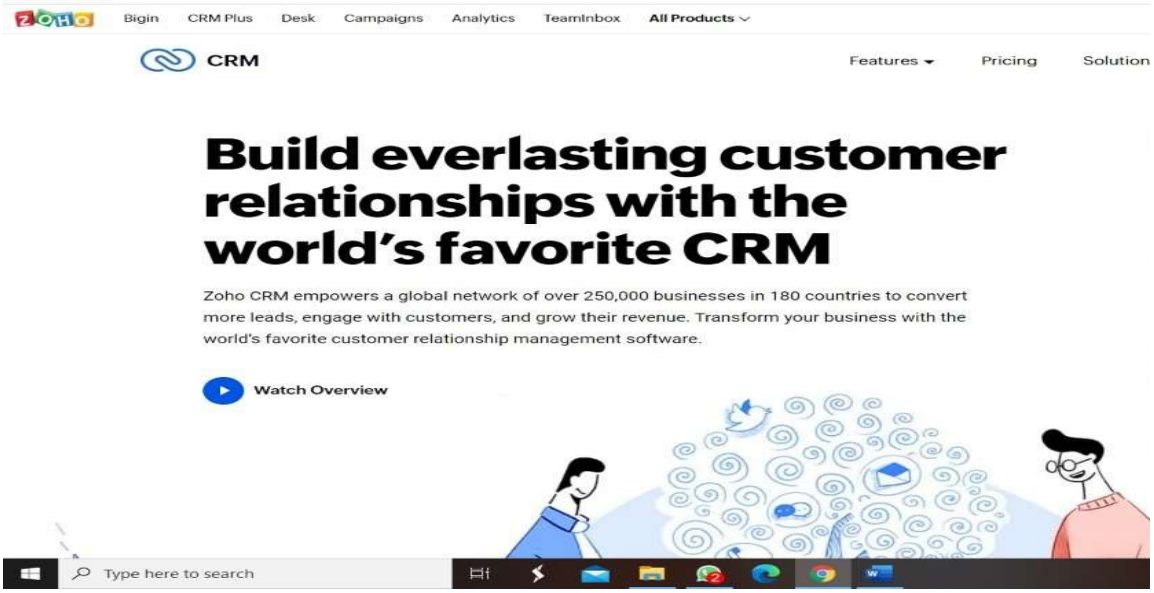
STEP 5: CREATED NEW APPLICATION

STEP 6: SELECT ONE FORM

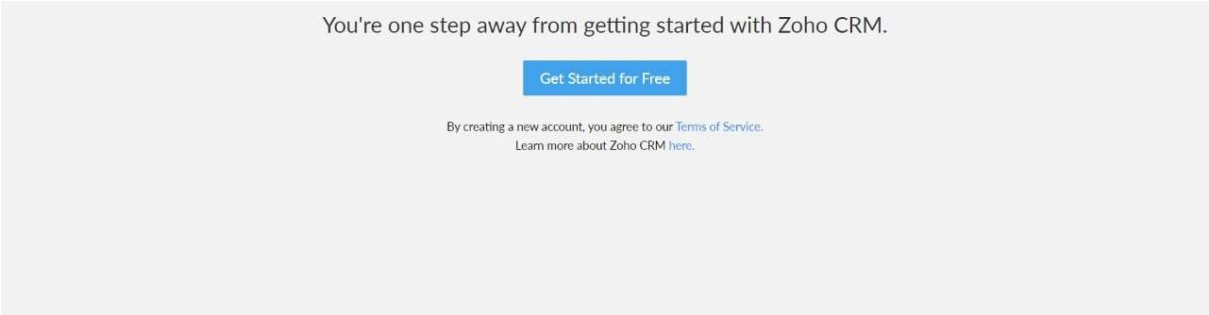
STEP 7: THE SOFTWARE HASE BEEN CREATED.

IMPLEMENTATION:

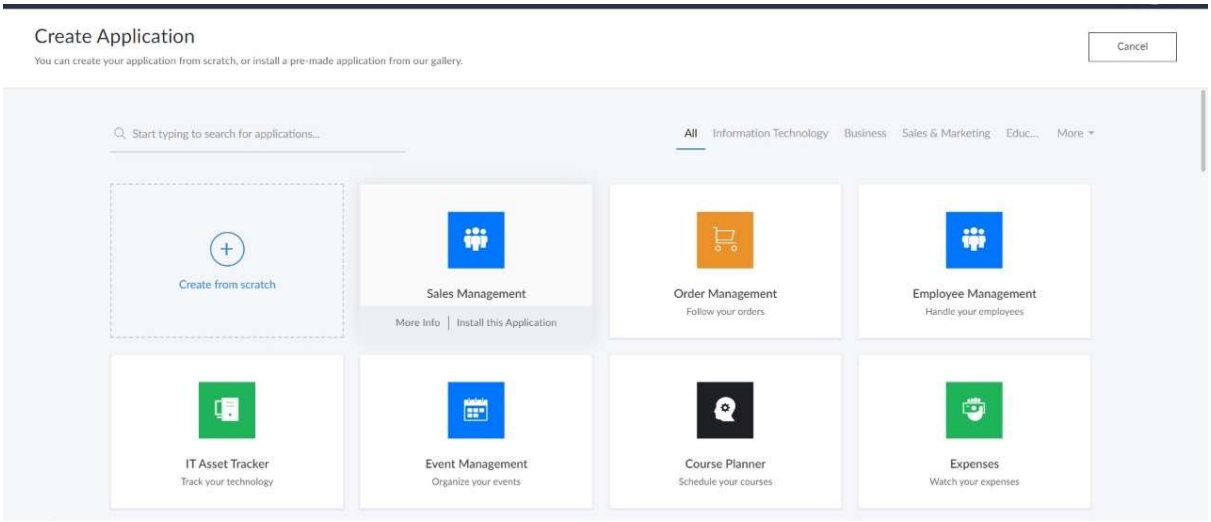
STEP1: GOTO ZOHO.COM



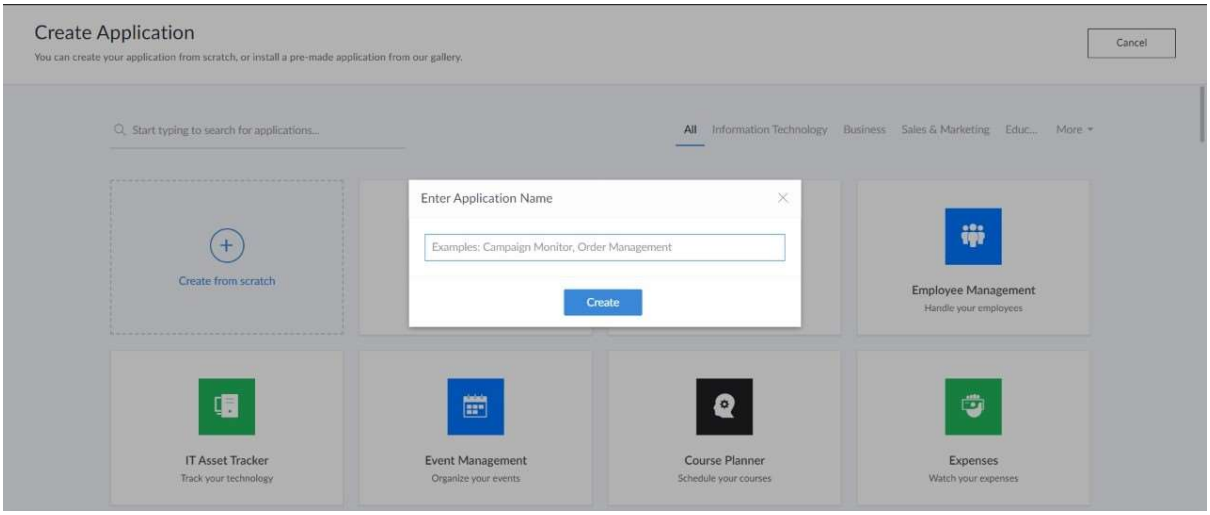
STEP 2: LOGINTOTHE ZOHO.COM



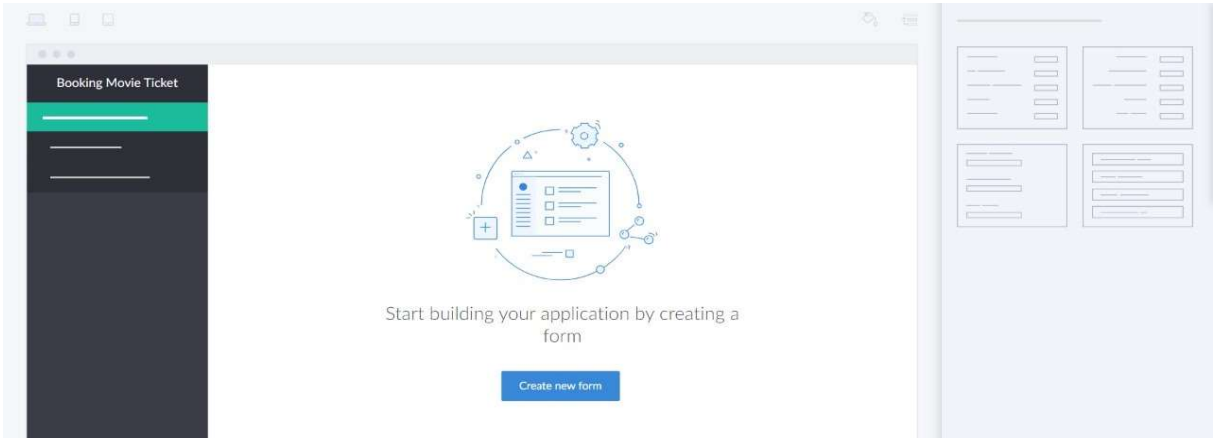
STEP 3: SELECT ONE APPLICATION



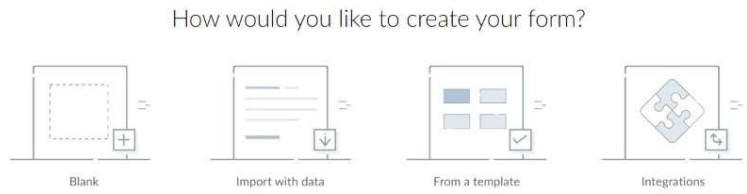
STEP 4: ENTER APPLICATION NAME



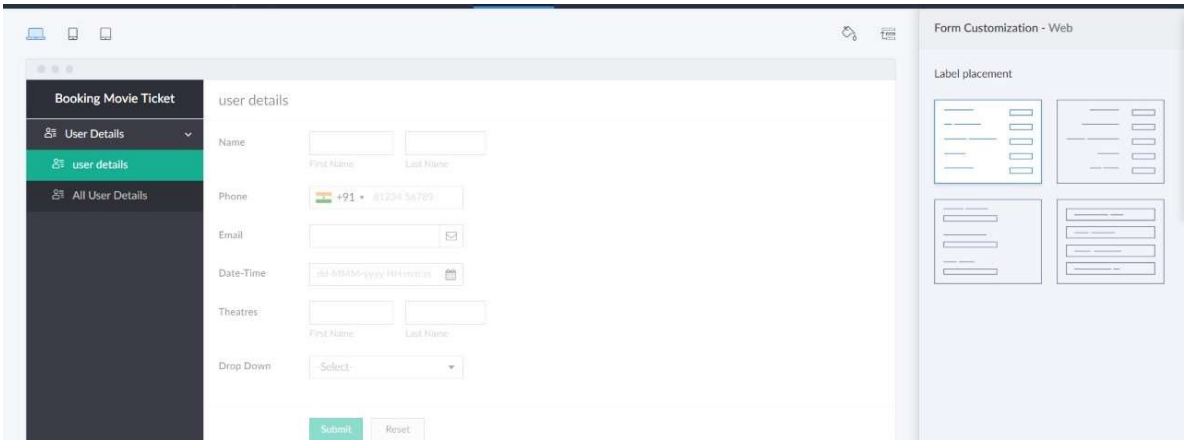
STEP 5: CREATED NEW APPLICATION

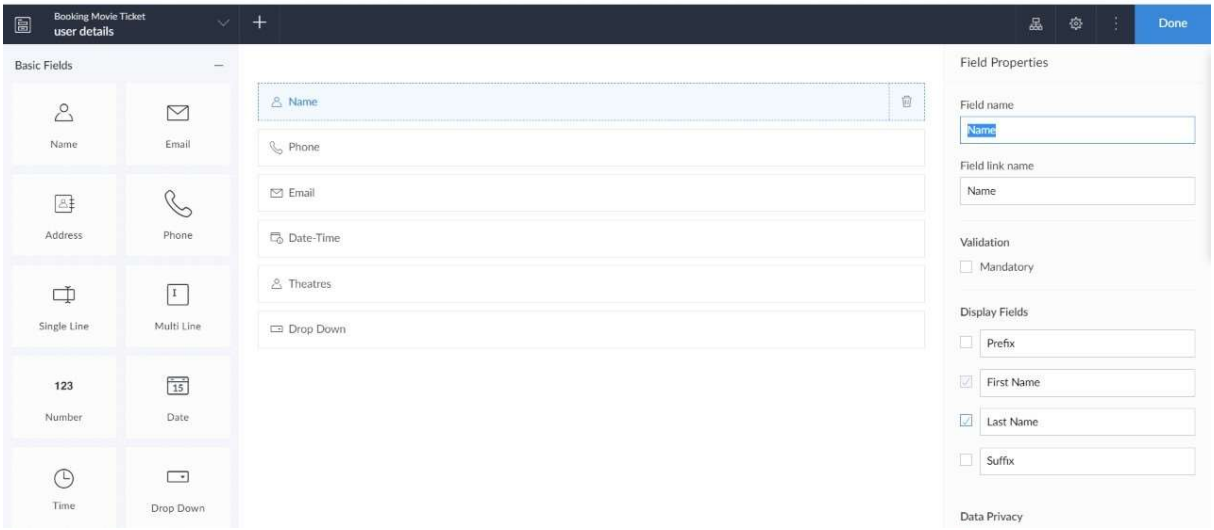


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
user details
Done
Basic Fields
Name
Email
Address
Phone
Single Line
Multi Line
123
Number
Date
Time
Drop Down
Name
Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
Display Fields
Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 2: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION FOR FLIGHT RESERVATION SYSTEM USING ANY CLOUD SERVICE PROVIDER TO DEMONSTRATE SAAS.

DATE:

AIM:

To create a simple cloud software application for flight reservation system using any cloud service provider to demonstrate saas.

PROCEDURE:

step1: Go to zoho.com.

step 2: Log into the zoho.com.

step 3: Select one application step.

step4: Enter application name as flight reservation system.

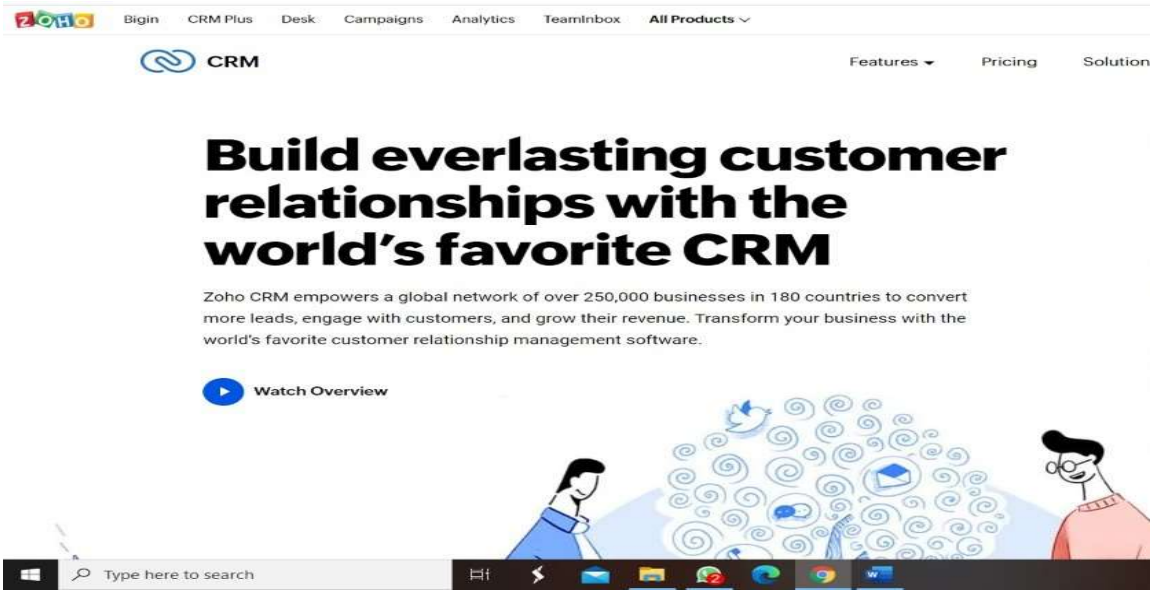
step 5: Created new application flight reservation system.

step 6: Select one form

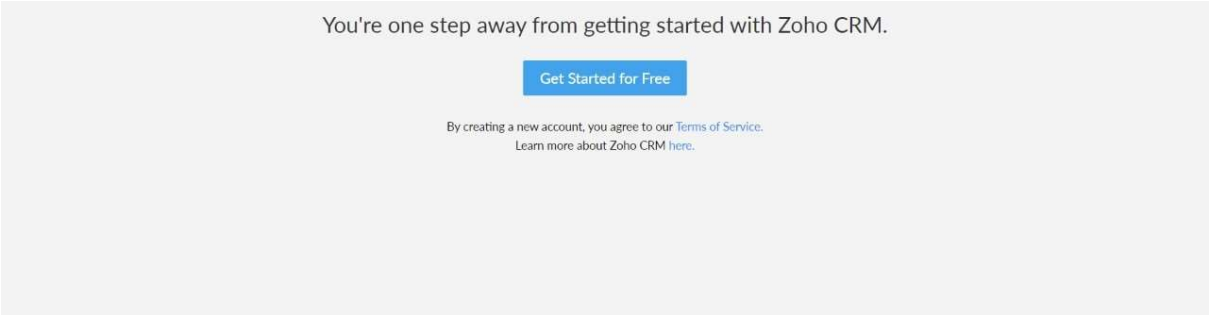
step 7: The software has been created.

IMPLEMENTATION:

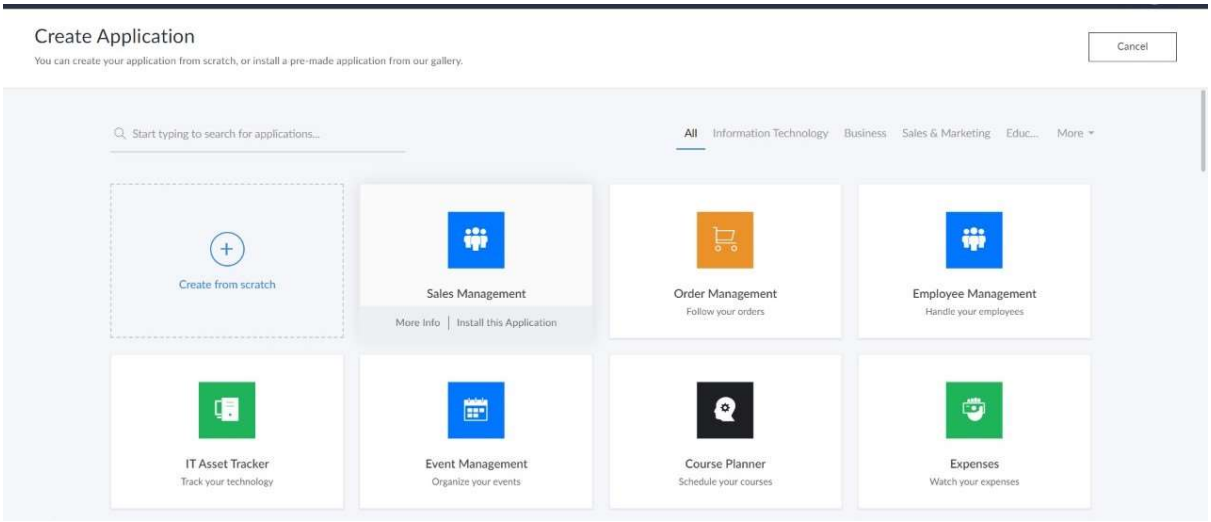
STEP1: GOTO ZOHO.COM



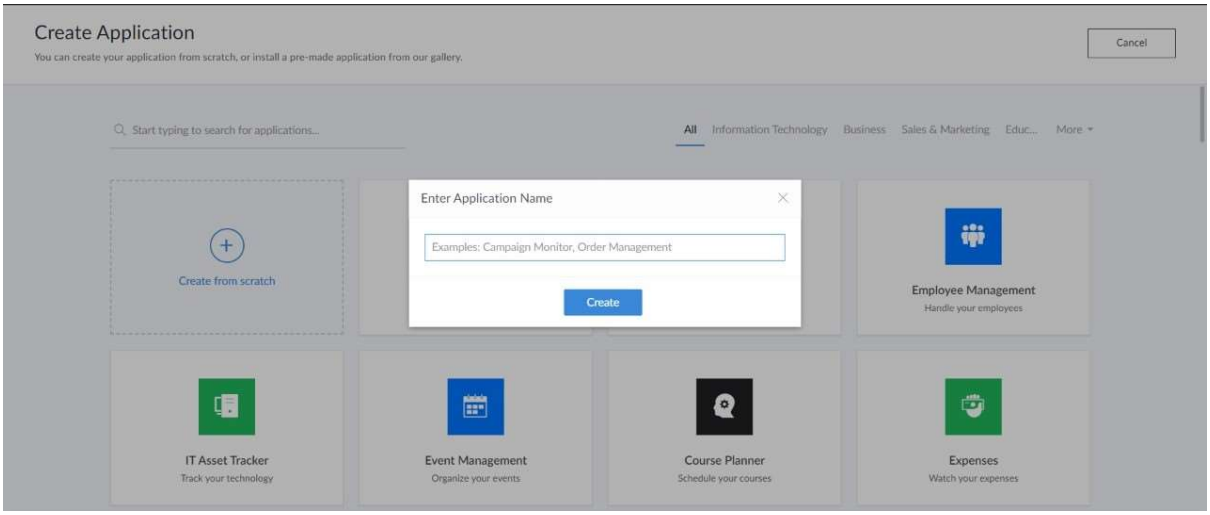
STEP 2: LOGINTOTHE ZOHO.COM



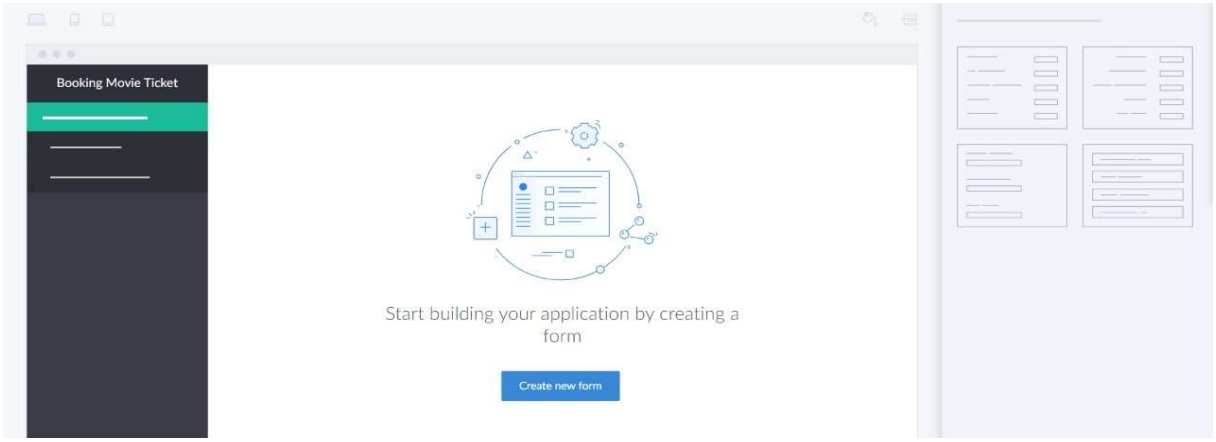
STEP 3: SELECT ONE APPLICATION



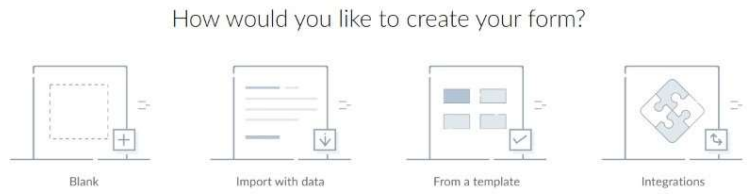
STEP 4: ENTER APPLICATION NAME



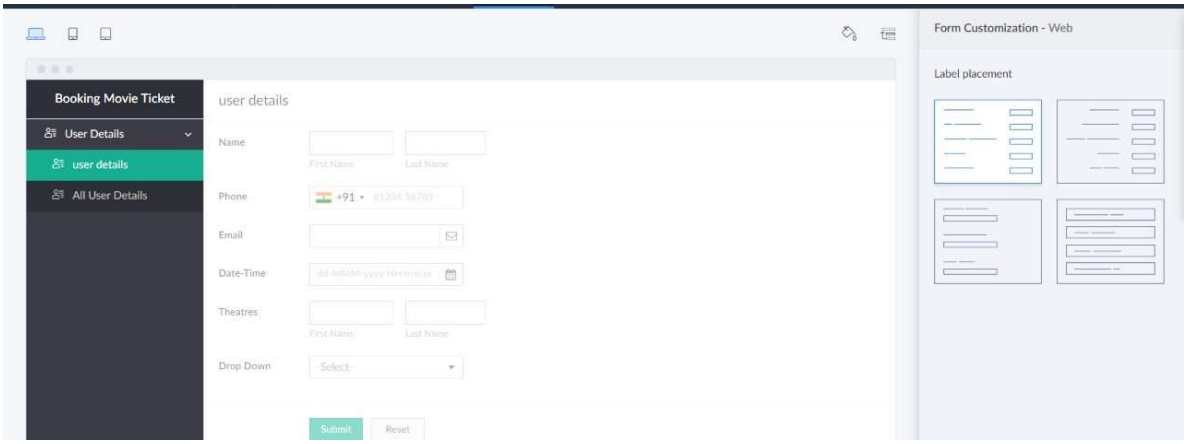
STEP 5: CREATED NEW APPLICATION

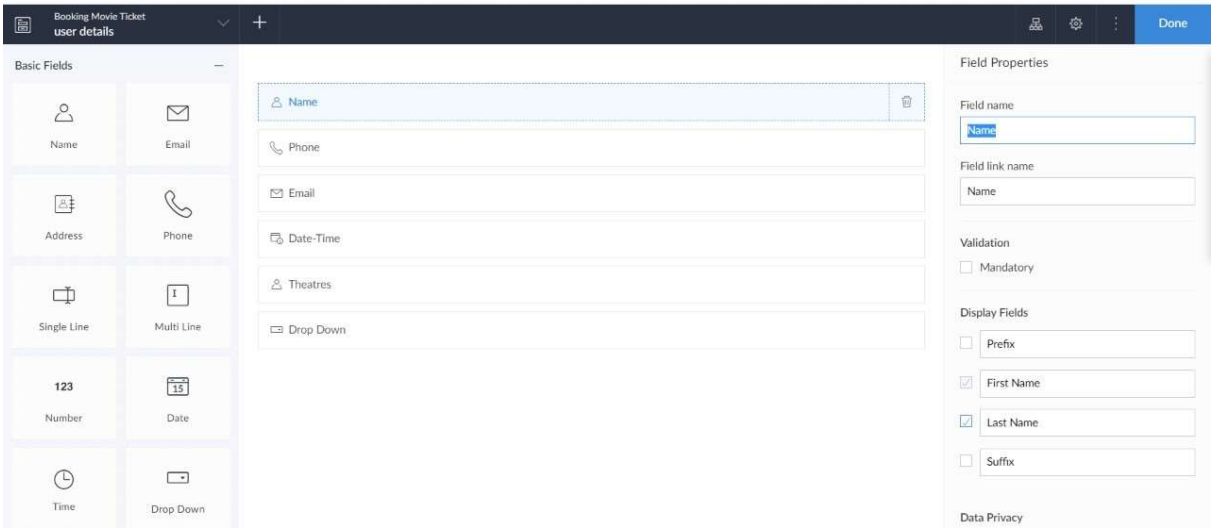


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
user details
Done
Basic Fields
Name
Email
Address
Phone
Single Line
Multi Line
123
Number
Date
Time
Drop Down
Name
Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
Display Fields
Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 3: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION FOR PROPERTY BUYING & RENTAL PROCESS (IN CHENNAI CITY) USING ANY CLOUD SERVICE PROVIDER TO DEMONSTRATE SAAS.

DATE:

AIM:

To Create a simple cloud software application for Property Buying & Rental process (In Chennai city) using any Cloud Service Provider to demonstrate SaaS.

PROCEDURE:

step1: Go to zoho.com.

step 2: Log into the zoho.com.

step 3: Select one application step.

step4: Enter application name as property buying & rental.

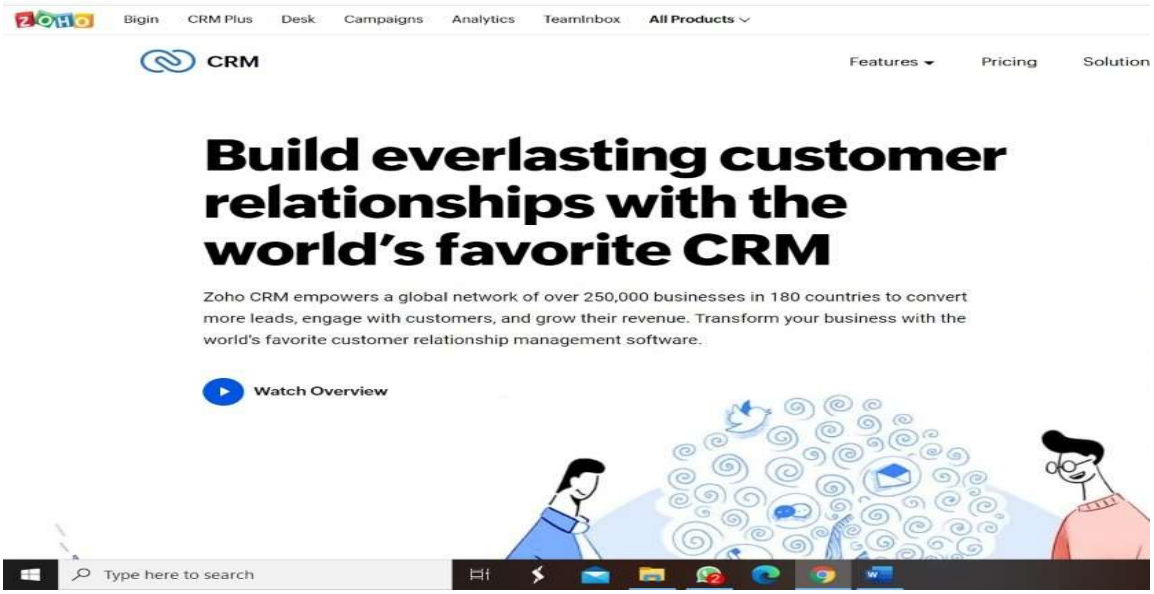
step 5: Created new application as property buying & rental.

step 6: Select one form

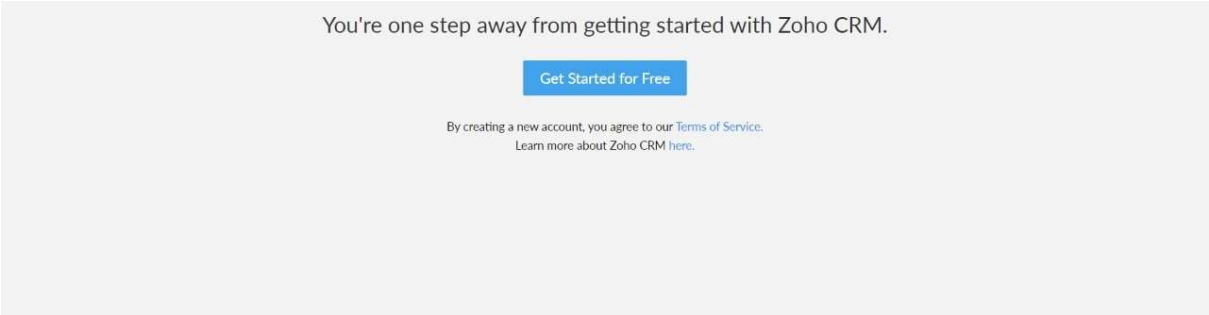
step 7: The software has been created.

IMPLEMENTATION:

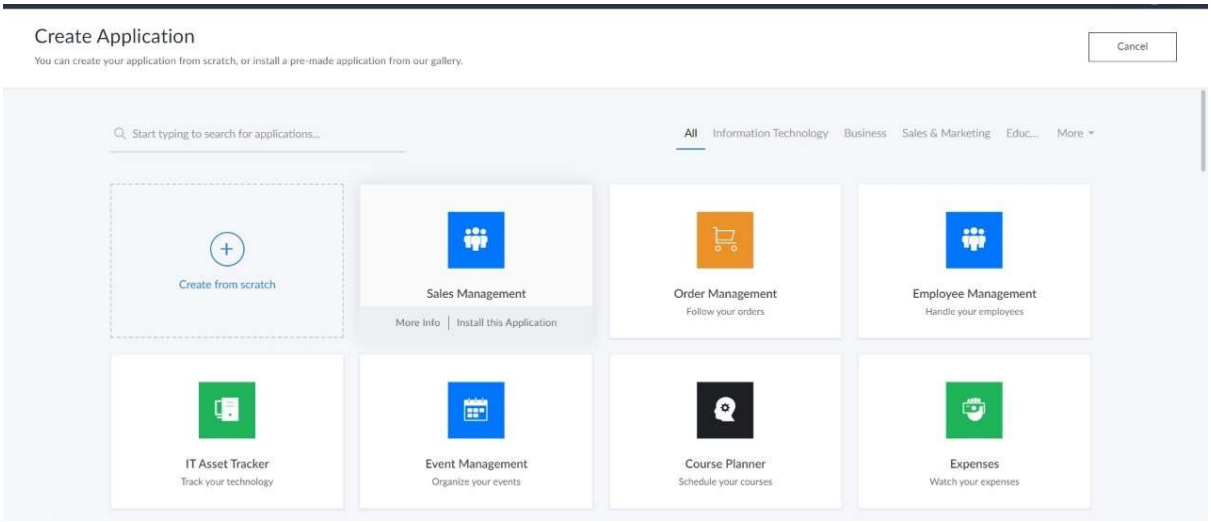
STEP1: GOTO ZOHO.COM



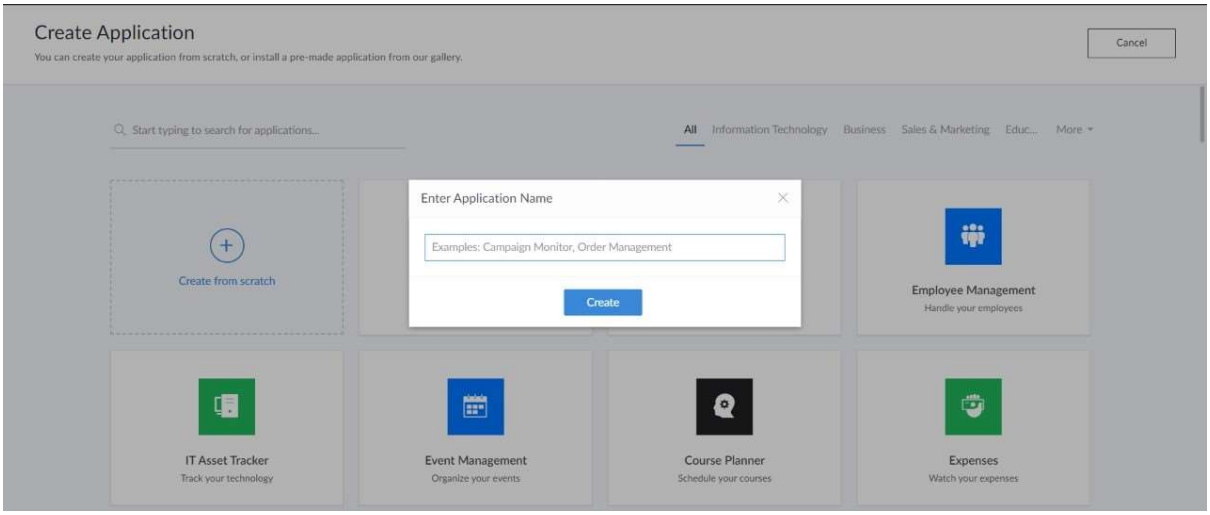
STEP 2: LOGINTOTHE ZOHO.COM



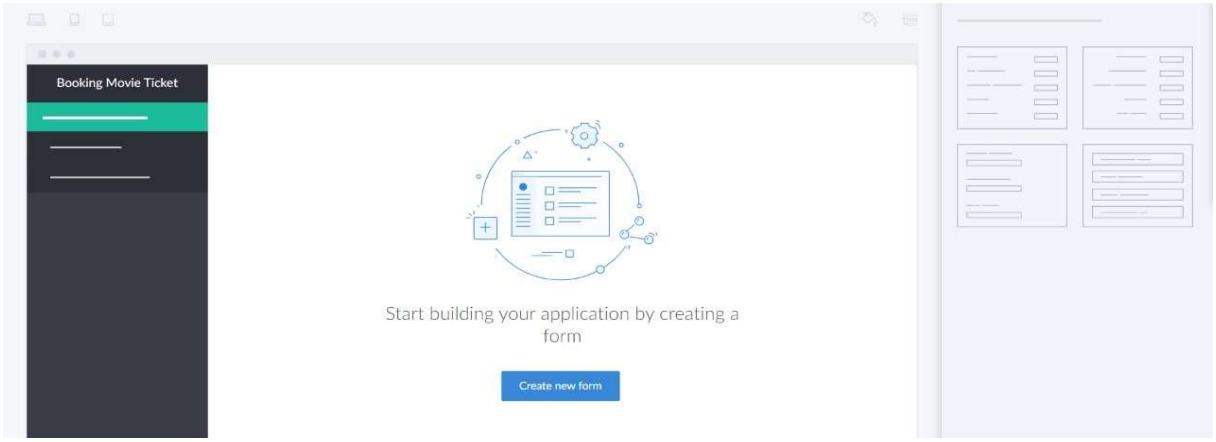
STEP 3: SELECT ONE APPLICATION



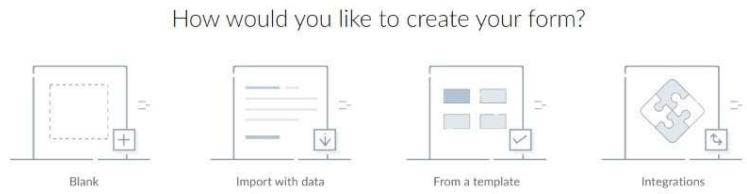
STEP 4: ENTER APPLICATION NAME



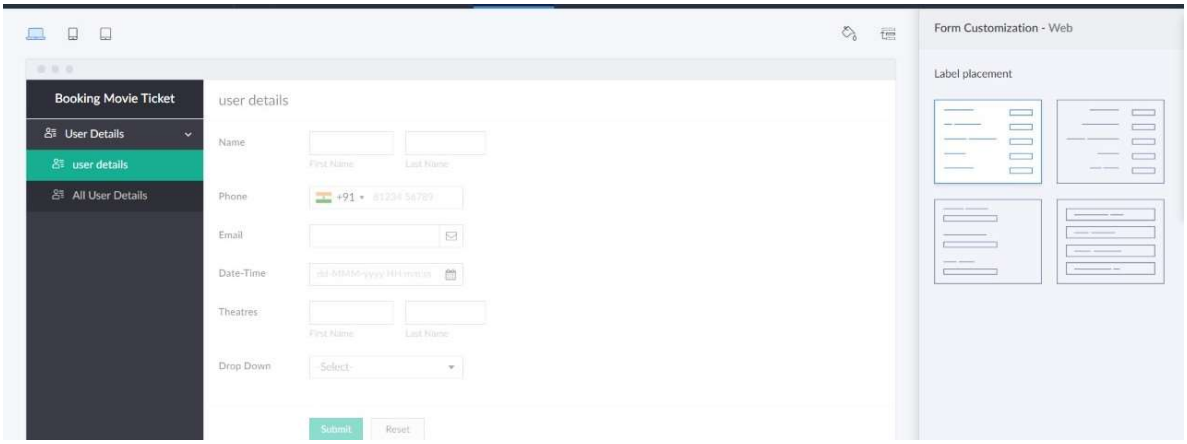
STEP 5: CREATED NEW APPLICATION

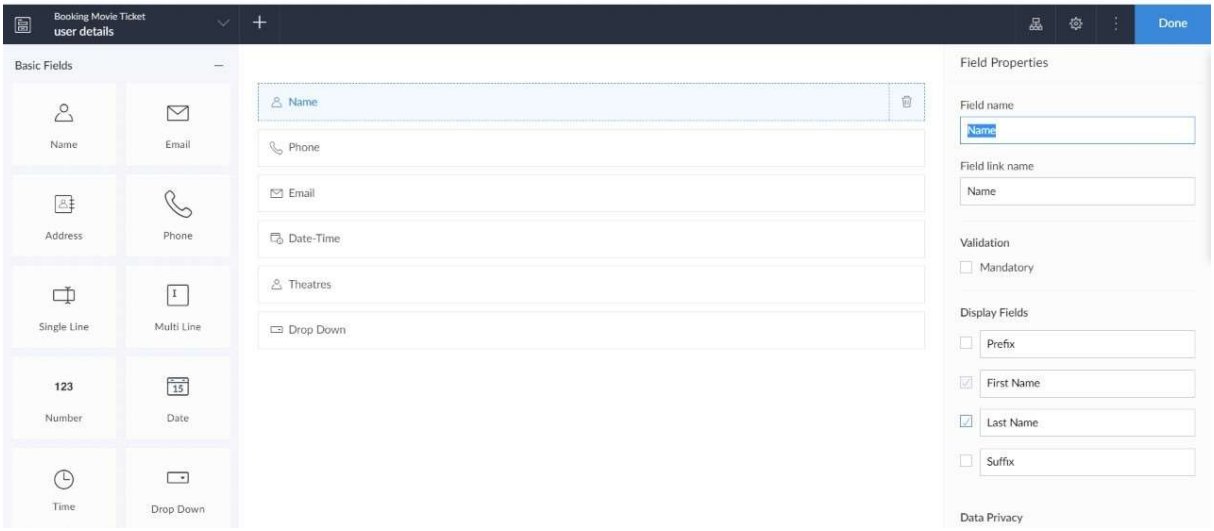


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
user details
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Basic Fields
Name
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Phone
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Multi Line
123
Number
Date
Time
Drop Down
Name
Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
Display Fields
Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 4: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION FOR CAR BOOKING RESERVATION SYSTEM USING ANY CLOUD SERVICE PROVIDER TO DEMONSTRATE SAAS.

DATE:

AIM:

To Create a simple cloud software application for Car Booking Reservation System using any Cloud Service Provider to demonstrate SaaS.

PROCEDURE:

step1: Go to zoho.com.

step 2: Log into the zoho.com.

step 3: Select one application step.

step4: Enter application name as Car Booking Reservation System.

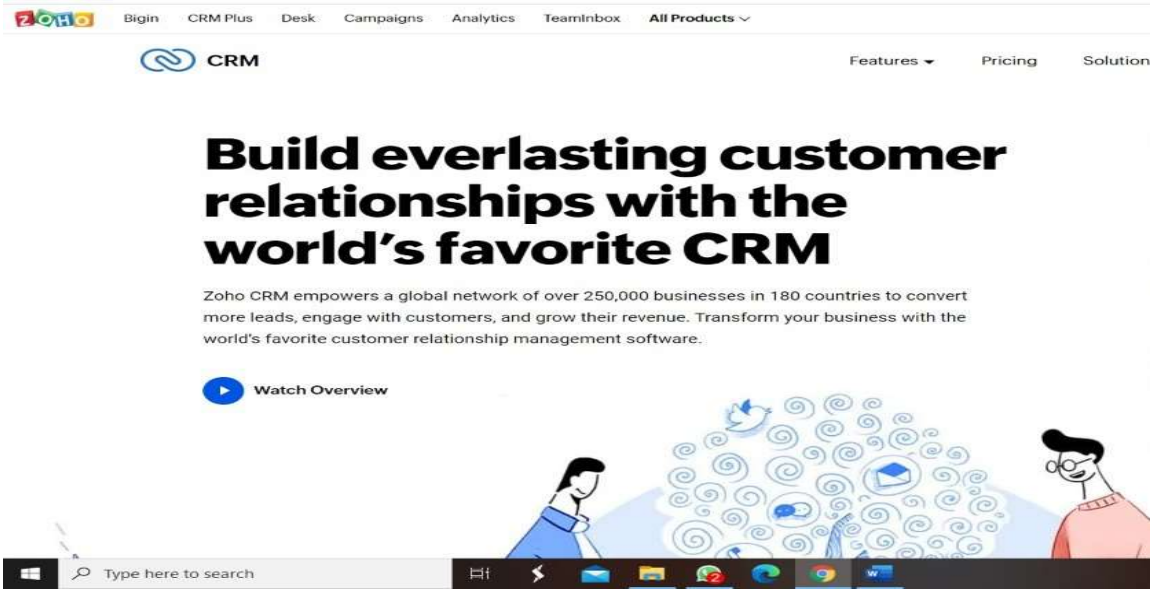
step 5: Created new application as Car Booking Reservation System.

step 6: Select one form

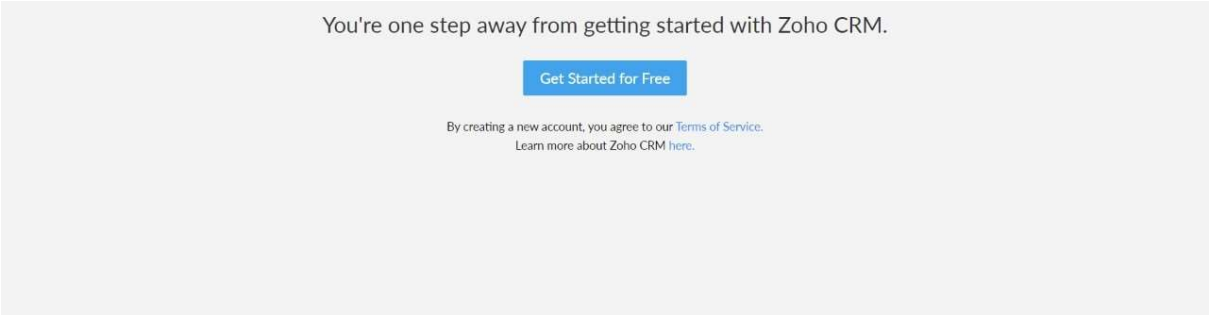
step 7: The software has been created.

IMPLEMENTATION:

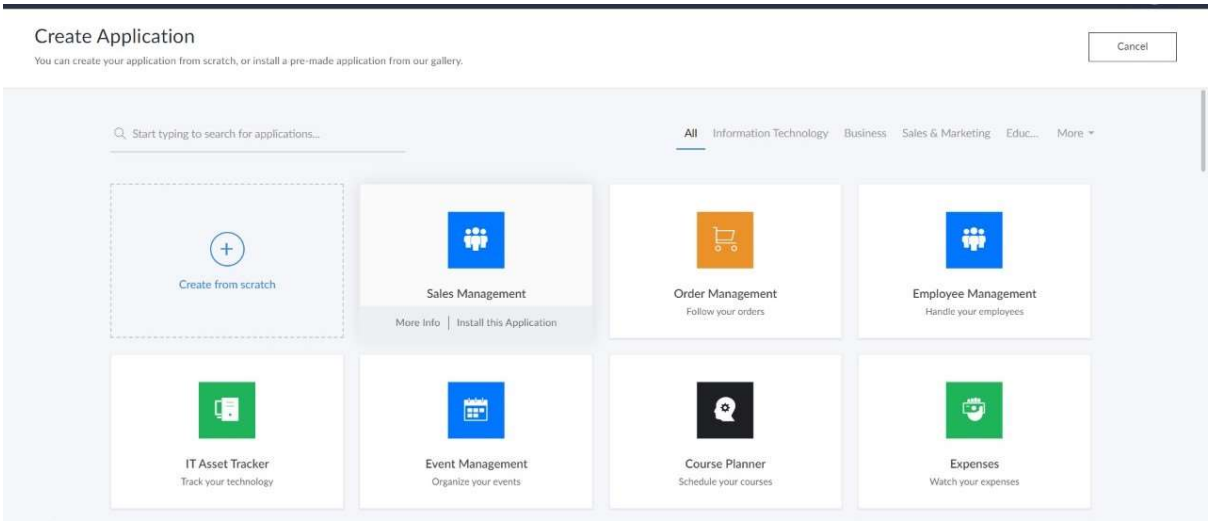
STEP1: GOTO ZOHO.COM



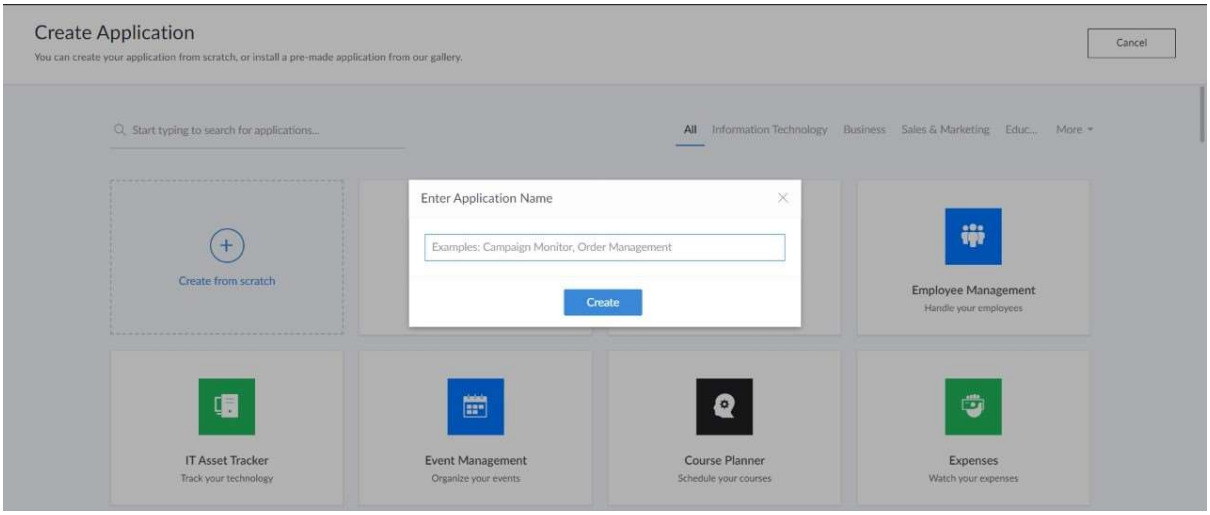
STEP 2: LOGINTOTHE ZOHO.COM



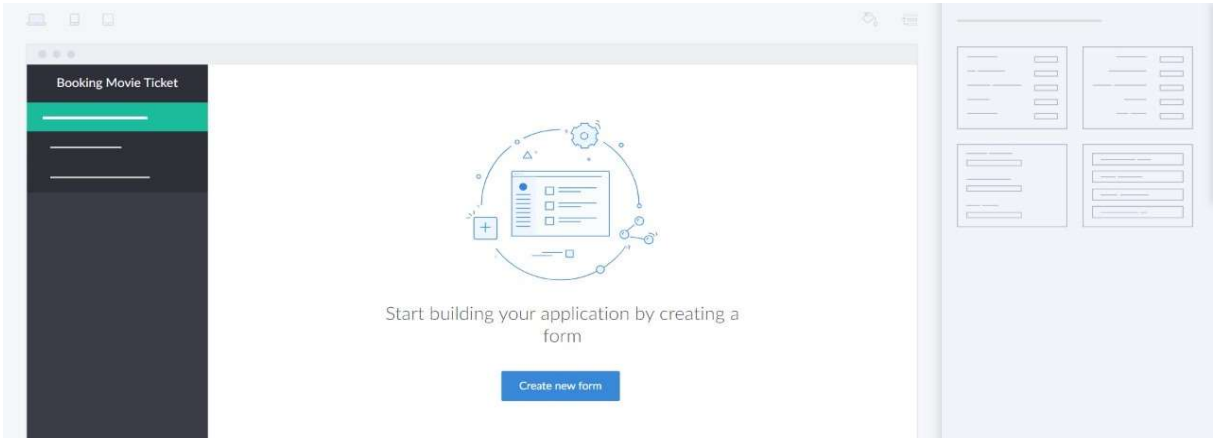
STEP 3: SELECT ONE APPLICATION



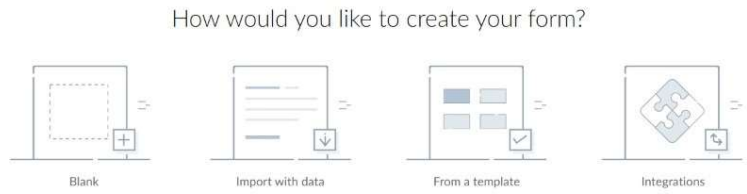
STEP 4: ENTER APPLICATION NAME



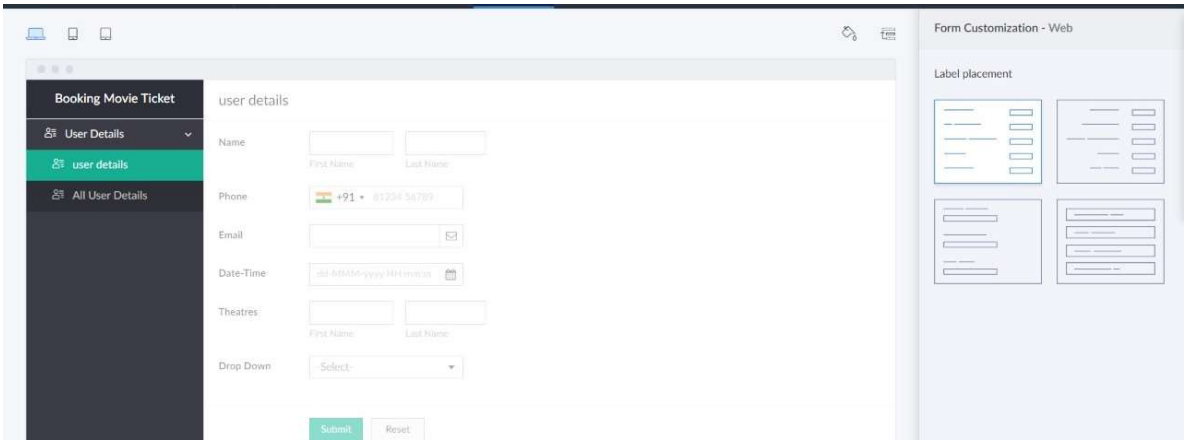
STEP 5: CREATED NEW APPLICATION

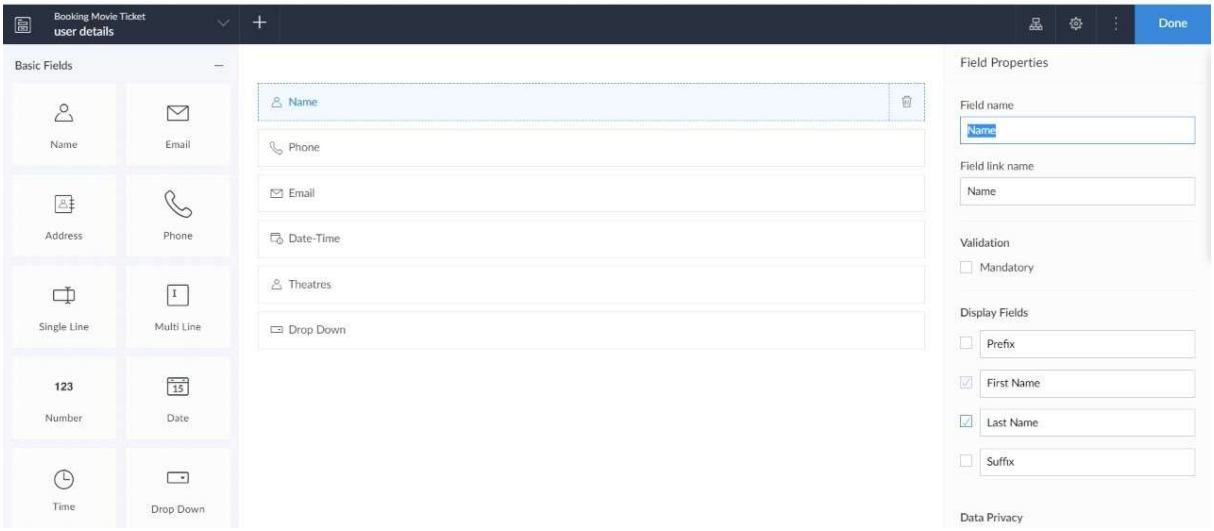


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
user details
Done
Basic Fields
Name
Email
Address
Phone
Single Line
Multi Line
123
Number
Date
Time
Drop Down
Name
Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
Display Fields
Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 5: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION FOR LIBRARY BOOK RESERVATION SYSTEM FOR SIMATS LIBRARY USING ANY CLOUD SERVICE PROVIDER TO DEMONSTRATE SAAS

DATE:

AIM:

To Create a simple cloud software application for Library book reservation system for SIMATS library using any Cloud Service Provider to demonstrate SaaS

PROCEDURE:

step1: Go to zoho.com.

step 2: Log into the zoho.com.

step 3: Select one application step.

step4: Enter application name as library book reservation system.

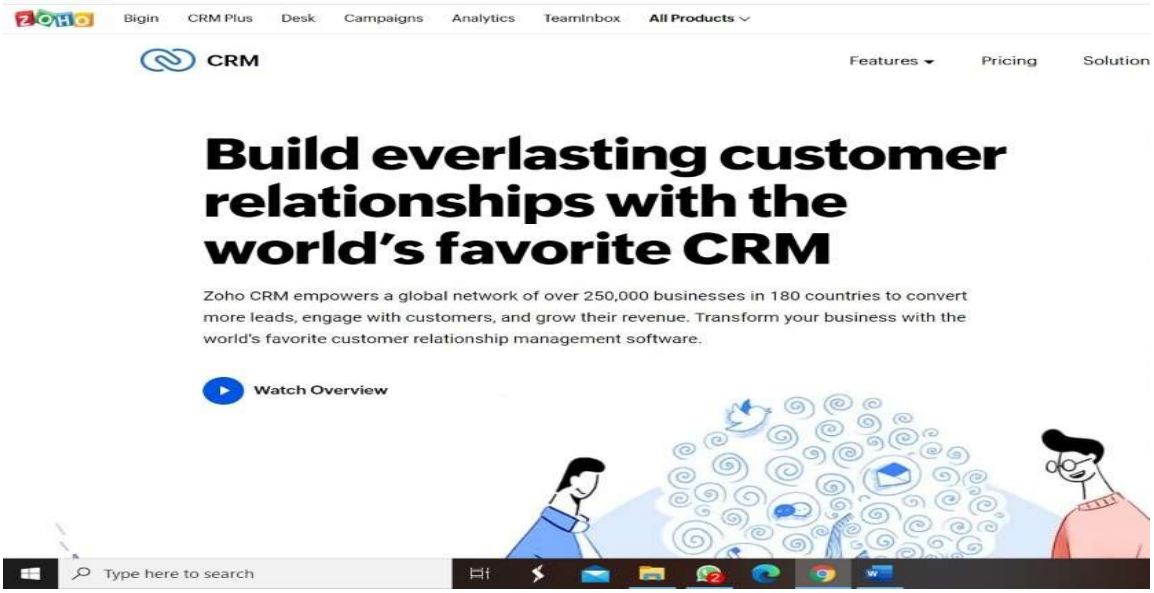
step 5: Created new application as library book reservation system.

step 6: Select one form

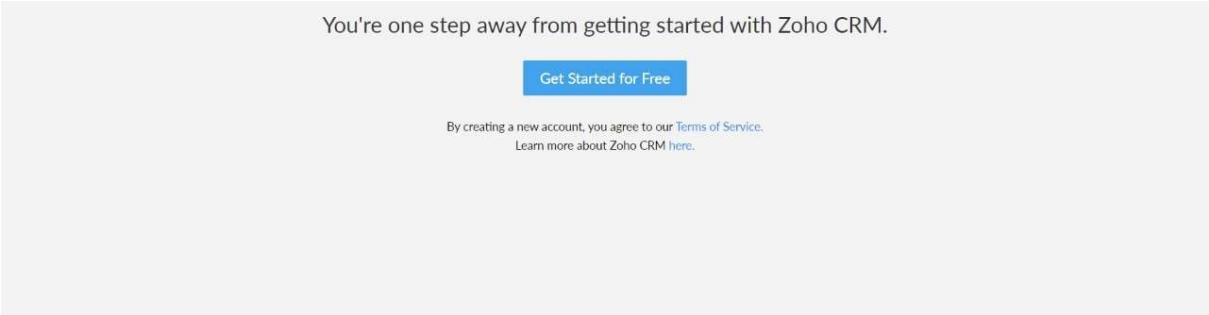
step 7: The software has been created.

IMPLEMENTATION:

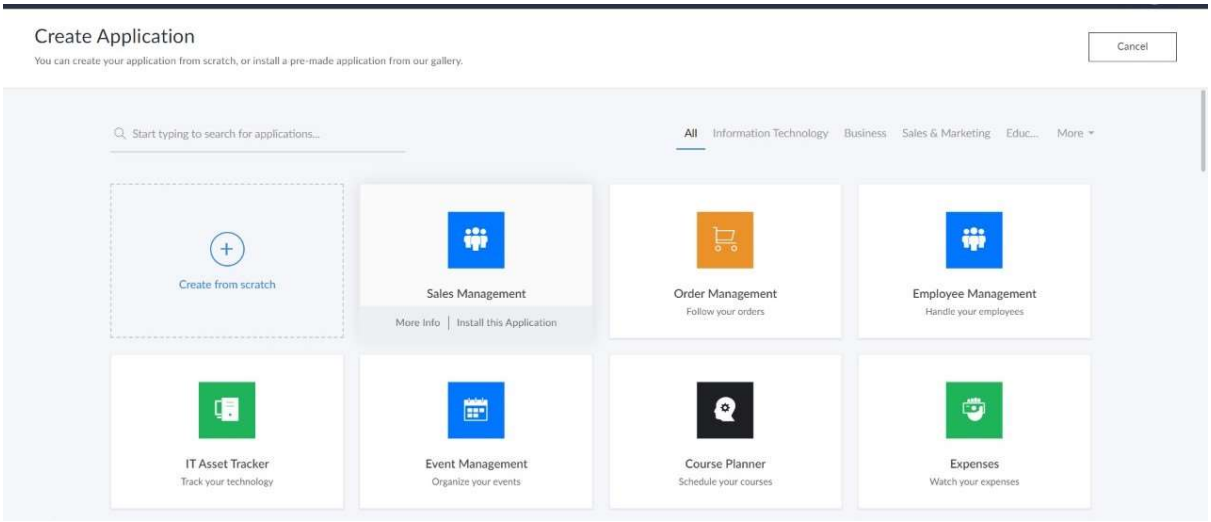
STEP1: GOTO ZOHO.COM



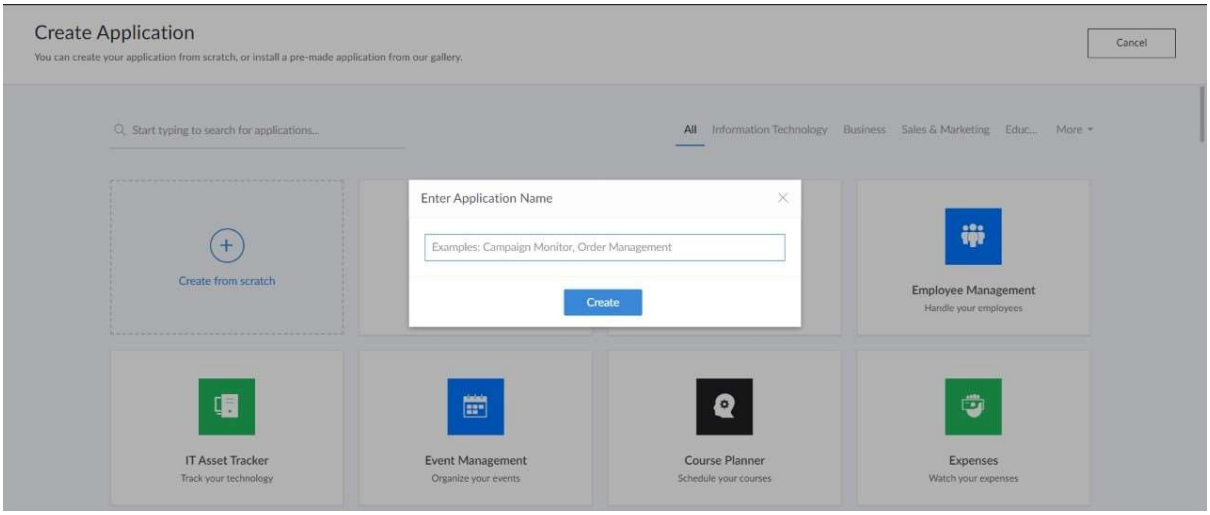
STEP 2: LOGIN TO THE ZOHO.COM



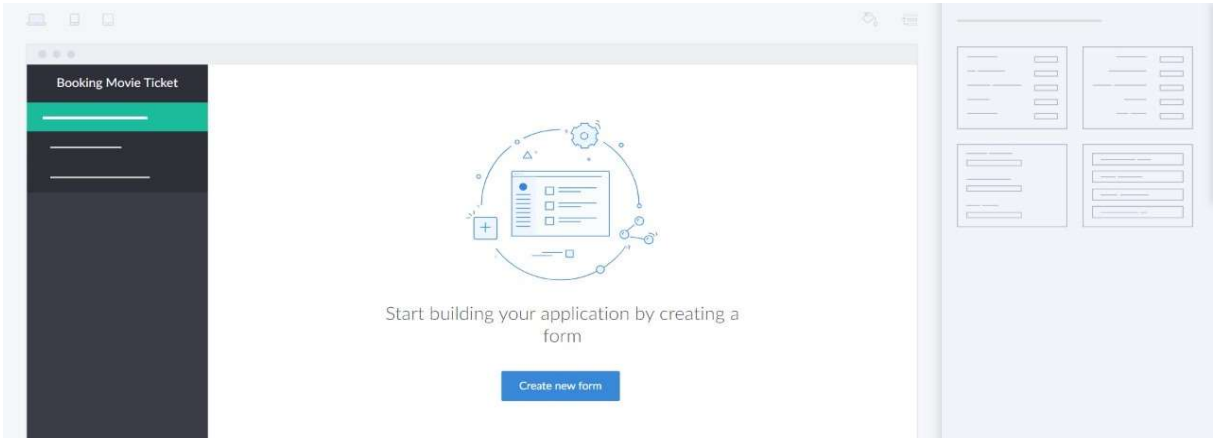
STEP 3: SELECT ONE APPLICATION



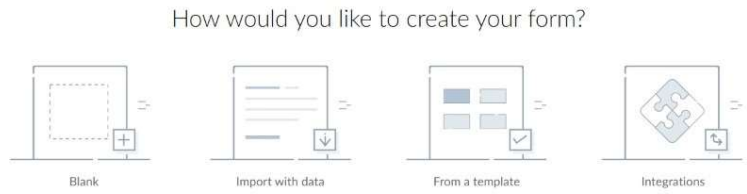
STEP 4: ENTER APPLICATION NAME



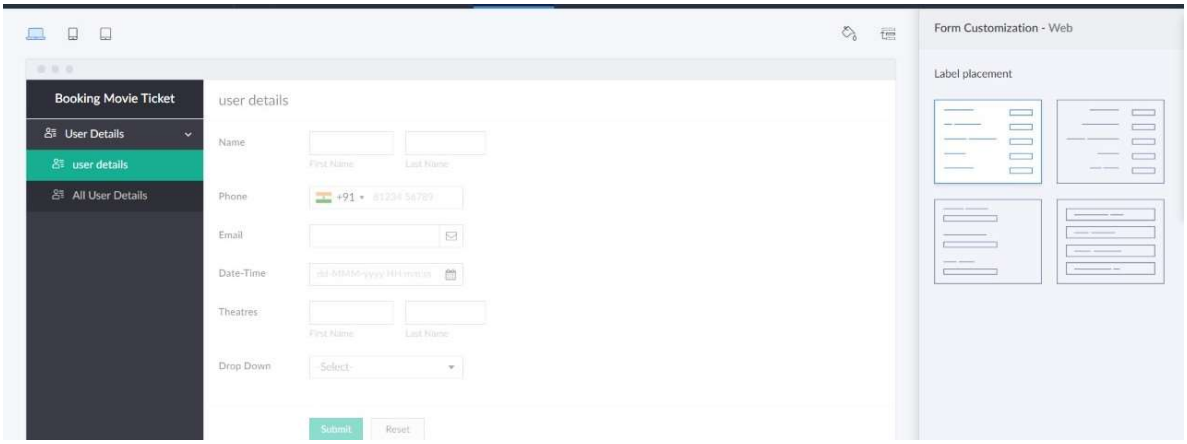
STEP 5: CREATED NEW APPLICATION

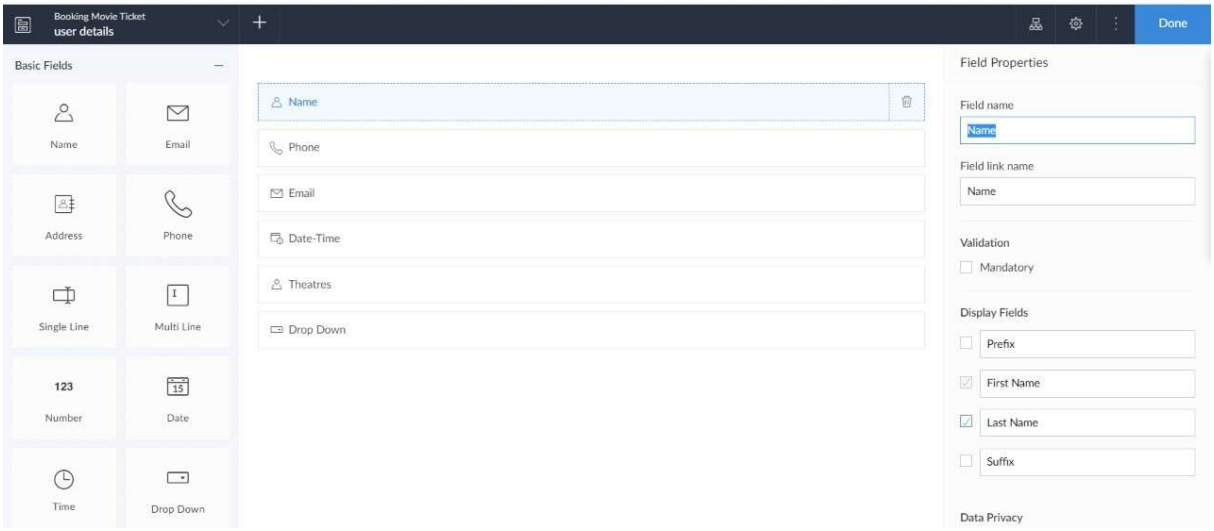


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
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Basic Fields
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Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
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Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 6: CREATE A SIMPLE CLOUD SOFTWARE APPLICATION FOR PRODUCT SELLING USING ANY CLOUD SERVICE PROVIDER TO DEMONSTRATE SAAS.

DATE:

AIM:

To create a simple cloud software application for product selling using any cloud service provider to demonstrate saas.

PROCEDURE:

step1: Go to zoho.com.

step 2: Log into the zoho.com.

step 3: Select one application step.

step4: Enter application name as product selling.

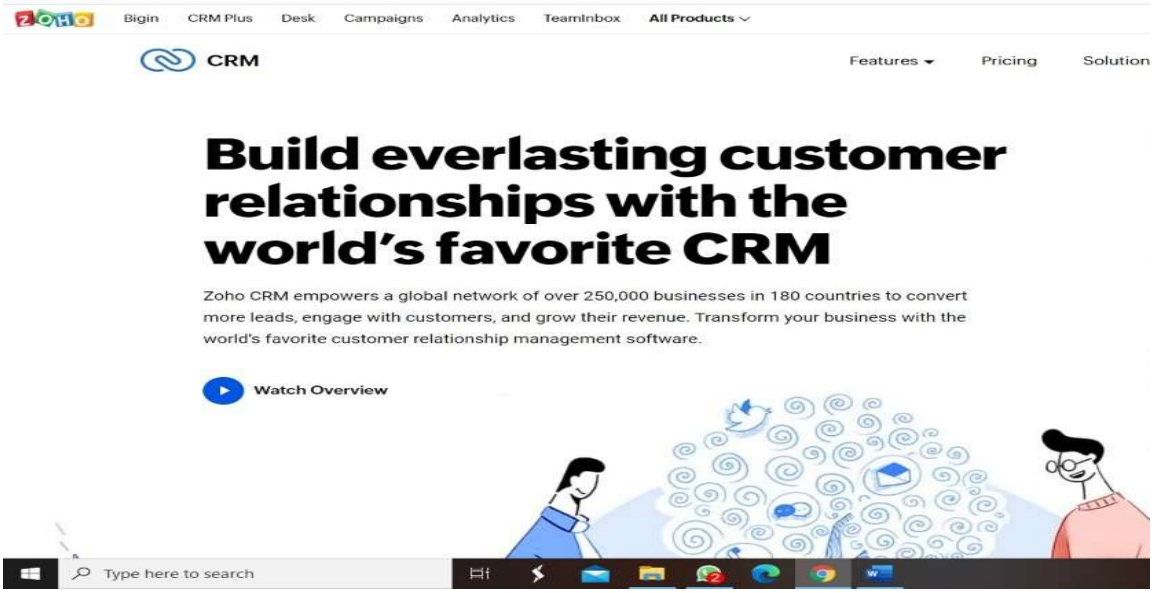
step 5: Created new application as product selling.

step 6: Select one form

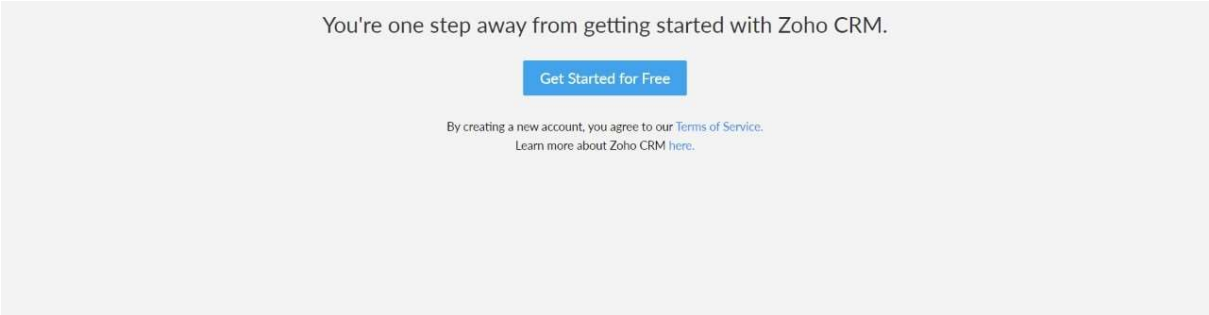
step 7: The software has been created.

IMPLEMENTATION:

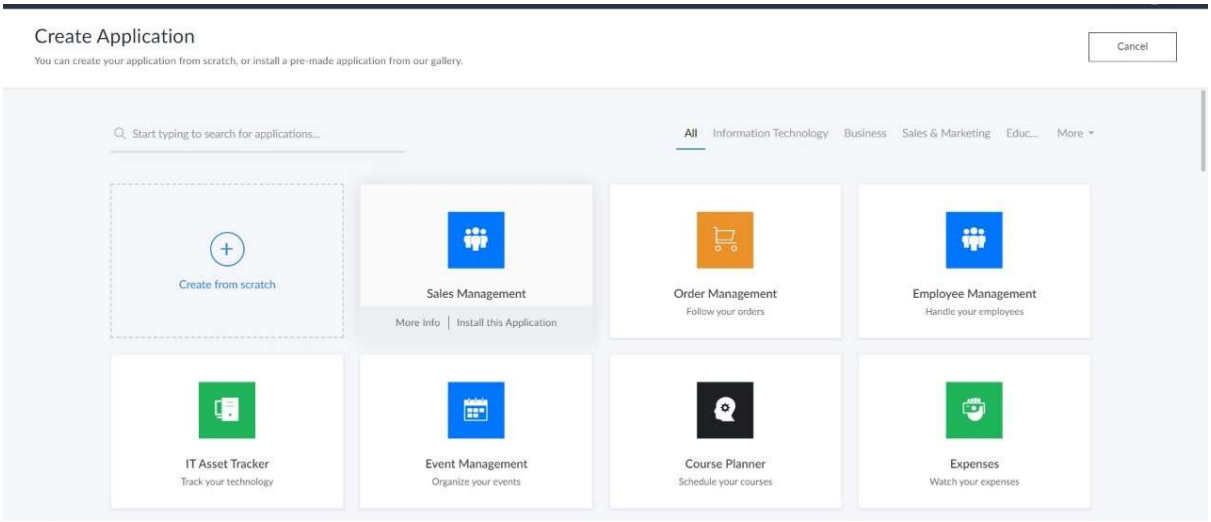
STEP1: GOTO ZOHO.COM



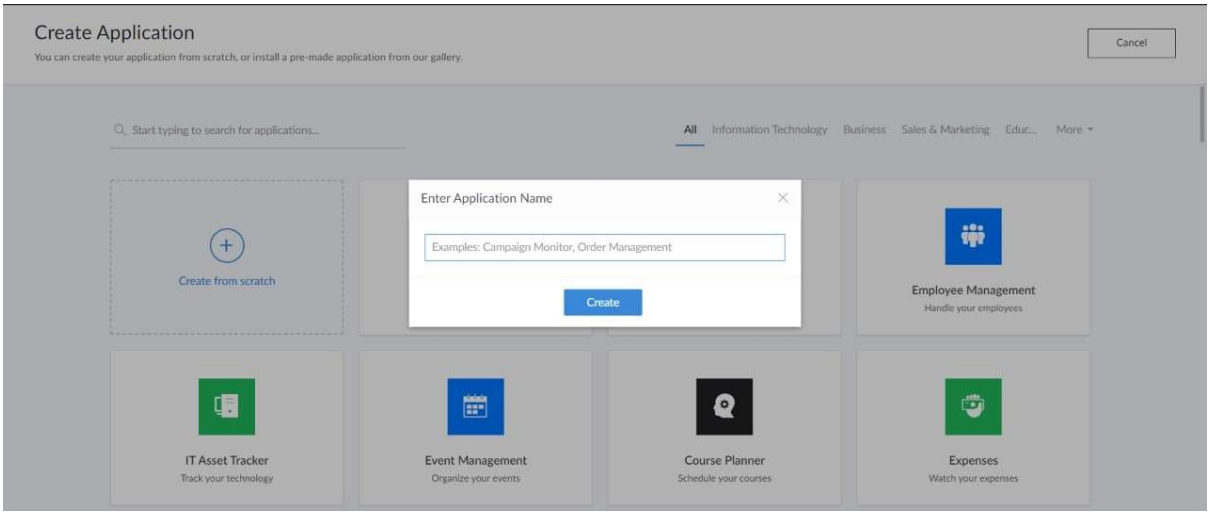
STEP 2: LOGIN TO THE ZOHO.COM



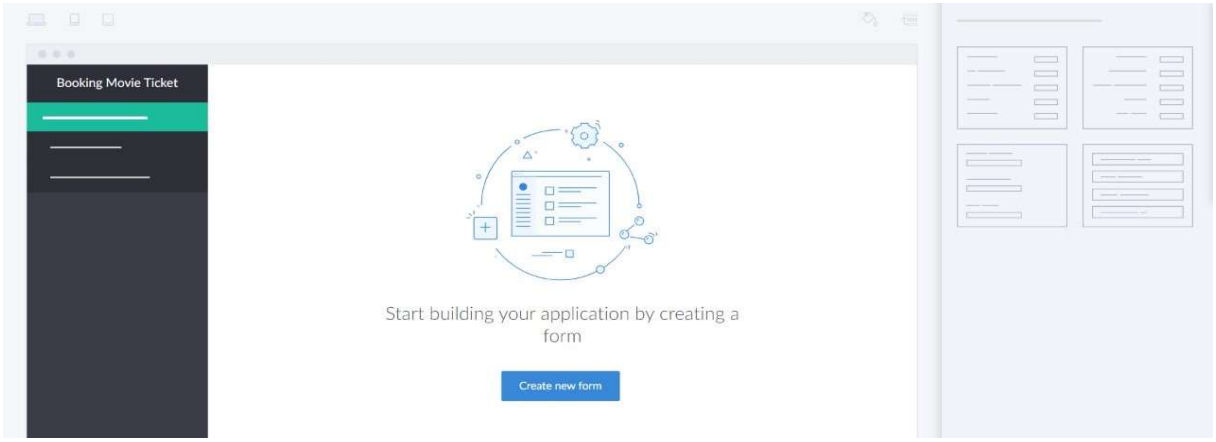
STEP 3: SELECT ONE APPLICATION



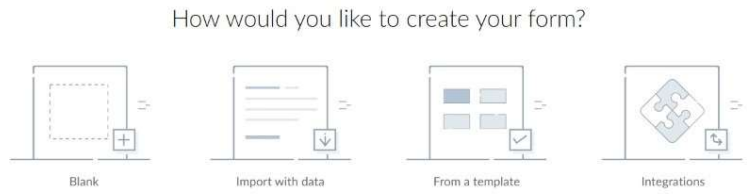
STEP 4: ENTER APPLICATION NAME



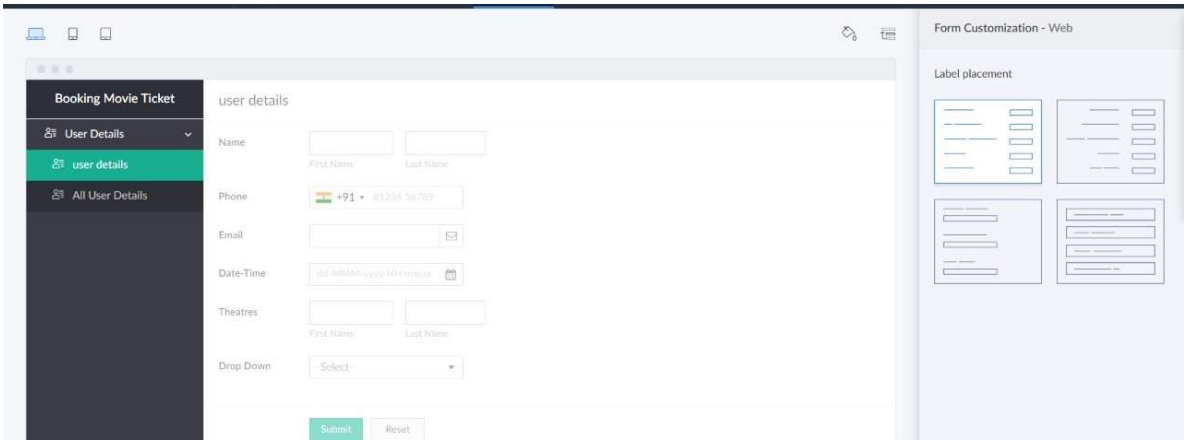
STEP 5: CREATED NEW APPLICATION

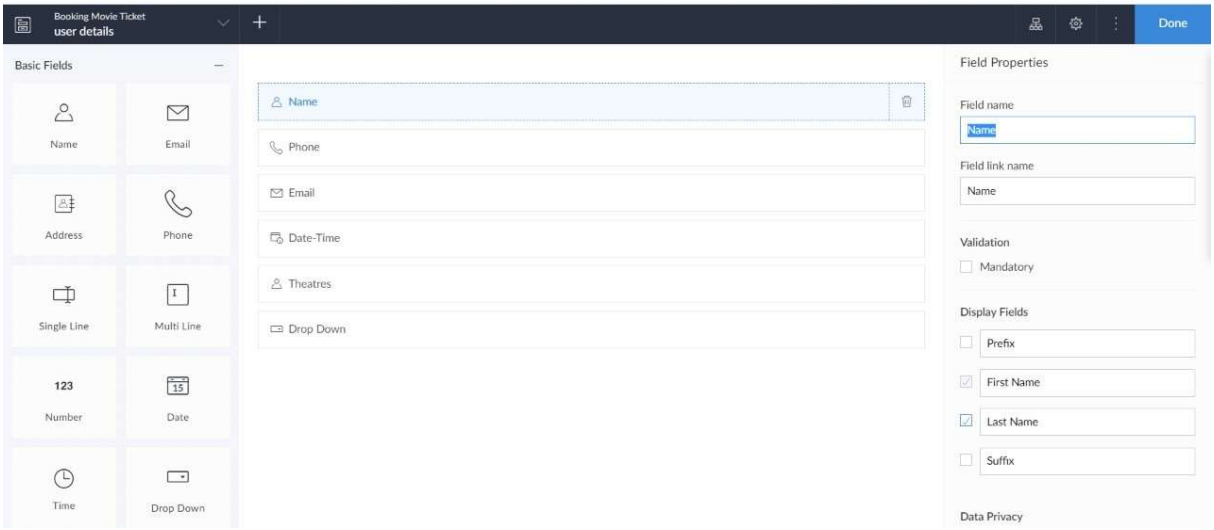


STEP 6: SELECT ONE FORM



STEP 7: THE SOFTWARE HASE BEEN CREATED.




Booking Movie Ticket
user details
Done
Basic Fields
Name
Email
Address
Phone
Single Line
Multi Line
123
Number
Date
Time
Drop Down
Name
Phone
Email
Date-Time
Theatres
Drop Down
Field Properties
Field name
Name
Field link name
Name
Validation
Mandatory
Display Fields
Prefix
First Name
Last Name
Suffix
Data Privacy

EXP NO 7: DEMONSTRATE VIRTUALIZATION BY INSTALLING TYPE-2 HYPERVISOR IN YOUR DEVICE, CREATE AND CONFIGURE VM IMAGE WITH A HOST OPERATING SYSTEM (EITHER WINDOWS/LINUX).

DATE:

AIM:

To demonstrate virtualization by installing type-2 hypervisor in your device, create and configure VM image with a host operating system (either windows/linux).

PROCEDURE:

STEP 1: Dowload VMware workstation and installed as type 2hypervisor.

STEP2: Dowload ubuntu or tiny OS as iso image file.

STEP 3: In VMware workstation->create new VM.

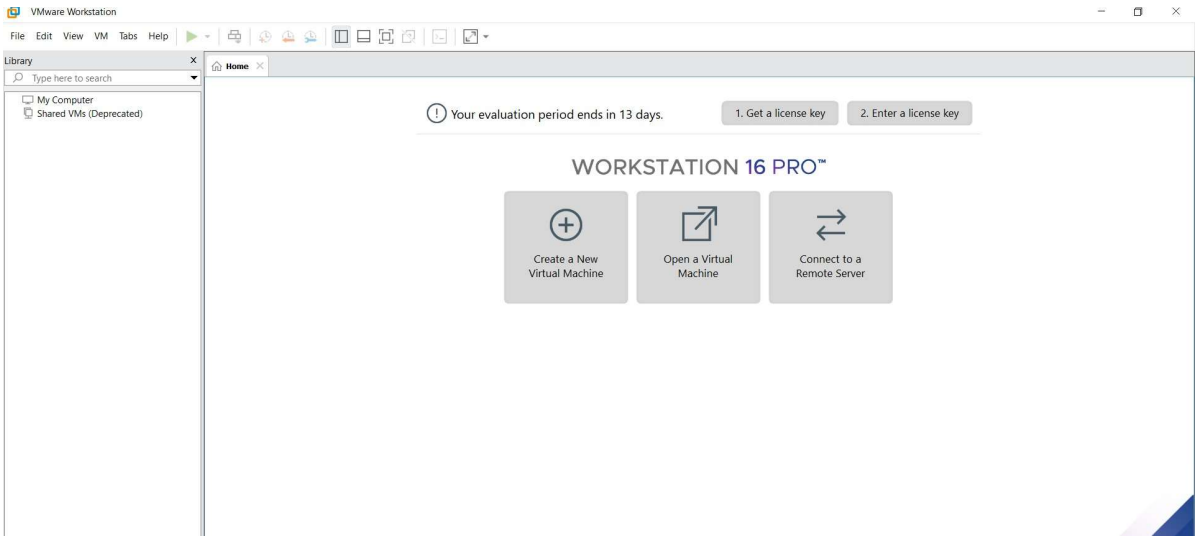
STEP 4: Do the basic configuration settings.

STEP 5: Created tiny OS virtual machine.

STEP 6: Launch the VM.

IMPLEMENTATION:

STEP 1:DOWLOAD VMWARE WORKSTATION AND INSTALLED AS TYPE 2HYPERVISOR

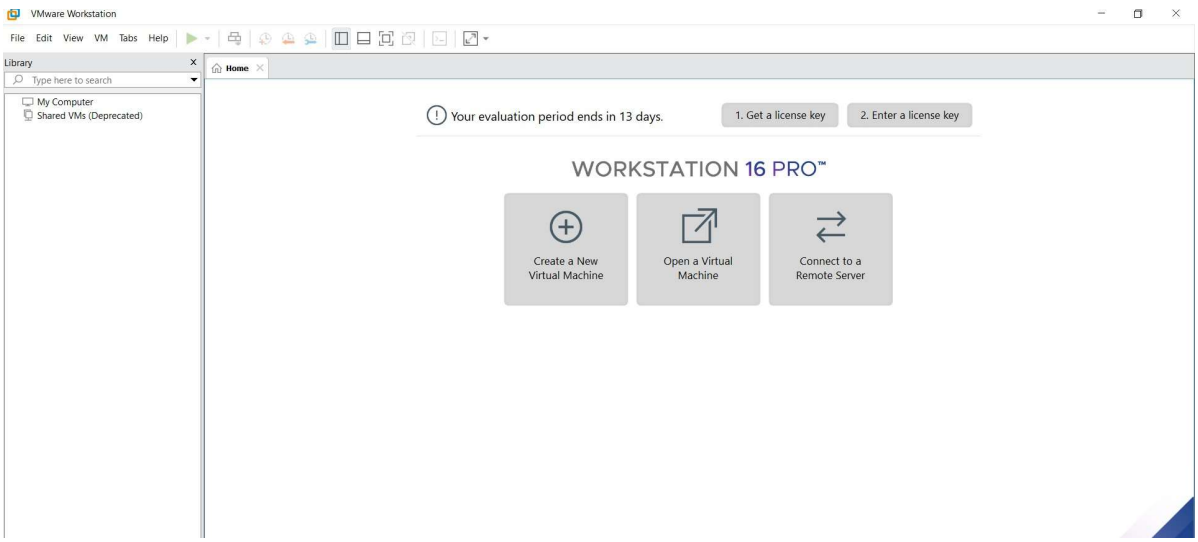


STEP2: DOWLOAD UBUNTU OR TINY OS AS ISO IMAGE FILE

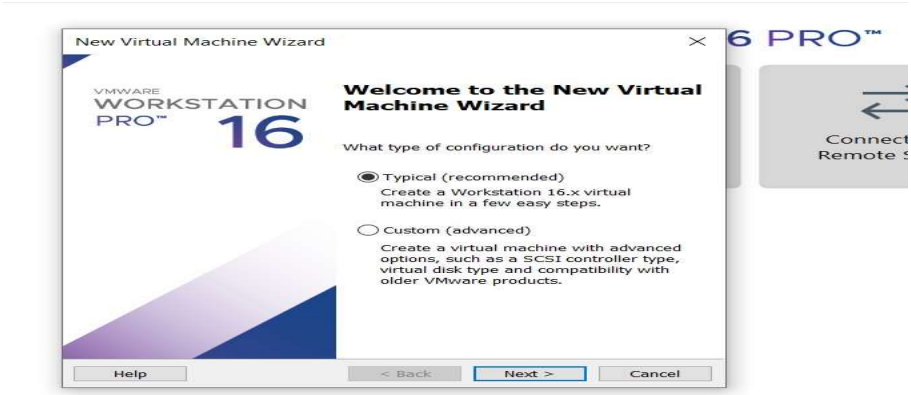
Index of /11.x/x86/release/

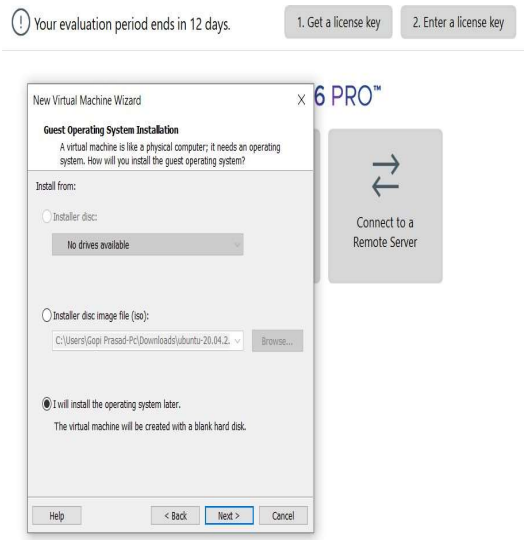
../		
distribution_files/	09-Feb-2020 11:50	-
src/	03-Dec-2019 11:14	-
Core-11.1.iso	01-Apr-2020 07:49	14757888
Core-11.1.iso.md5.txt	01-Apr-2020 07:49	48
Core-11.1.iso.zsync	01-Apr-2020 07:49	50639
Core-current.iso	01-Apr-2020 07:49	14757888
CorePlus-11.1.iso	01-Apr-2020 07:50	216006656
CorePlus-11.1.iso.md5.txt	01-Apr-2020 07:50	52
CorePlus-11.1.iso.zsync	01-Apr-2020 07:50	369358
CorePlus-current.iso	01-Apr-2020 07:50	216006656
TinyCore-11.1.iso	01-Apr-2020 07:50	19922944
TinyCore-11.1.iso.md5.txt	01-Apr-2020 07:50	52
TinyCore-11.1.iso.zsync	01-Apr-2020 07:50	68301
TinyCore-current.iso	01-Apr-2020 07:50	19922944

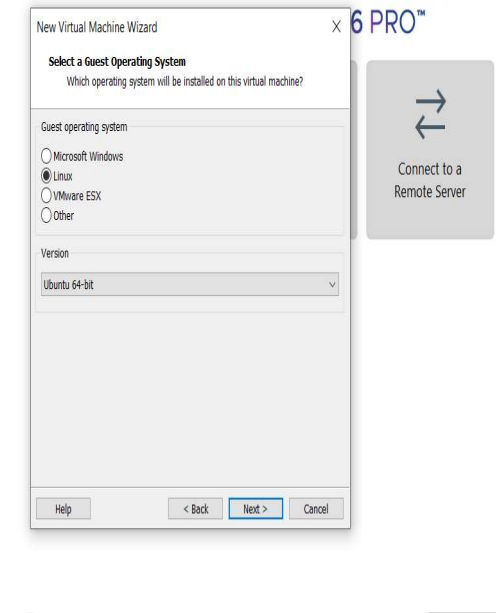
STEP 3: IN VMWARE WORKSTATION->CREATE NEW VM

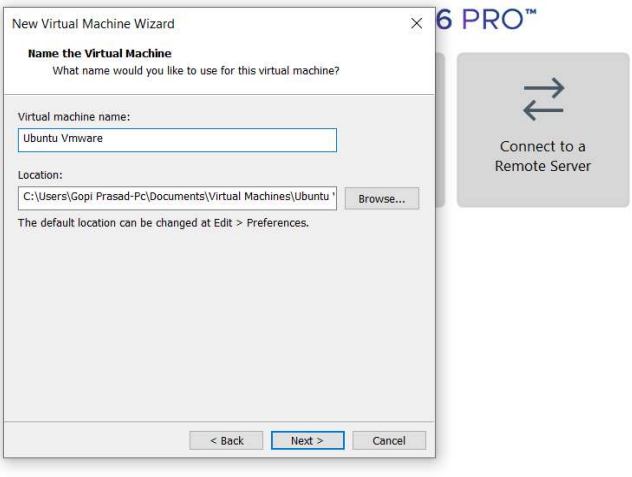


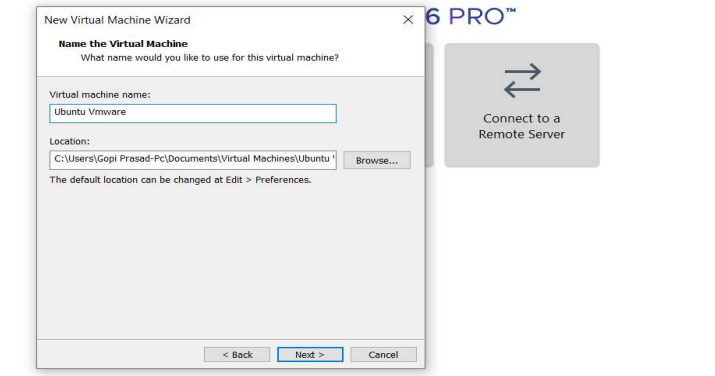
STEP 4: DO THE BASIC CONFIGURATION SETTINGS.

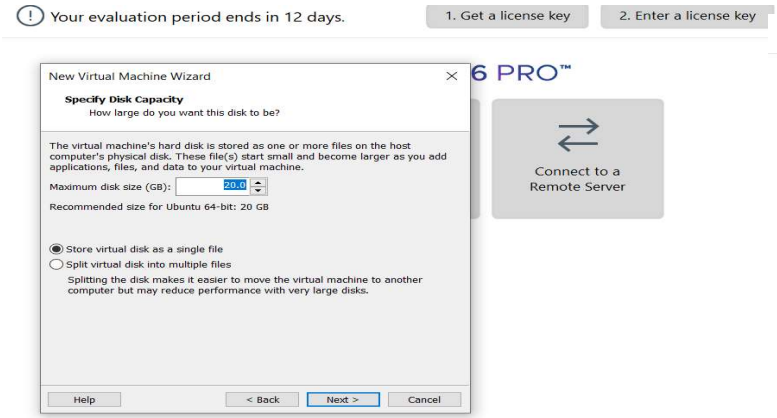


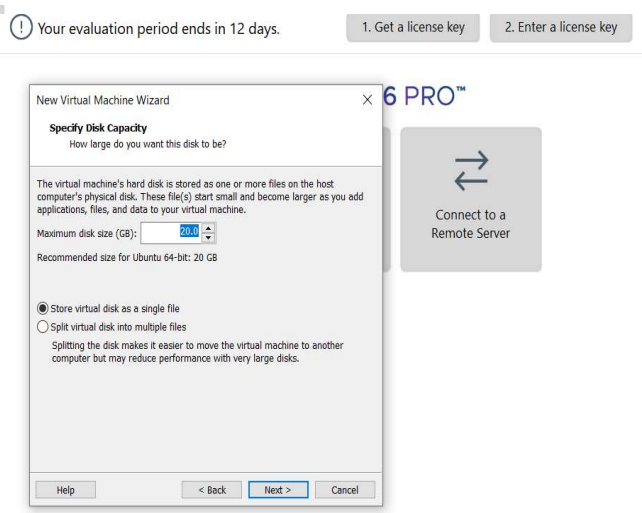

Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
New Virtual Machine Wizard
Guest Operating System Installation
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?
Install from:
Installer disc:
No drives available
Installer disc image file (iso):
C:\Users\Gopi Prasad-Pc\Downloads\ubuntu-20.04.2.
Browse...
I will install the operating system later.
The virtual machine will be created with a blank hard disk.
Help
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server

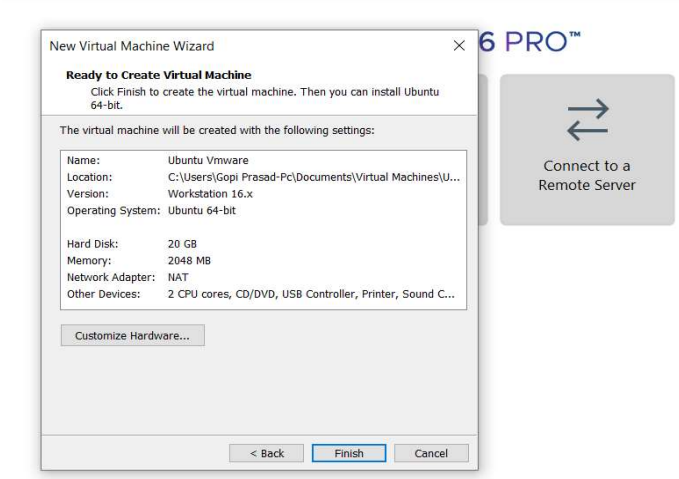

New Virtual Machine Wizard
Select a Guest Operating System
Which operating system will be installed on this virtual machine?
Guest operating system
Microsoft Windows
Linux
VMware ESX
Other
Version
Ubuntu 64-bit
Help
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server


New Virtual Machine Wizard
Name the Virtual Machine
What name would you like to use for this virtual machine?
Virtual machine name:
Ubuntu Vmware
Location:
C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\Ubuntu
Browse...
The default location can be changed at Edit > Preferences.
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server

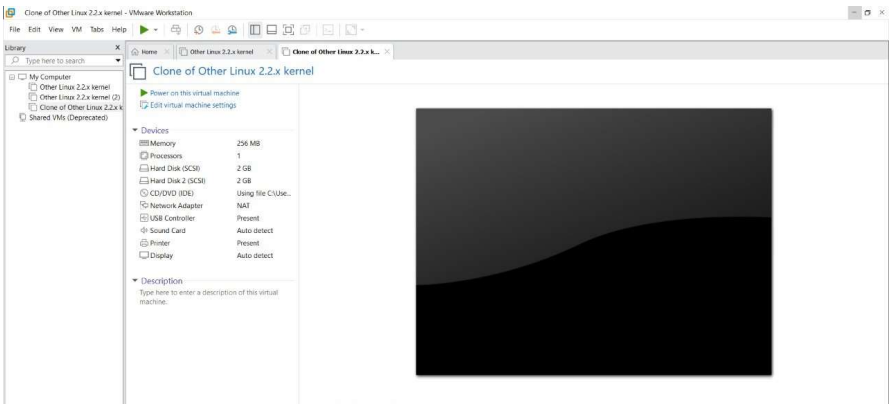

New Virtual Machine Wizard
Name the Virtual Machine
What name would you like to use for this virtual machine?
Virtual machine name:
Ubuntu Vmware
Location:
C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\Ubuntu
Browse...
The default location can be changed at Edit > Preferences.
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server


Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
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
6 PRO™
Connect to a Remote Server

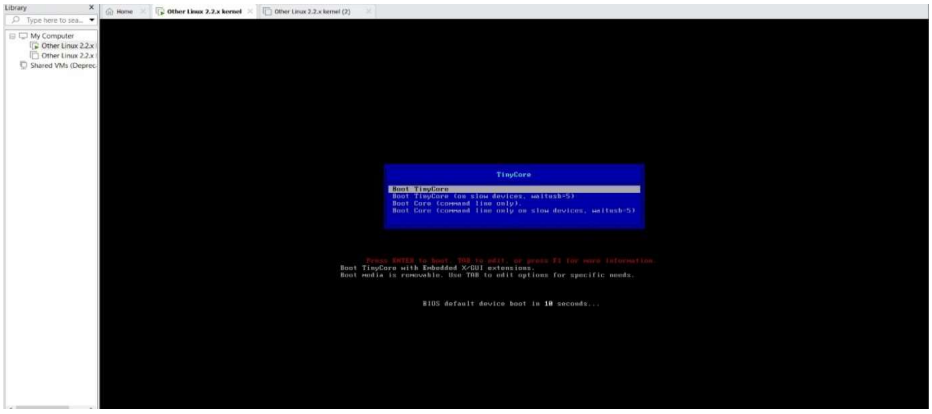

Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
New Virtual Machine Wizard
Specify Disk Capacity
How large do you want this disk to be?
The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and 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
6 PRO™
Connect to a Remote Server


New Virtual Machine Wizard
Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Ubuntu 64-bit.
The virtual machine will be created with the following settings:
Name: Ubuntu Vmware
Location: C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\U...
Version: Workstation 16.x
Operating System: Ubuntu 64-bit
Hard Disk: 20 GB
Memory: 2048 MB
Network Adapter: NAT
Other Devices: 2 CPU cores, CD/DVD, USB Controller, Printer, Sound C...
Customize Hardware...
< Back
Finish
Cancel
6 PRO™
Connect to a Remote Server

STEP 5: CREATED TINYOS VIRTUAL MACHINE



STEP 6: LAUNCH THE VM



EXPNO 8: CREATE A VIRTUAL MACHINE WITH 1 CPU, 2GB RAM AND 15GB STORAGE DISK USING A TYPE 2 VIRTUALIZATION SOFTWARE.

DATE:

AIM:

To create a virtual machine with 1 cpu, 2gb ram and 15gbstorage disk using a type 2 virtualization software.

PROCEDURE:

STEP 1: Dowload VMware workstation and installed as type 2hypervisor.

STEP2: Dowload ubuntu or tiny OS as iso image file.

STEP 3: In VMware workstation->create new VM.

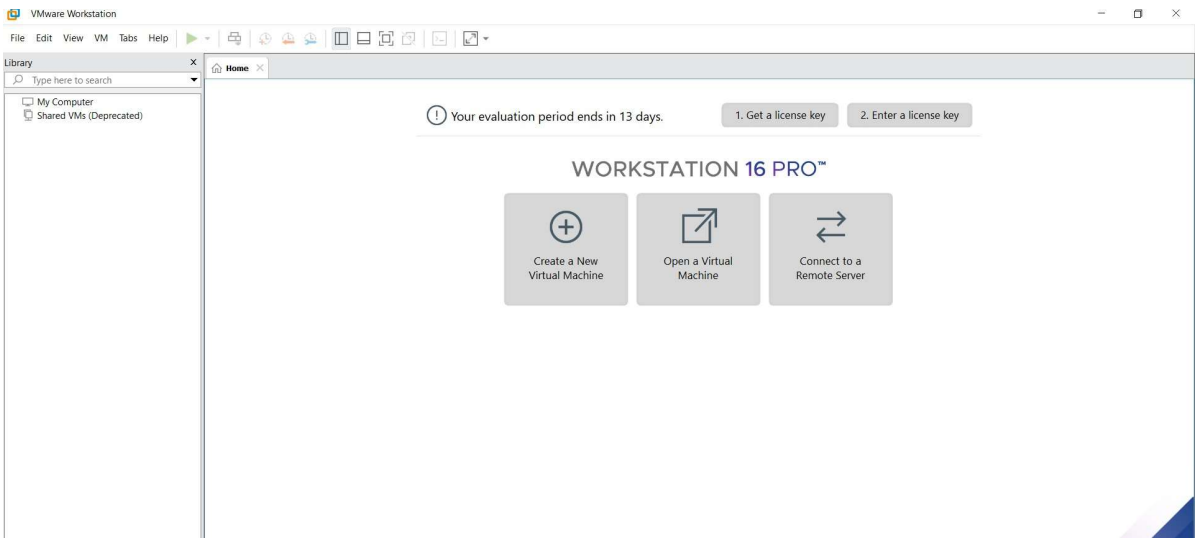
STEP 4: Do the basic configuration settings.

STEP 5: Created tiny OS virtual machine.

STEP 6: Launch the VM.

IMPLEMENTATION:

STEP 1:DOWLOAD VMWARE WORKSTATION AND INSTALLED AS TYPE 2HYPERVISOR

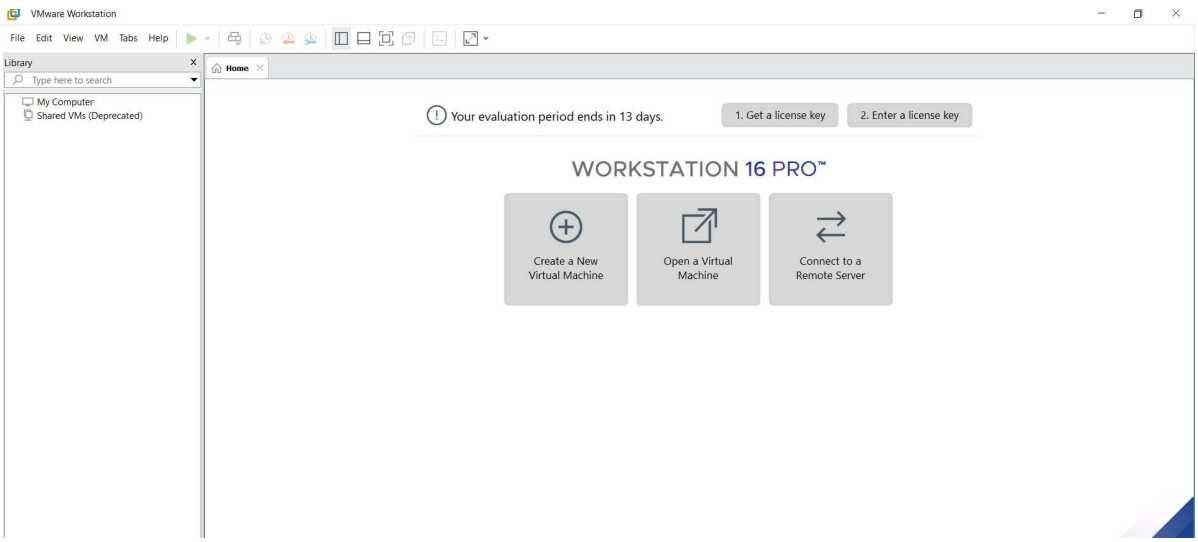


STEP2: DOWLOAD UBUNTU OR TINY OS AS ISO IMAGE FILE

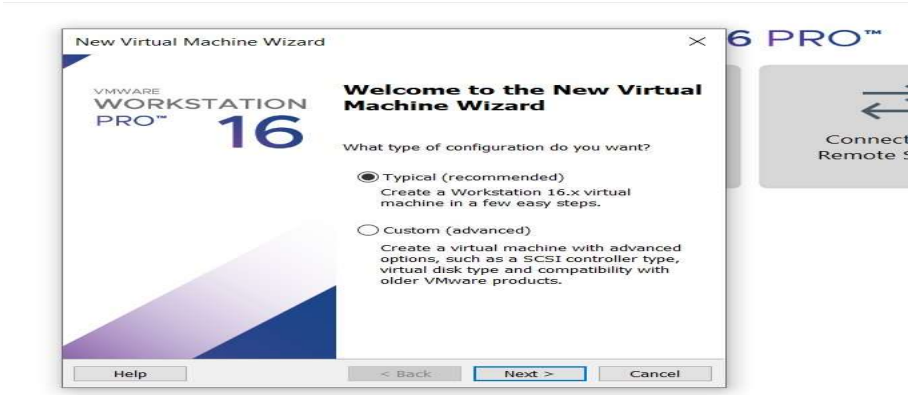
Index of /11.x/x86/release/

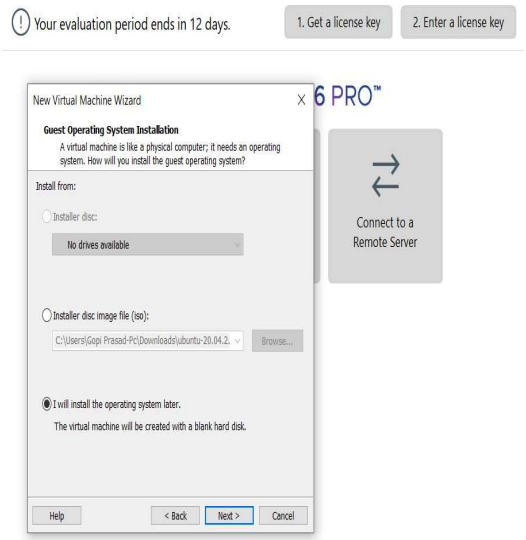
../		
distribution_files/	09-Feb-2020 11:50	-
src/	03-Dec-2019 11:14	-
Core-11.1.iso	01-Apr-2020 07:49	14757888
Core-11.1.iso.md5.txt	01-Apr-2020 07:49	48
Core-11.1.iso.zsync	01-Apr-2020 07:49	50639
Core-current.iso	01-Apr-2020 07:49	14757888
CorePlus-11.1.iso	01-Apr-2020 07:50	216006656
CorePlus-11.1.iso.md5.txt	01-Apr-2020 07:50	52
CorePlus-11.1.iso.zsync	01-Apr-2020 07:50	369358
CorePlus-current.iso	01-Apr-2020 07:50	216006656
TinyCore-11.1.iso	01-Apr-2020 07:50	19922944
TinyCore-11.1.iso.md5.txt	01-Apr-2020 07:50	52
TinyCore-11.1.iso.zsync	01-Apr-2020 07:50	68301
TinyCore-current.iso	01-Apr-2020 07:50	19922944

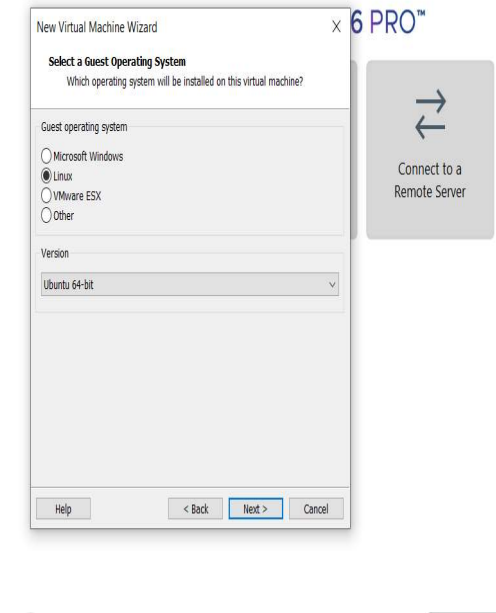
STEP 3: IN VMWARE WORKSTATION->CREATE NEW VM

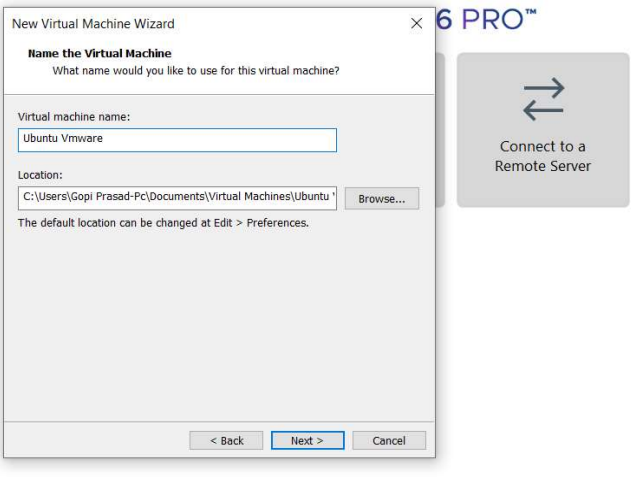


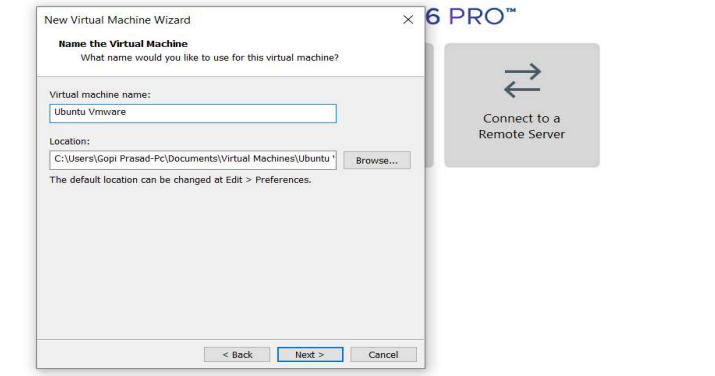
STEP 4: DO THE BASIC CONFIGURATION SETTINGS.

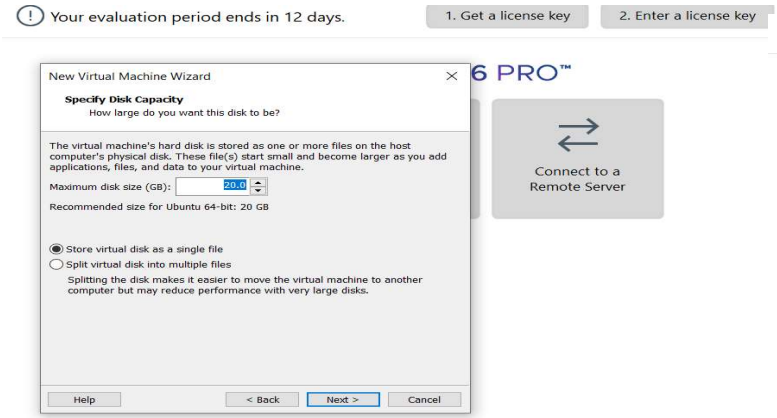


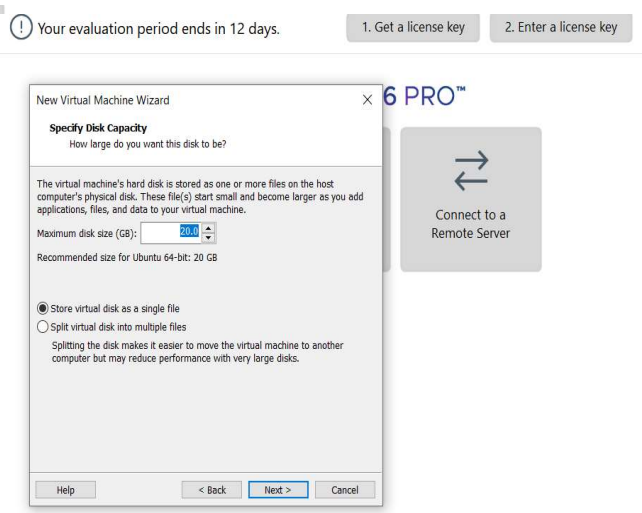

Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
New Virtual Machine Wizard
Guest Operating System Installation
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?
Install from:
Installer disc:
No drives available
Installer disc image file (iso):
C:\Users\Gopi Prasad-Pc\Downloads\ubuntu-20.04.2.
Browse...
I will install the operating system later.
The virtual machine will be created with a blank hard disk.
Help
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server

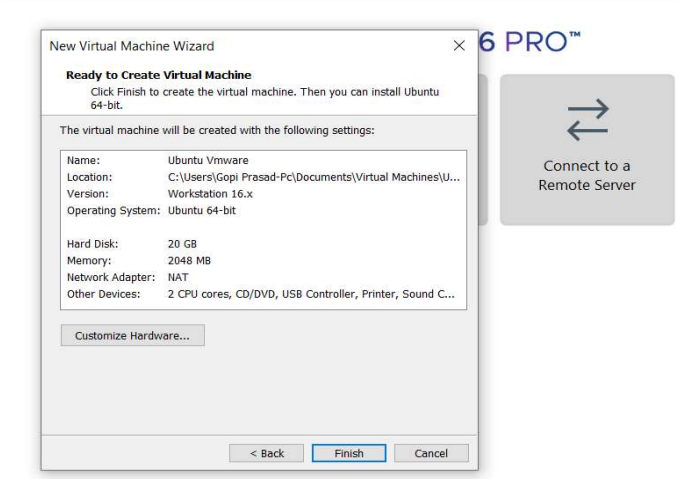

New Virtual Machine Wizard
Select a Guest Operating System
Which operating system will be installed on this virtual machine?
Guest operating system
Microsoft Windows
Linux
VMware ESX
Other
Version
Ubuntu 64-bit
Help
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server


New Virtual Machine Wizard
Name the Virtual Machine
What name would you like to use for this virtual machine?
Virtual machine name:
Ubuntu Vmware
Location:
C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\Ubuntu
Browse...
The default location can be changed at Edit > Preferences.
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server

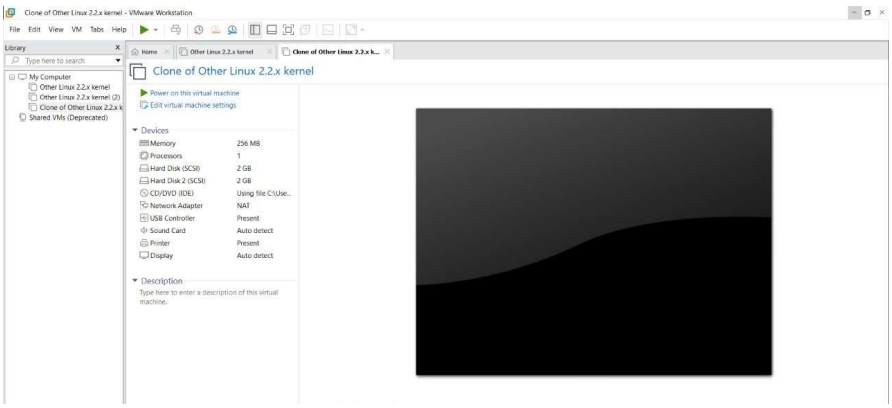

New Virtual Machine Wizard
Name the Virtual Machine
What name would you like to use for this virtual machine?
Virtual machine name:
Ubuntu Vmware
Location:
C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\Ubuntu
Browse...
The default location can be changed at Edit > Preferences.
< Back
Next >
Cancel
6 PRO™
Connect to a Remote Server


Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
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
6 PRO™
Connect to a Remote Server


Your evaluation period ends in 12 days.
1. Get a license key
2. Enter a license key
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
6 PRO™
Connect to a Remote Server


New Virtual Machine Wizard
Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Ubuntu 64-bit.
The virtual machine will be created with the following settings:
Name: Ubuntu Vmware
Location: C:\Users\Gopi Prasad-Pc\Documents\Virtual Machines\U...
Version: Workstation 16.x
Operating System: Ubuntu 64-bit
Hard Disk: 20 GB
Memory: 2048 MB
Network Adapter: NAT
Other Devices: 2 CPU cores, CD/DVD, USB Controller, Printer, Sound C...
Customize Hardware...
< Back
Finish
Cancel
6 PRO™
Connect to a Remote Server

STEP 5: CREATED TINYOS VIRTUAL MACHINE



EXP 9: CREATE A VIRTUAL HARD DISK AND ALLOCATE THE STORAGEUSING VM WARE WORKSTATION.

DATE:

AIM:

To create a virtual hard disk and allocate the storage using vm ware workstation

PROCEDURE:

STEP 1:GOTO VM WARE WORKSTATION.

STEP2: RIGHT CLICK THE VM AND GOTO THE SETTINGS.

STEP 3: ADD HARDWARE WIZARD AND SELECT SCSI AND CLICK NEXT.

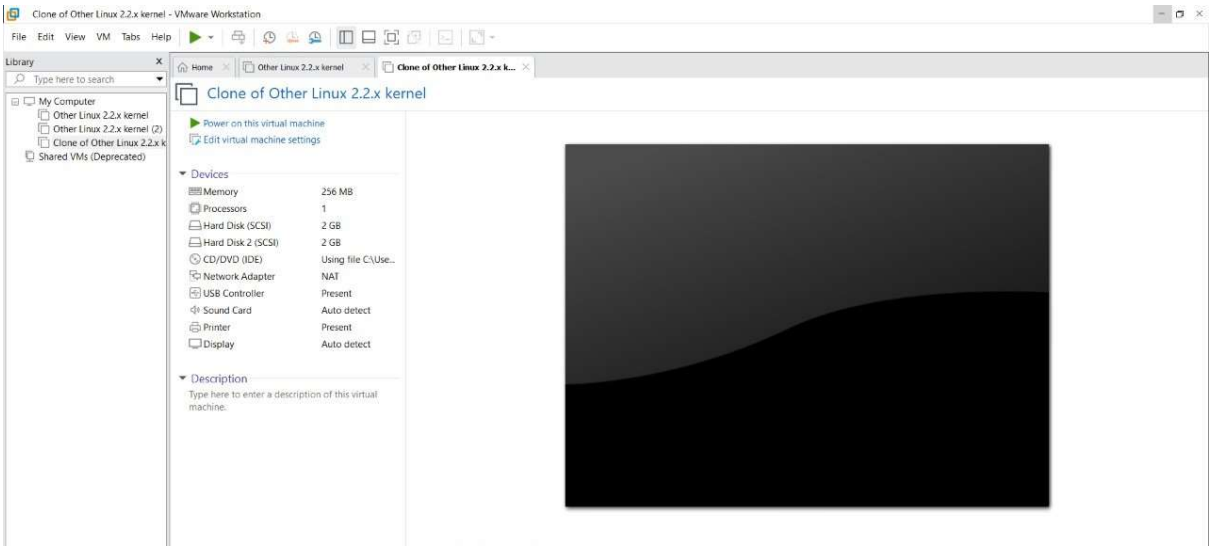
STEP 4: CREATE NEW VIRTUAL DISK.

STEP 5: SELCT THE DISK SIZE AS 2.0. AND SELCT SPLIT VIRTUAL DISK INTOMULTIFILES.

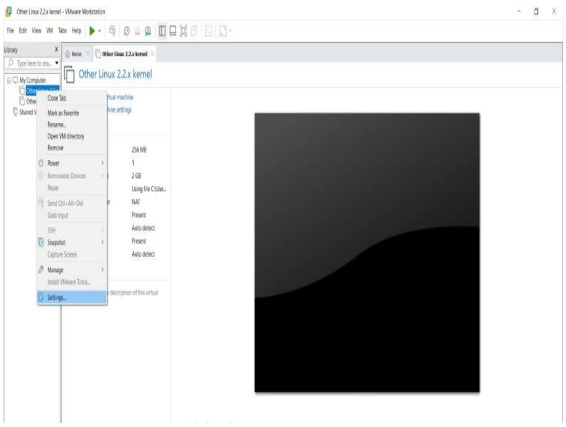
STEP 6: GIVE NAME AND CLICK THE FINISH.

IMPLEMENTATION:

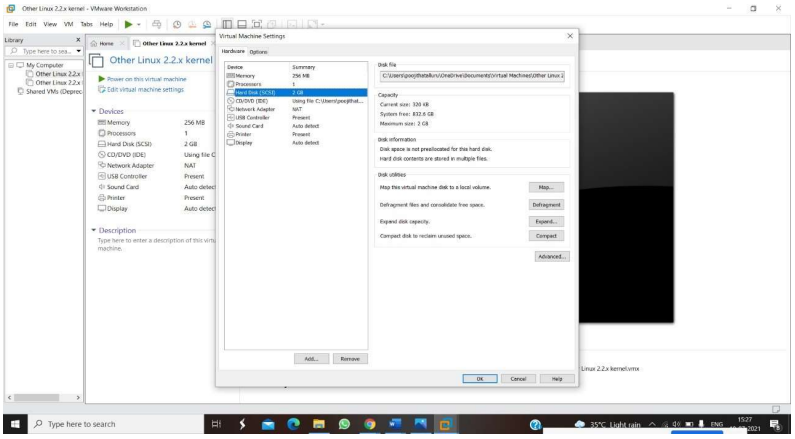
STEP 1:GOTO VM WARE WORKSTATION



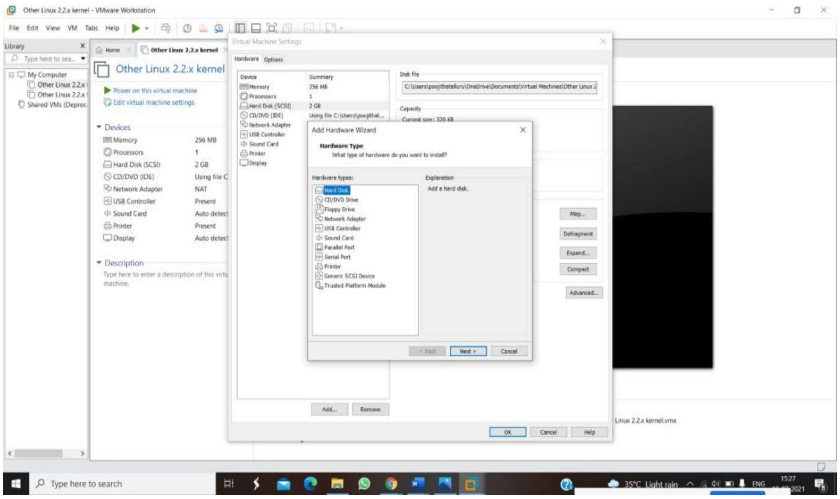
STEP2: RIGHT CLICK THE VM AND GOTO THE SETTINGS

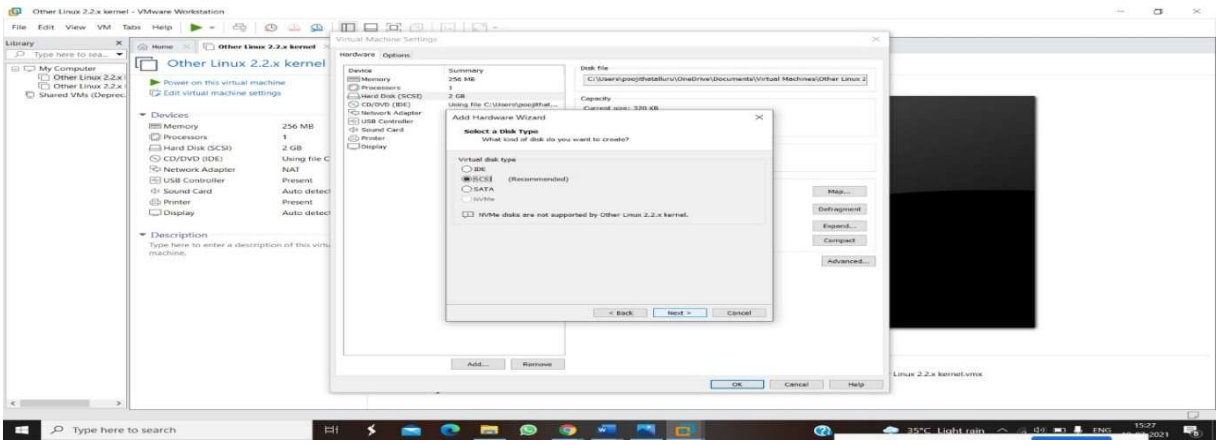


STEP 3: ADD HARDWARE WIZARD AND SELECT SCSI AND CLICK NEXT

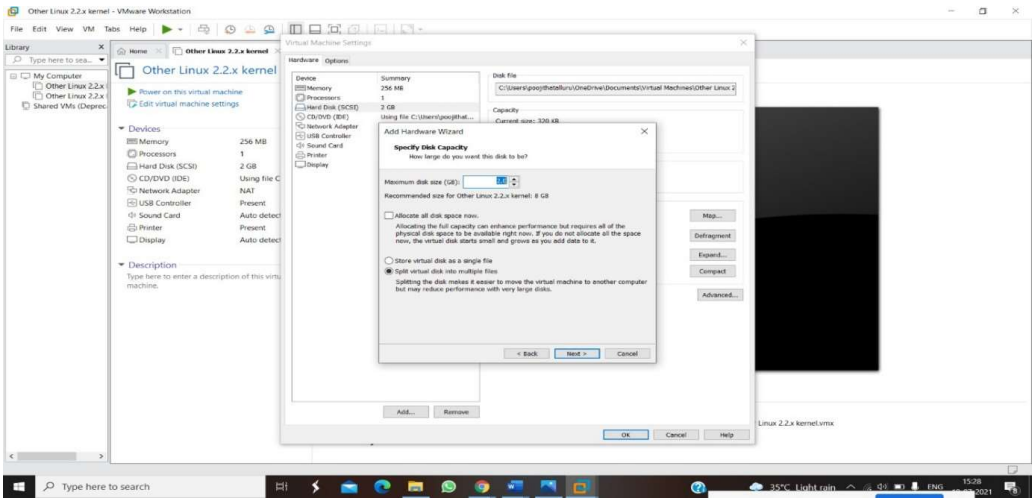


STEP 4: CREATE NEW VIRTUAL DISK

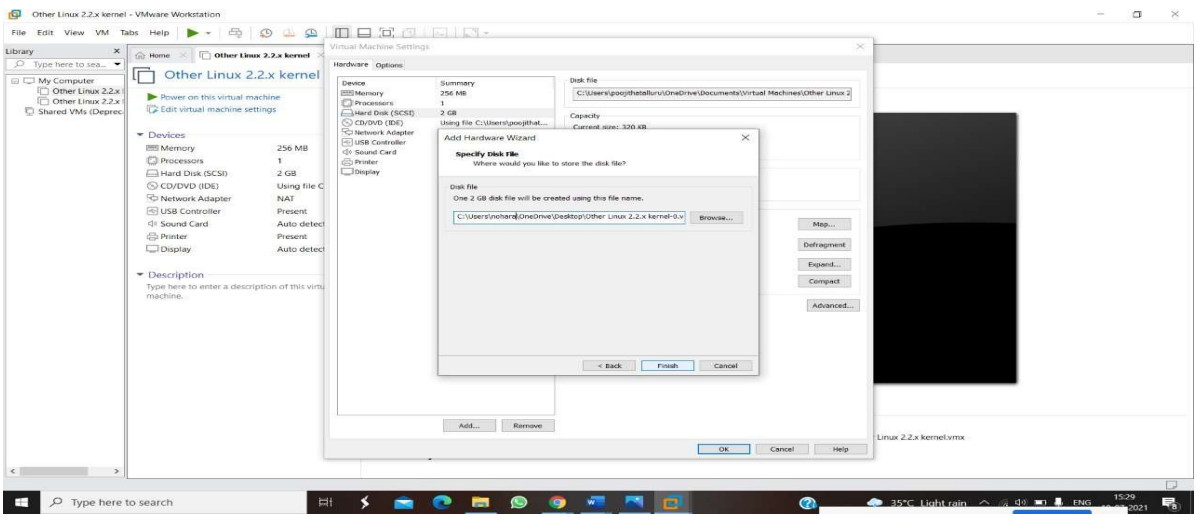


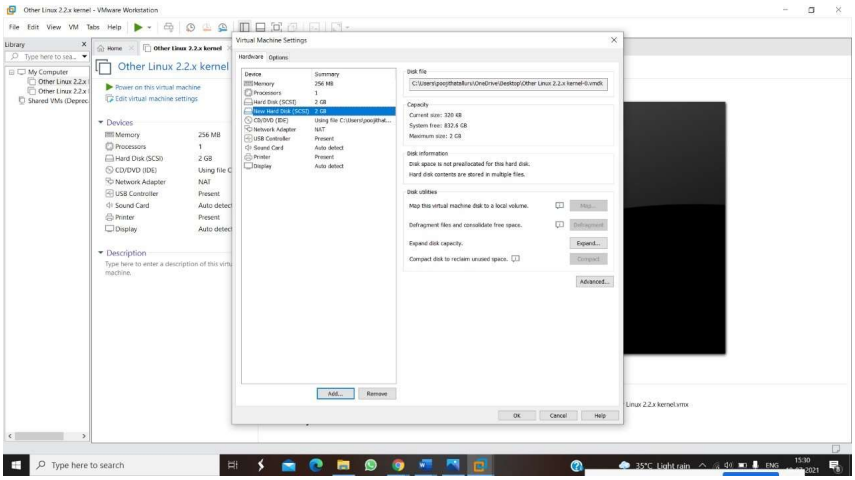


STEP 5: SELCT THE DISK SIZE AS 2.0. AND SELCT SPLIT VIRTUAL DISK INTOMULTIFILES.



STEP 6: GIVE NAME AND CLICK THE FINISH




Other Linux 2.2.x kernel - VMware Workstation
File Edit View VM Tabs Help
Library
Other Linux 2.2.x kernel
Power on this virtual machine
Edit virtual machine settings
Devices
Memory 256 MB
Processors 1
Hard Disk (SCSI) 2 GB
CD/DVD (IDE) Using file C
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 Settings
Hardware Options
Device Summary
Memory 256 MB
Processors 1
Hard Disk (SCSI) 2 GB
New Hard Disk (SCSI) 2 GB
CD/DVD (IDE) Using file C:\Users\pooj\thal...
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Add... Remove
Disk file
C:\Users\pooj\thatalluru\OneDrive\Desktop\Other Linux 2.2.x kernel-0.vmdk
Capacity
Current size: 320 KB
System free: 832.6 GB
Maximum size: 2 GB
Disk information
Disk space is not preallocated for this hard disk.
Hard disk contents are stored in multiple files.
Disk utilities
Map this virtual machine disk to a local volume. Map...
Defragment files and consolidate free spaces. Defragment
Expand disk capacity. Expand...
Compact disk to reclaim unused space. Compact
Advanced...
OK Cancel Help
Linux 2.2.x kernel.vmx
Type here to search
35°C Light rain
ENG
15:30

EXPNO 10: CREATE A SNAPSHOT OF A VM AND TEST IT BY LOADING THE PREVIOUS VERSION/CLONED VM

DATE:

AIM:

To create a snapshot of a vm and test it by loading the previous version/cloned vm

PROCEDURE:

STEP 1: GOTO VMWARE WORKSTATION**.**

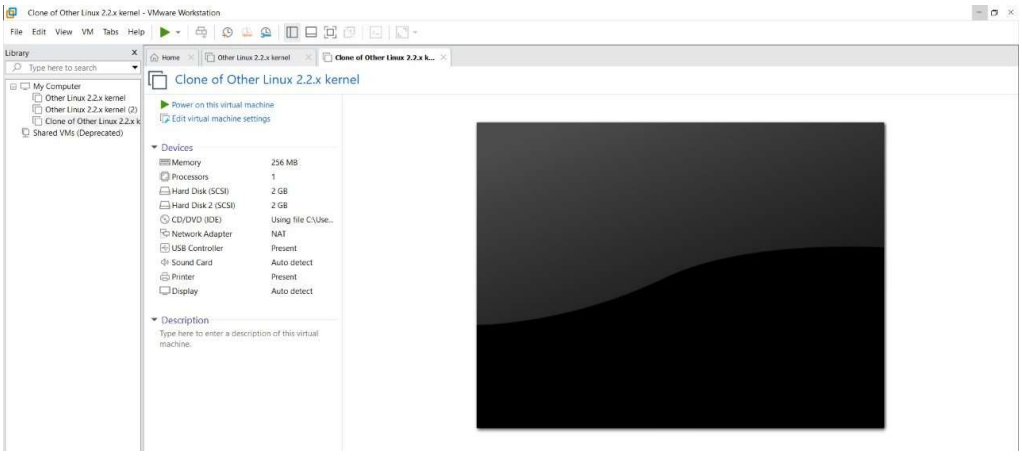
STEP 2: CREATE FILES ON DESKTOP.

STEP 3: CLICK ON VM AND SELECTS SNAPSHOT-> TAKE SNAPSHOT.

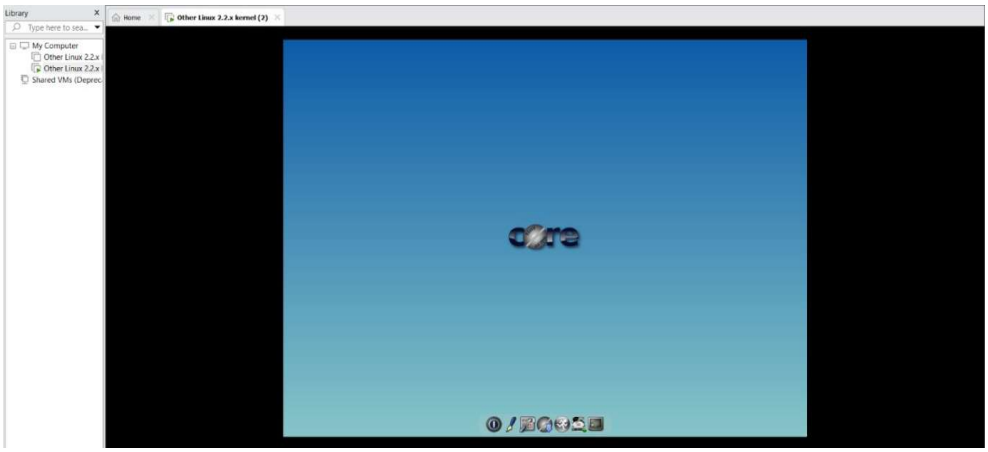
STEP 4: SNAPSHOT IS BEING DONE

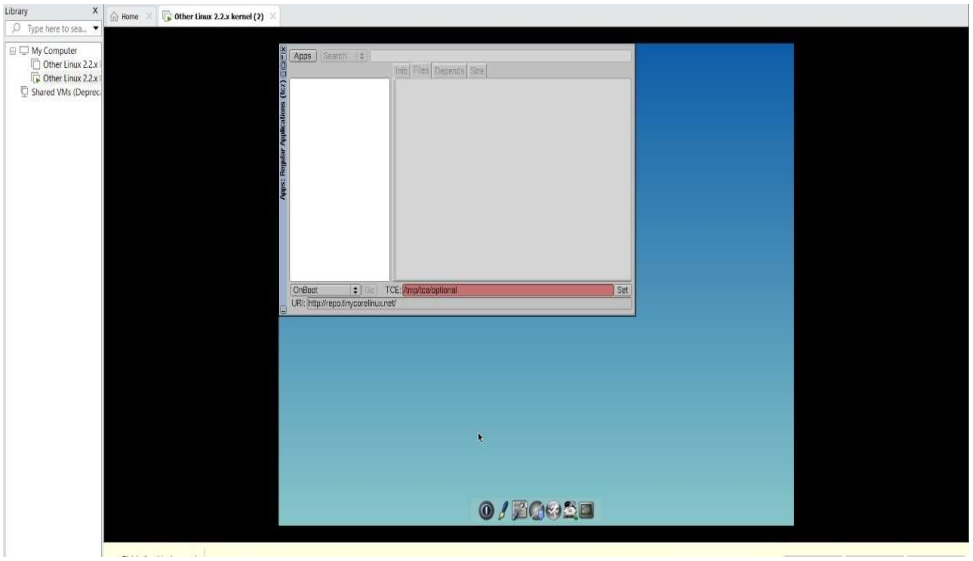
IMPLEMENTATION:

STEP 1: GOTO VMWARE WORKSTATION

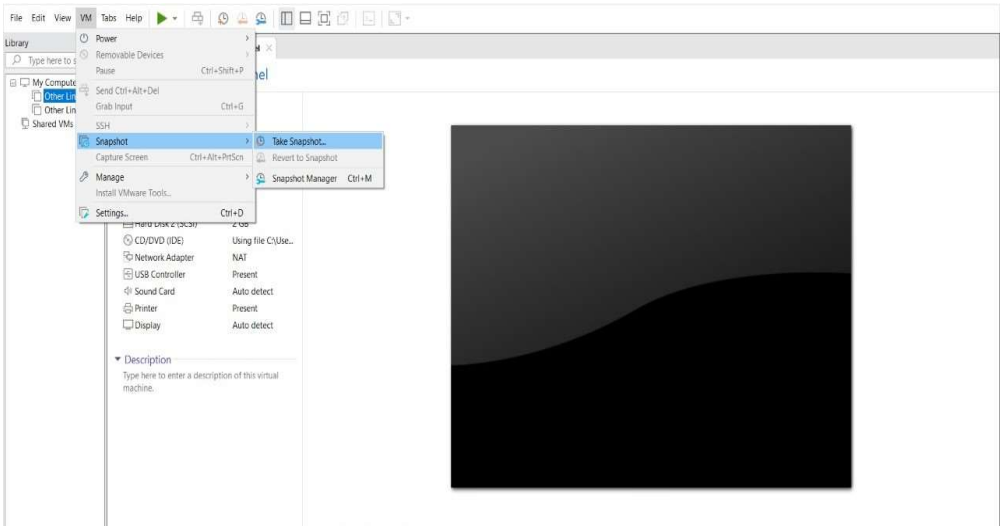


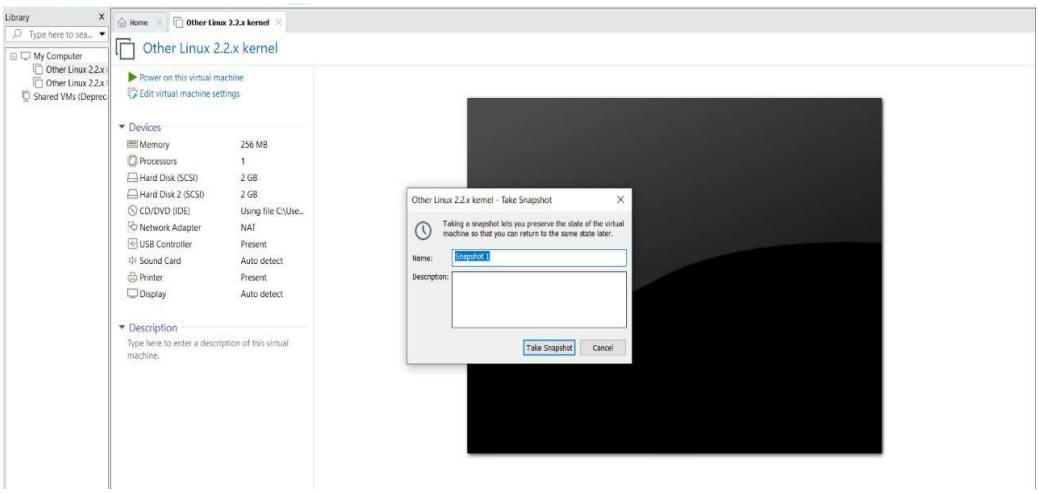
STEP 2: CREATE FILES ON DESKTOP



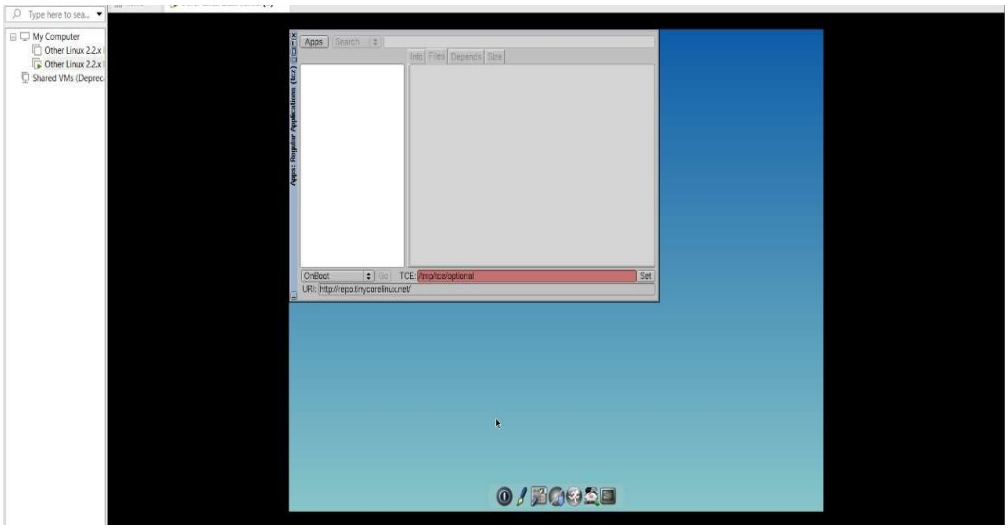


STEP 3: CLICK ON VM AND SELECTS SNAPSHOT-> TAKE SNAPSHOT.





STEP 4: SNAPSHOT IS BEING DONE



EXPNO 11: CREATE A CLONING OF A VM AND TEST IT BY LOADING THE PREVIOUS VERSION/CLONED VM.

DATE:

AIM:

To create a cloning of a vm and test it by loading the previous version/cloned vm.

PROCEDURE:

STEP 1: GO TO VM AND GOTO MANAGE AND CLICK CLONE

STEP 2: CLICK CLONE

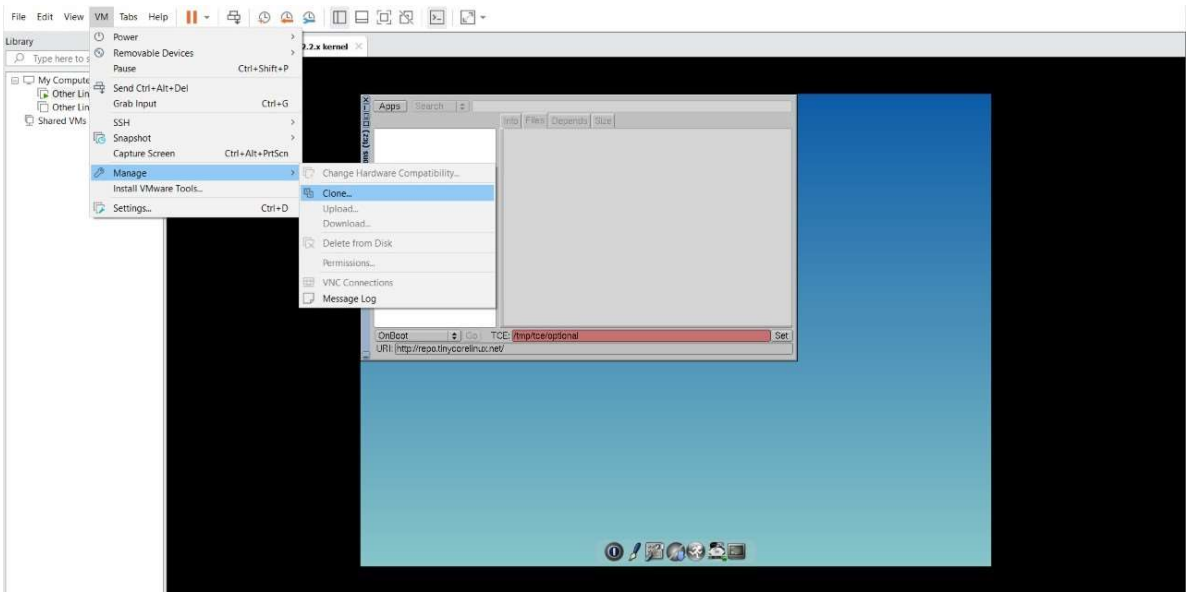
STEP 3: SELECT THE FULL CLONE

STEP 4: AFTER CLONE AGAIN OR VM IS OPENED.

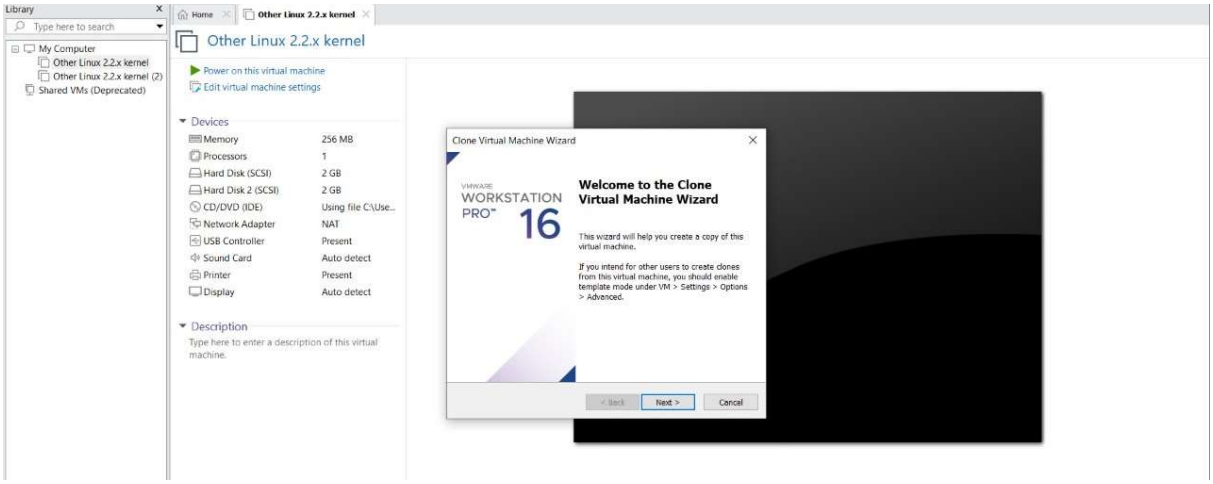
IMPLEMENTATION:

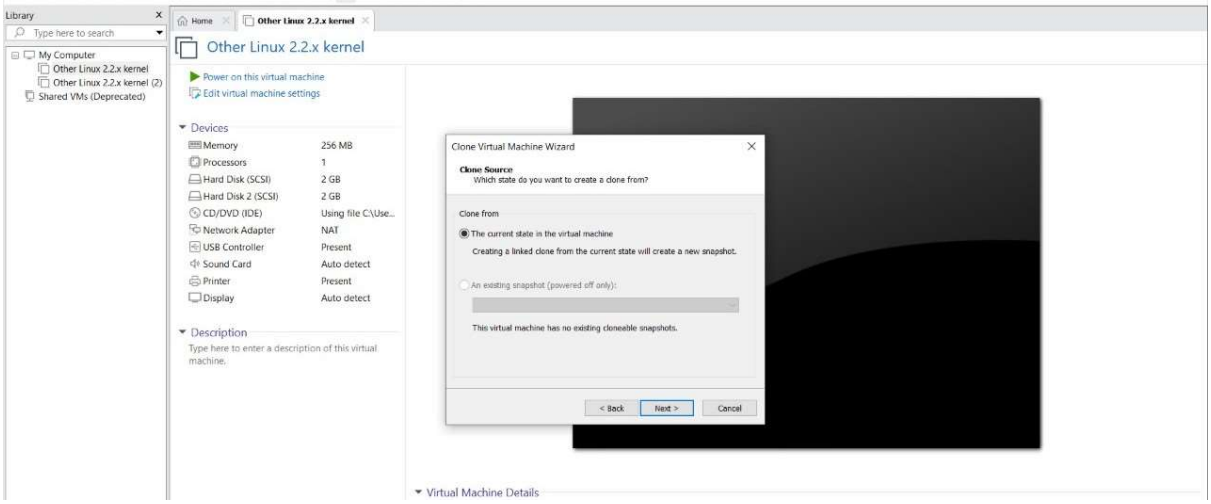
CLONING OF A VM

STEP 1: GO TO VM AND GOTO MANAGE AND CLICK CLONE

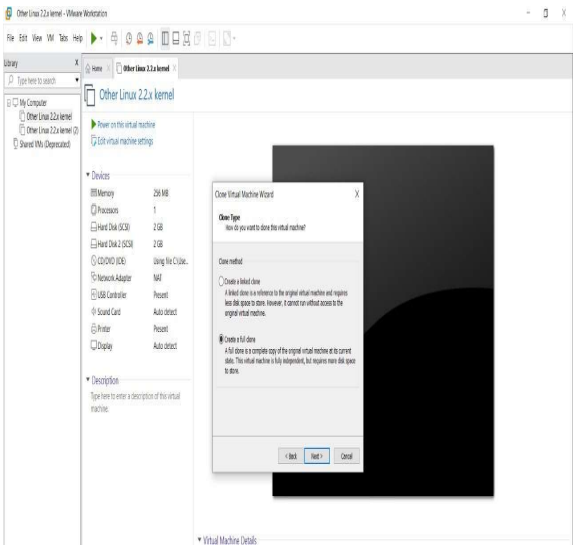


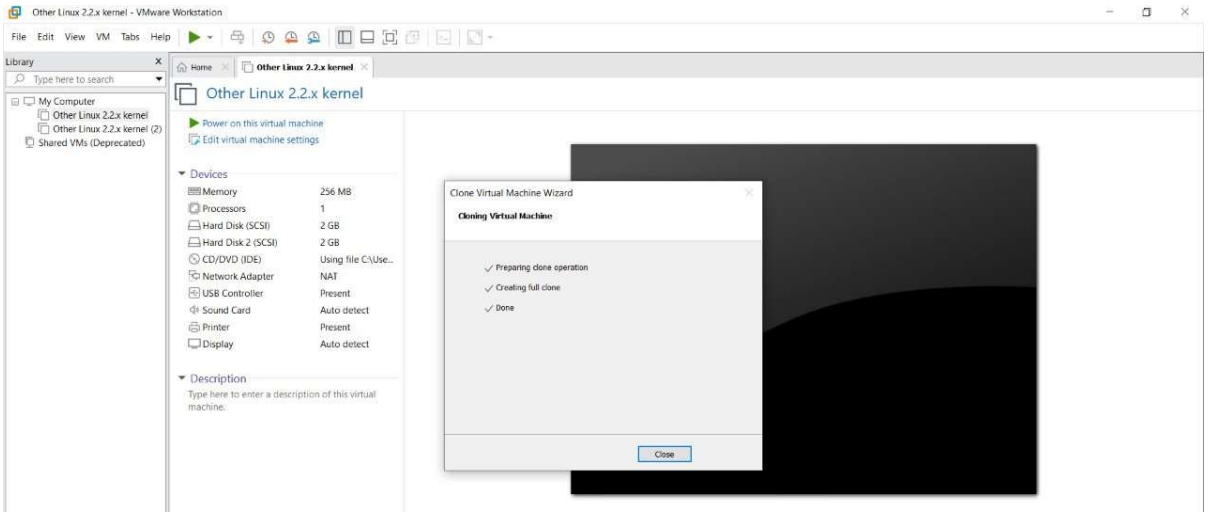
STEP 2: CLICK CLONE



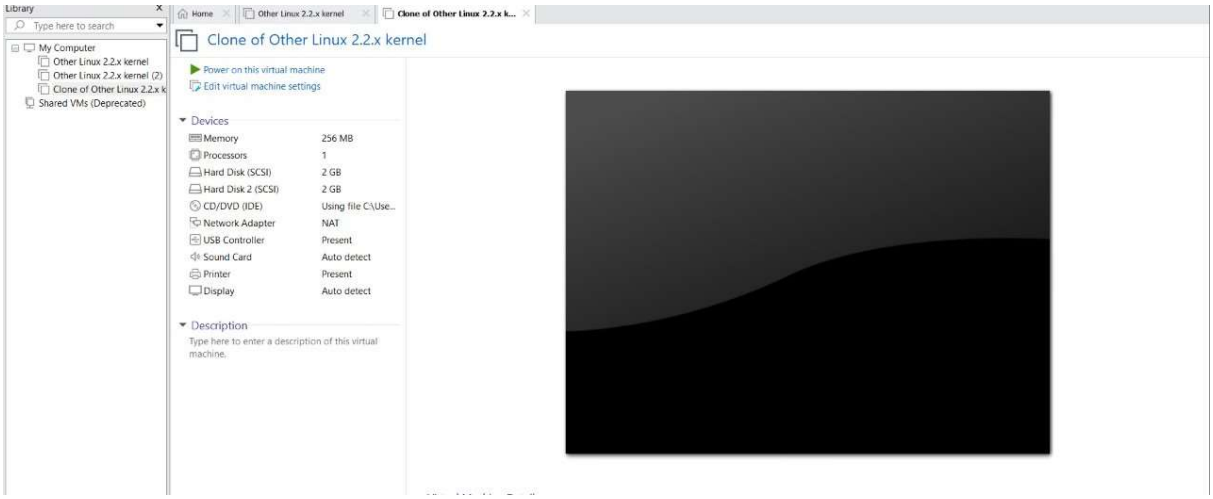


STEP 3: SELECT THE FULL CLONE





STEP 4: AFTER CLONE AGAIN OR VM IS OPENED.



EXP 12: CHANGE HARDWARE COMPATIBILITY OF A VM (EITHER BY CLONE/CREATE NEW ONE) WHICH IS ALREADY CREATED AND CONFIGURED.

DATE:

AIM:

To Change Hardware compatibility of a VM (Either by clone/create new one) which is already created and configured.

PROCEDURE:

STEP 1:GOTO VM WARE WORKSTATION.

STEP2: RIGHT CLICK THE VM AND GOTO THE SETTINGS.

STEP 3: ADD HARDWARE WIZARD AND SELECT SCSI AND CLICK NEXT.

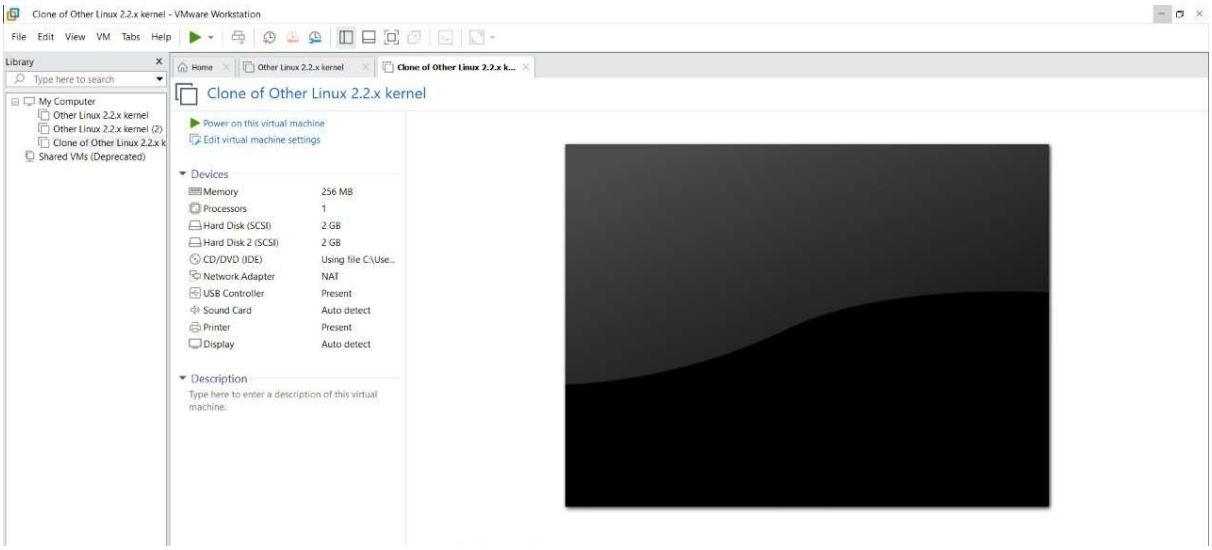
STEP 4: CREATE NEW VIRTUAL DISK.

STEP 5: SELCT THE DISK SIZE AS 2.0. AND SELCT SPLIT VIRTUAL DISK INTOMULTIFILES.

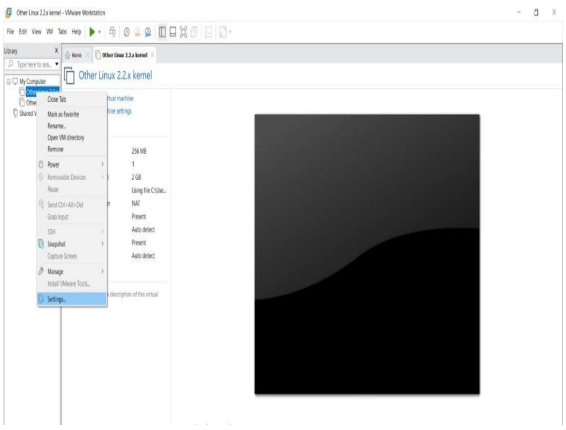
STEP 6: GIVE NAME AND CLICK THE FINISH.

IMPLEMENTATION:

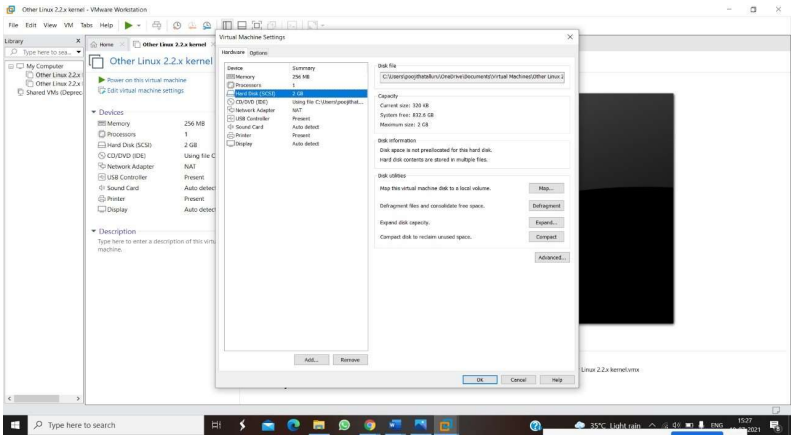
STEP 1:GOTO VM WARE WORKSTATION



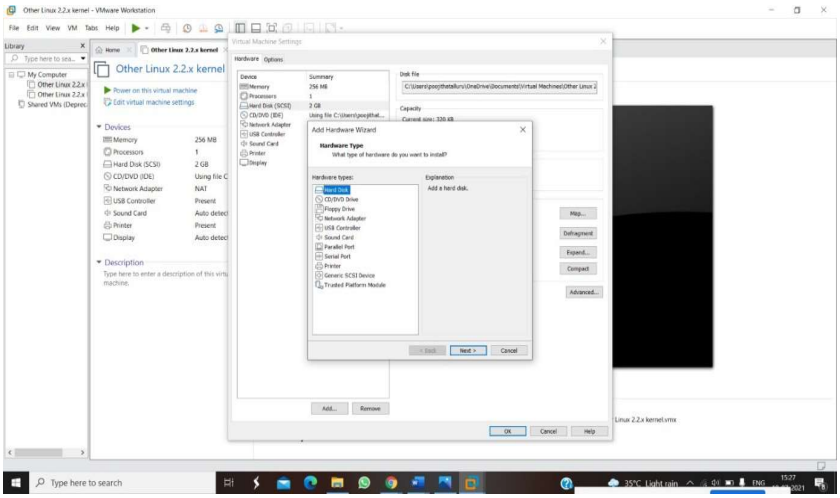
STEP2: RIGHT CLICK THE VM AND GOTO THE SETTINGS

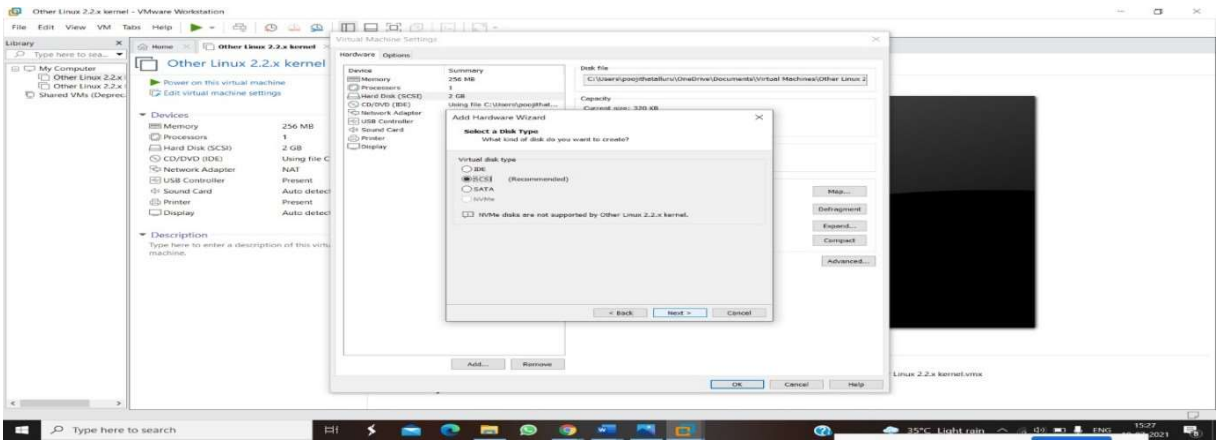


STEP 3: ADD HARDWARE WIZARD AND SELECT SCSI AND CLICK NEXT

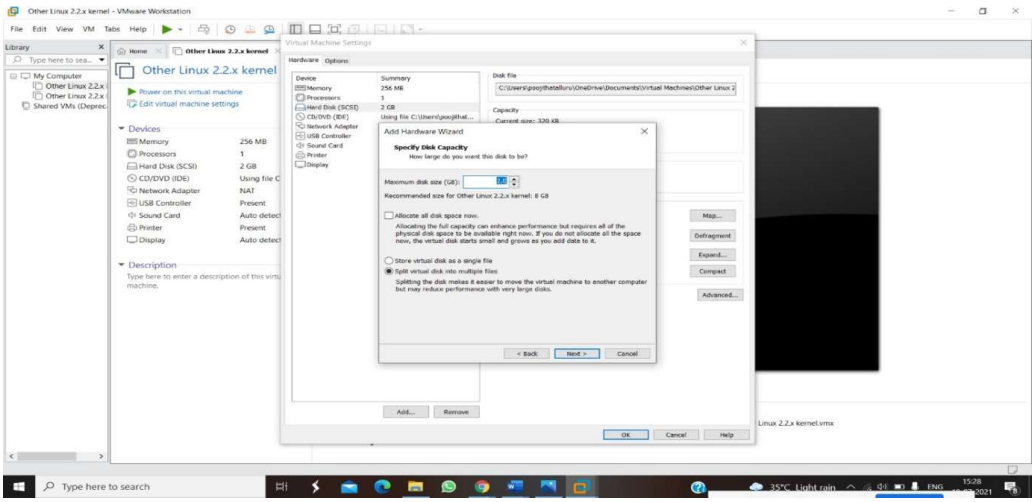


STEP 4: CREATE NEW VIRTUAL DISK

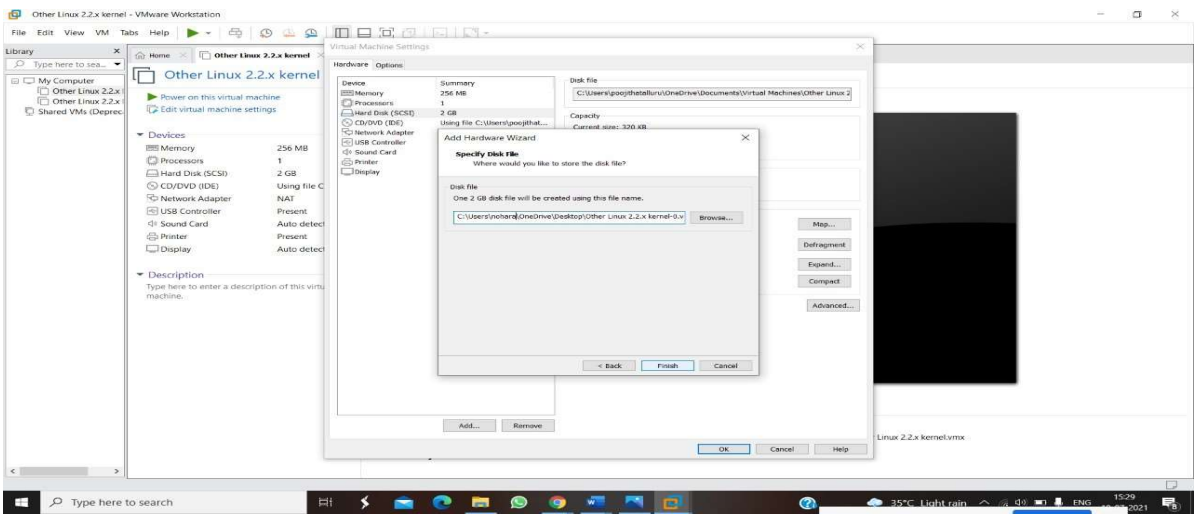


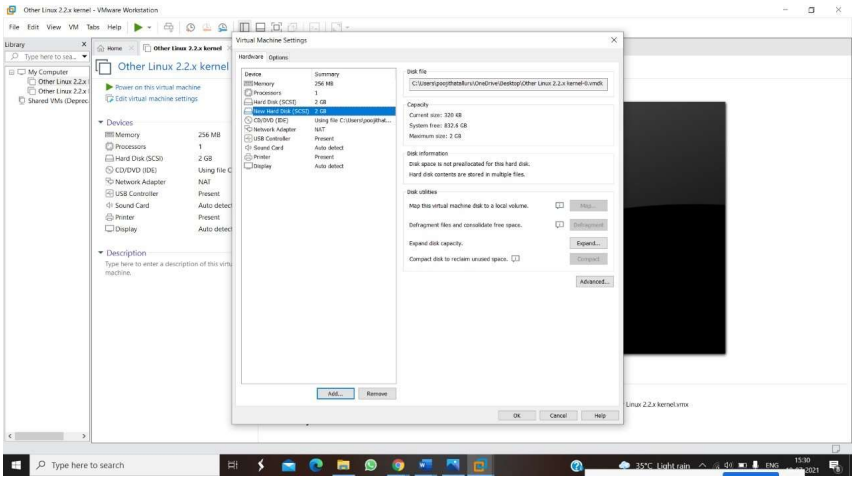


STEP 5: SELCT THE DISK SIZE AS 2.0. AND SELCT SPLIT VIRTUAL DISK INTOMULTIFILES.



STEP 6: GIVE NAME AND CLICK THE FINISH




Other Linux 2.2.x kernel - VMware Workstation
File Edit View VM Tabs Help
Library
Other Linux 2.2.x kernel
Power on this virtual machine
Edit virtual machine settings
Devices
Memory 256 MB
Processors 1
Hard Disk (SCSI) 2 GB
CD/DVD (IDE) Using file C
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 Settings
Hardware Options
Device Summary
Memory 256 MB
Processors 1
Hard Disk (SCSI) 2 GB
New Hard Disk (SCSI) 2 GB
CD/DVD (IDE) Using file C:\Users\pooj\thal...
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Add... Remove
Disk file
C:\Users\pooj\thatalluru\OneDrive\Desktop\Other Linux 2.2.x kernel-0.vmdk
Capacity
Current size: 320 KB
System free: 832.6 GB
Maximum size: 2 GB
Disk information
Disk space is not preallocated for this hard disk.
Hard disk contents are stored in multiple files.
Disk utilities
Map this virtual machine disk to a local volume. Map...
Defragment files and consolidate free spaces. Defragment
Expand disk capacity. Expand...
Compact disk to reclaim unused space. Compact
Advanced...
OK Cancel Help
Linux 2.2.x kernel.vmx
Type here to search
35°C Light rain
ENG
15:30

EXP 13 . DEMONSTRATE INFRASTRUCTURE AS A SERVICE(IAAS) BY CREATING AVIRTUAL MACHINE USING A PUBLIC CLOUD SERVICE PROVIDER(AZURE/GCP/AWS) CONFIGURE WITH MINIMUM CPU, RAM ANDSTORAGE AND LAUNCH THE VM IMAGE.---12

AIM:

To demonstrate infrastructure as a service(iaas) by creating a virtual machine using a public cloud service provider(azure/gcp/aws) configure with minimum cpu,ram and storage and launch the vm image.

PROCEDURE:

STEP1: CREATE AN ACCOUNT IN MICROSOFT AZURE.

STEP2: GOTO RESOURCE GROUP AND CREATE A RESOURCE GROUP.

STEP3: GIVE NECESSARY THINGS FOR RESOURCE GROUP.

STEP4: CREATE A VIRTUAL NETWORK FOR TO CREATE A VIRTUALMACHINE.

STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IP ADDRESS ANUSERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.

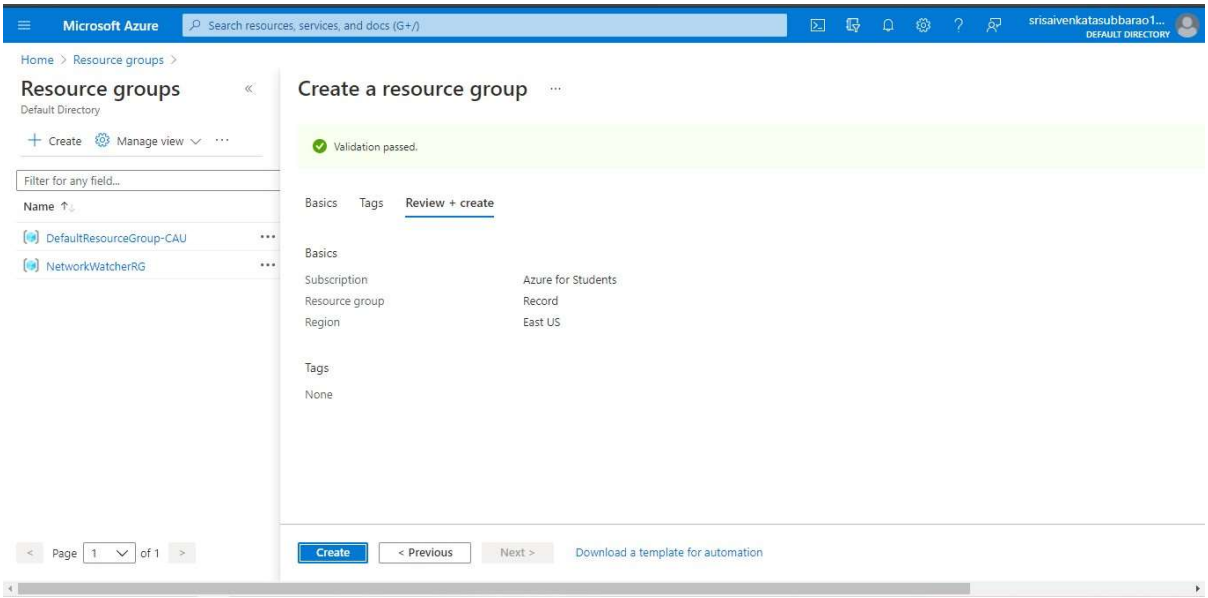
STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILETO OPEN YOUR WINDOWS VIRTUAL MACHINE.

STEP8: CREATED A NEW WINDOWS VIRTUAL MACHINE

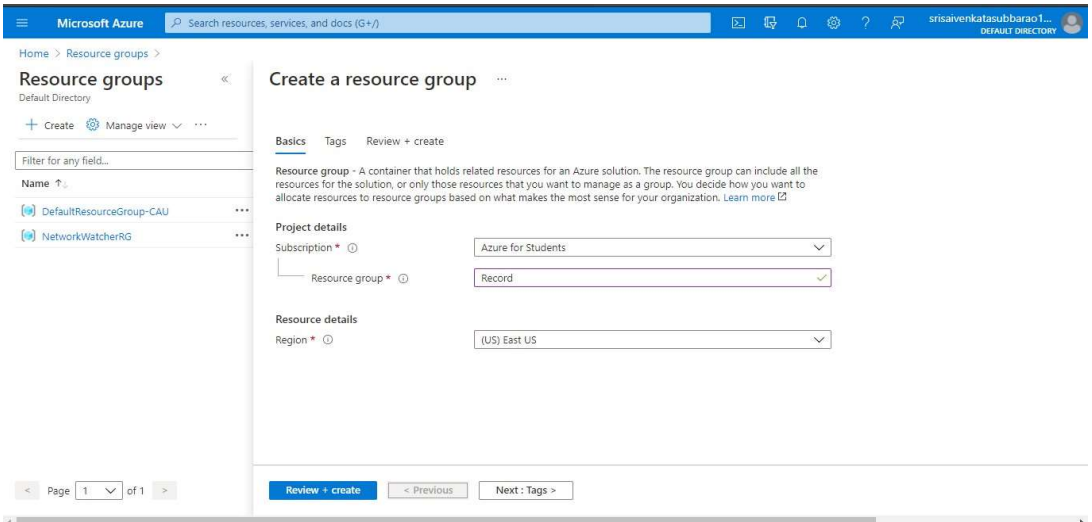
IMPLEMENTATION:

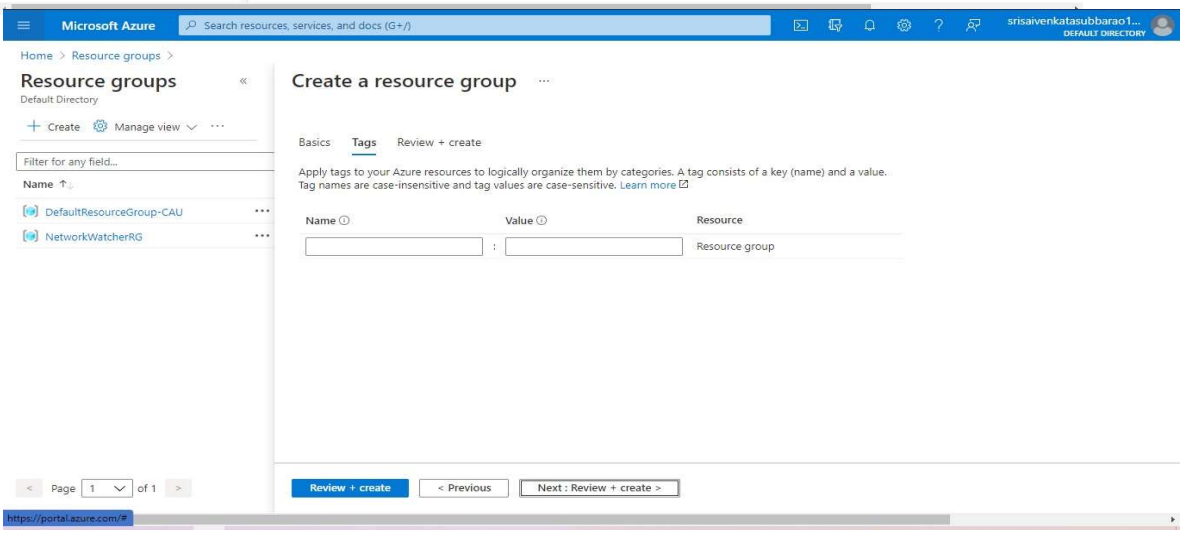
STEP1: CREATE AN ACCOUNT IN MICROSOFT AZURE.

STEP2: GOTO RESOURCE GROUP AND CREATE A RESOURCE GROUP.

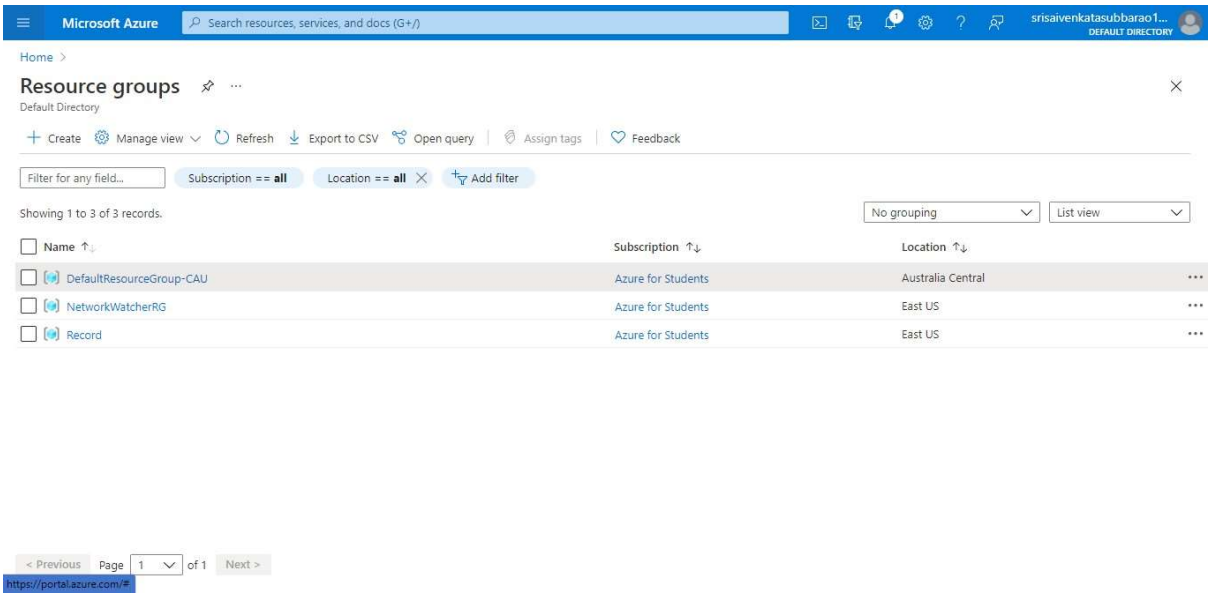


STEP3: GIVE NECESSARY THINGS FOR RESOURCE GROUP.



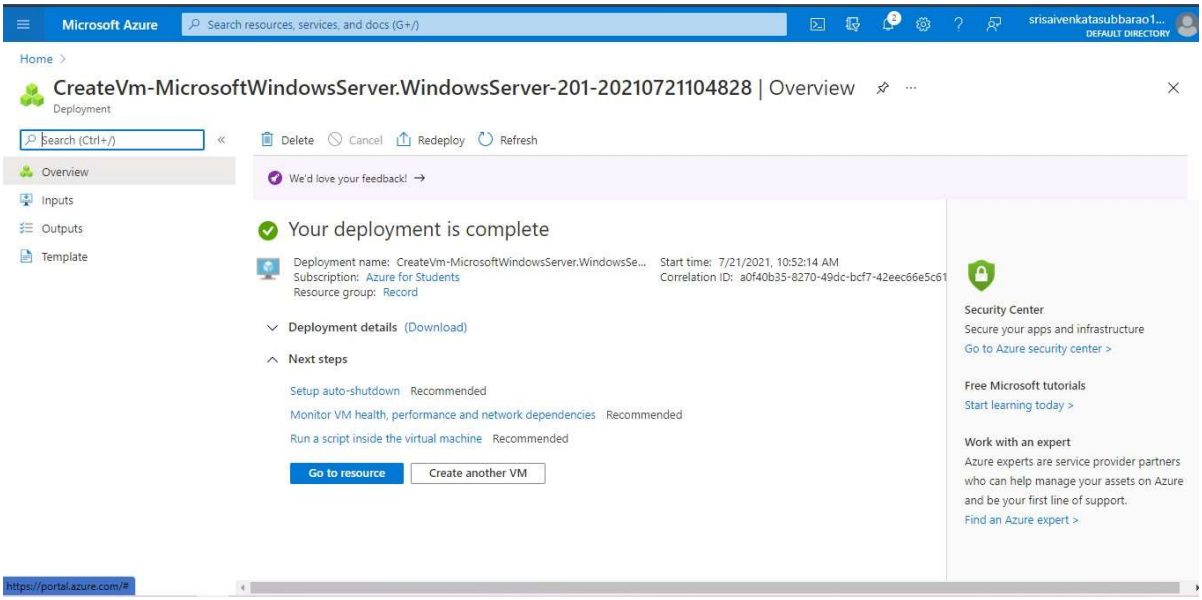


STEP4: CREATE A VIRTUAL NETWORK FOR TO CREATE A VIRTUALMACHINE .

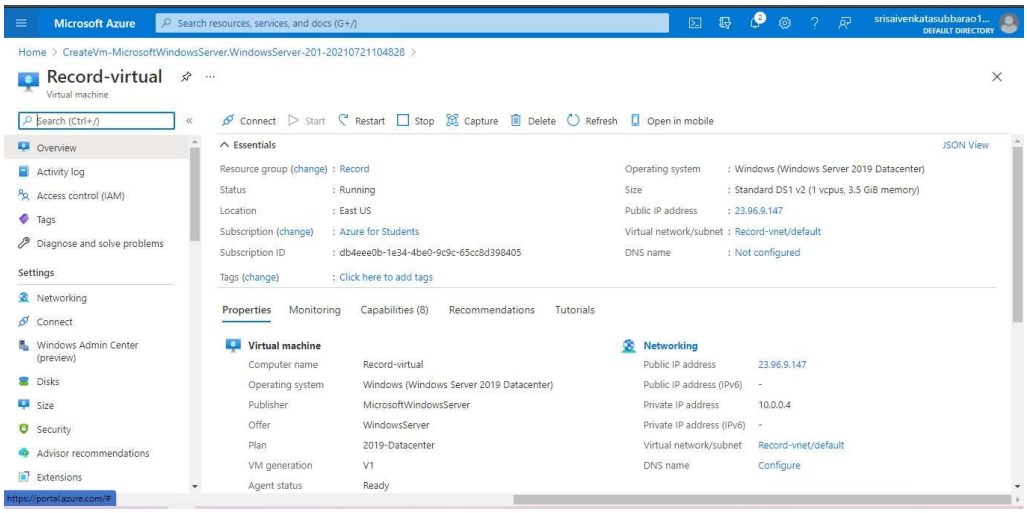


STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IP ADDRESS ANUSERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

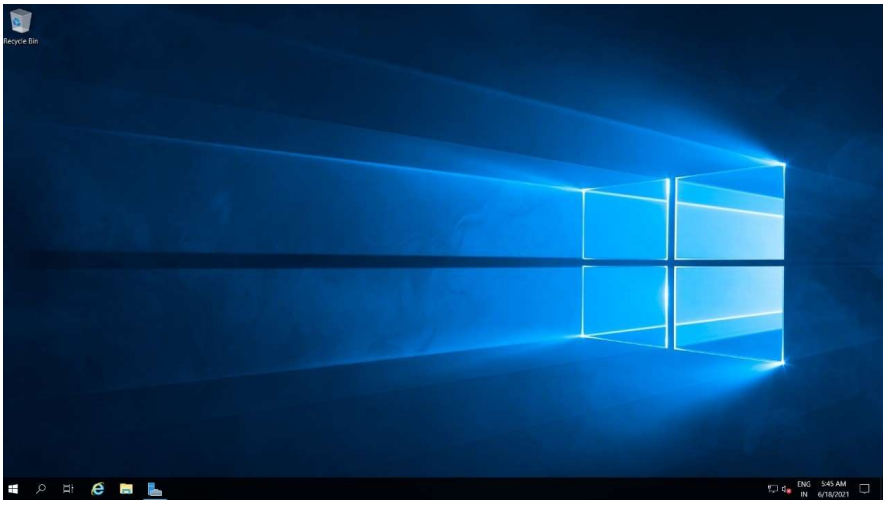
STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.



STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILETO OPEN YOUR WINDOWS VIRTUAL MACHINE.



STEP8: CREATED A NEW WINDOWS VIRTUAL MACHINE.



EXP14. DEMONSTRATE INFRASTRUCTURE AS A SERVICE (IAAS) BY CREATING A VIRTUAL MACHINE USING A PUBLIC CLOUD SERVICE PROVIDER (AZURE), CONFIGURE WITH REQUIRED MEMORY AND CPU.

AIM:

To demonstrate infrastructure as a service (iaas) by creating a virtual machine using a public cloud service provider (azure), configure with required memory and cpu.

PROCEDURE:

STEP1: CREATE AN ACCOUNT IN MICROSOFT AZURE.

STEP2: GOTO RESOURCE GROUP AND CREATE A RESOURCE GROUP.

STEP3: GIVE NECESSARY THINGS FOR RESOURCE GROUP.

STEP4: CREATE A VIRTUAL NETWORK FOR TO CREATE A VIRTUALMACHINE .

STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IP ADDRESS ANUSERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.

STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILETO OPEN YOUR WINDOWS VIRTUAL MACHINE.

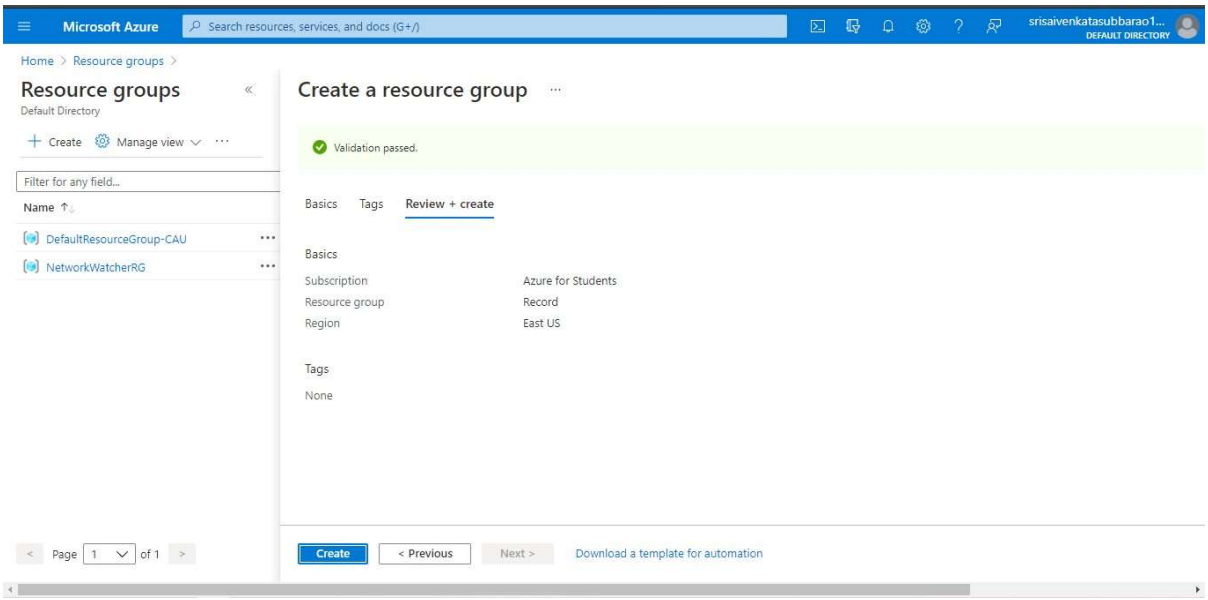
STEP8: NOW RESIZE THE VIRTUAL MACHINE SIZE.

STEP9: CREATED A NEW WINDOWS VIRTUAL MACHINE

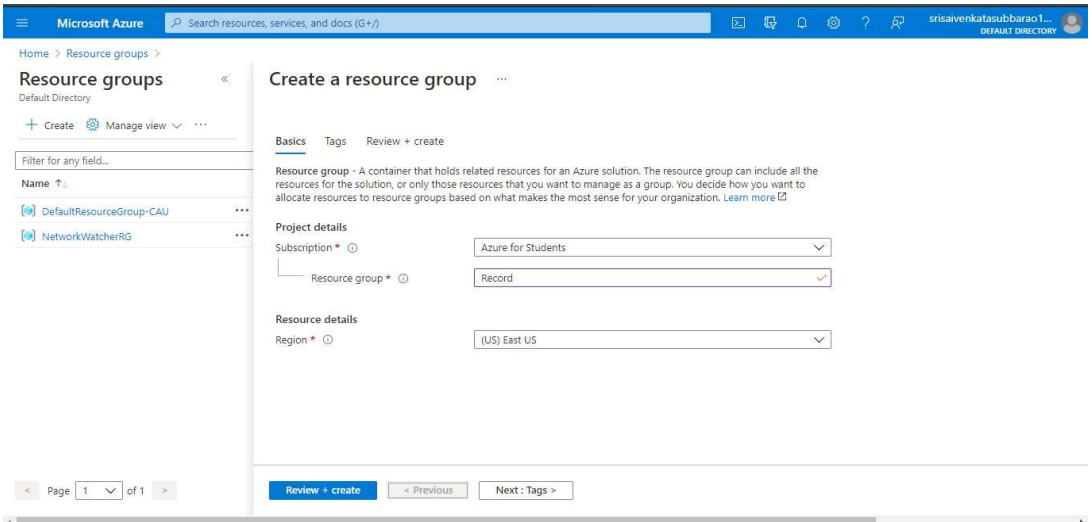
IMPLEMENTATION:

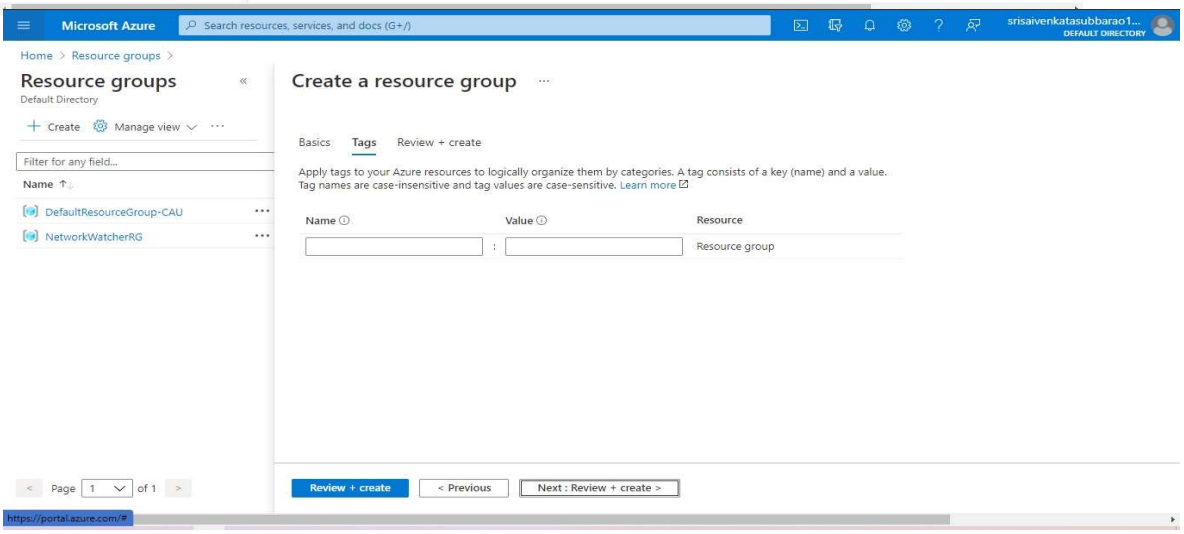
STEP1:CREATE AN ACCOUNT IN MICROSOFT AZURE.

STEP2: GOTO RESOURCE GROUP AND CREATE A RESOURCE GROUP.

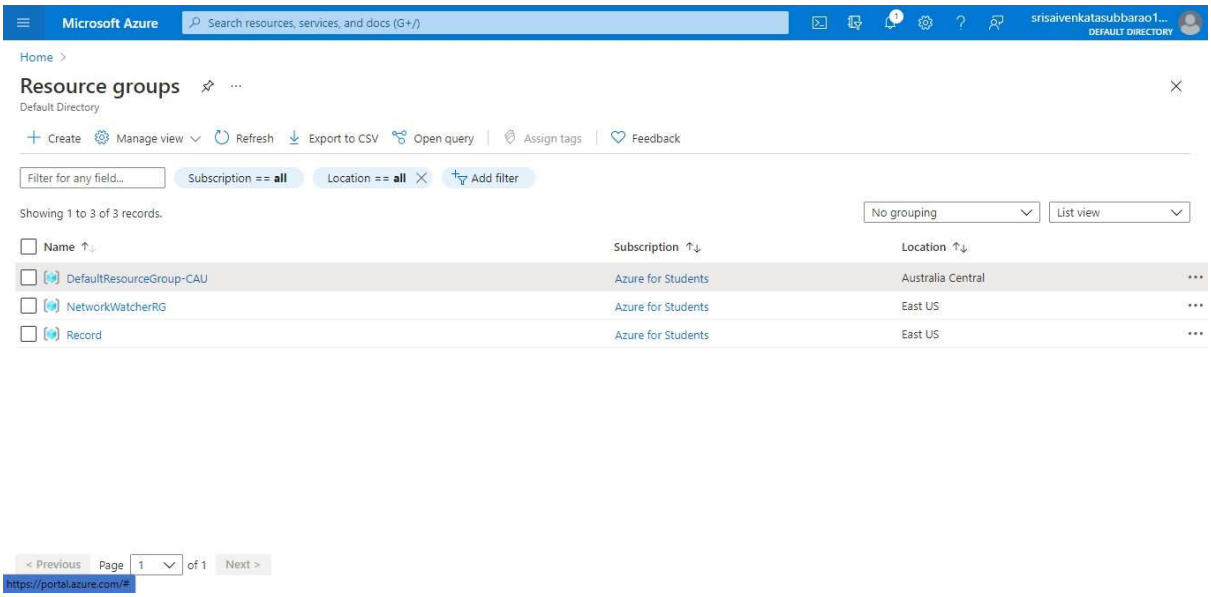


STEP3: GIVE NECESSARY THINGS FOR RESOURCE GROUP.



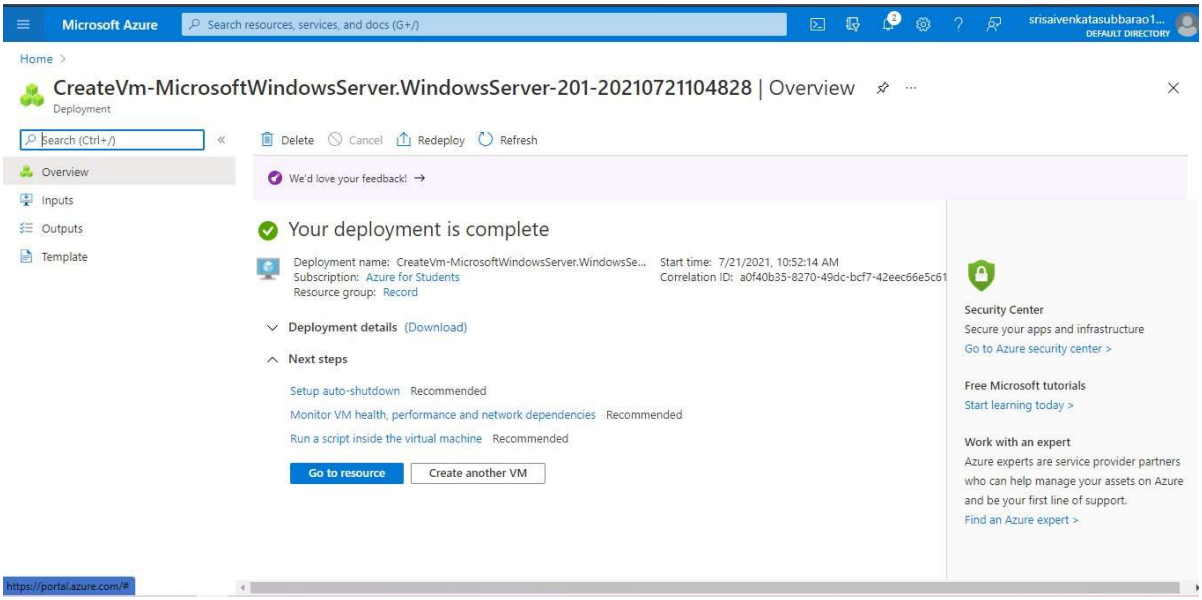


STEP4: CREATE A VIRTUAL NETWORK FOR TO CREATE A VIRTUALMACHINE .

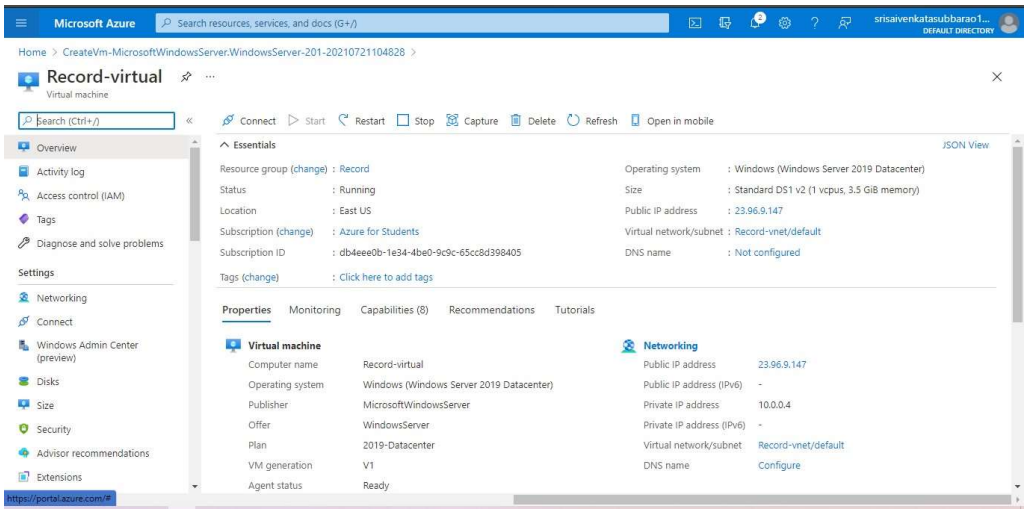


STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IP ADDRESS ANUSERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

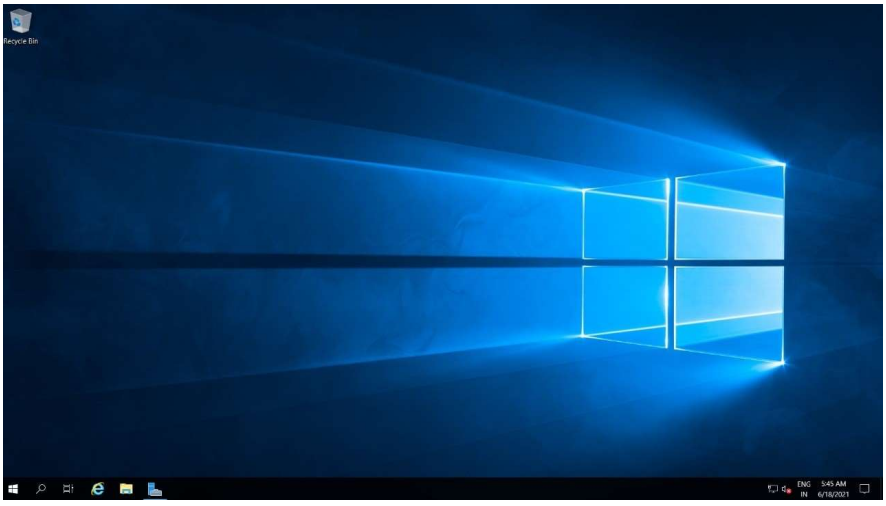
STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.



STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILETO OPEN YOUR WINDOWS VIRTUAL MACHINE.



STEP8: CREATED A NEW WINDOWS VIRTUAL MACHINE.



15. DEMONSTRATE INFRASTRUCTURE AS A SERVICE (IAAS) BY ESTABLISHING THE REMOTE CONNECTION, LAUNCH THE CREATED VM IMAGE AND RUN IN YOUR DESKTOP

Aim:

To demonstrate infrastructure as a service (iaas) by establishing the remote connection, launch the created vm image and run in your desktop.

Procedure:

STEP 1: create an account of Microsoft azure

STEP 2: click on create a resource

STEP 3: click on create of virtual machine

STEP 4: create a resource group

STEP 5: give the name of virtual machine

STEP 6: choose any region based on CPU & ram configuration of size

STEP 7: click on authenticated type //and choose >>password<<and create your own username and password

STEP 8: click on<<review and create>>

STEP 9: wait few minutes for getting the validation passed

STEP 10: after click on <<create>>then see your resource group is created and virtual machine also

STEP 11: click on << back to home >>

STEP 12: now see your resource group and virtual machine is created

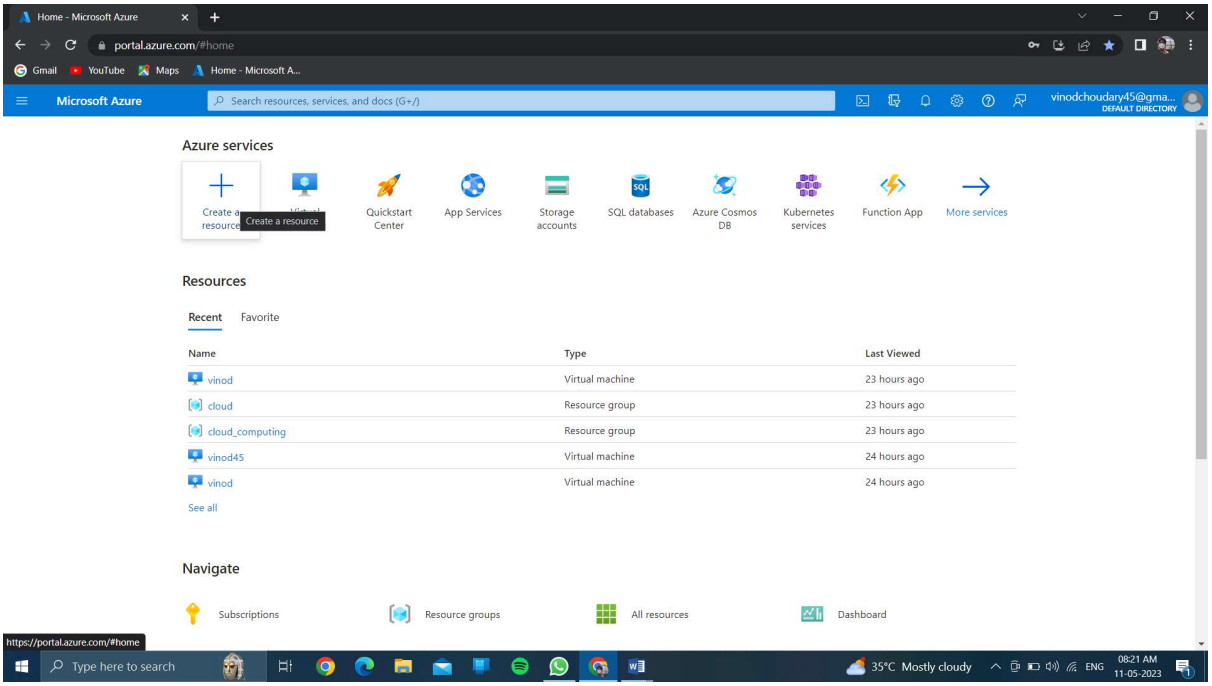
STEP 13: click on name of the virtual machine and see your name of your virtual machine

STEP 14: click on <<connect>> and wait for few minutes for checking the network security of client ip –address in ssh

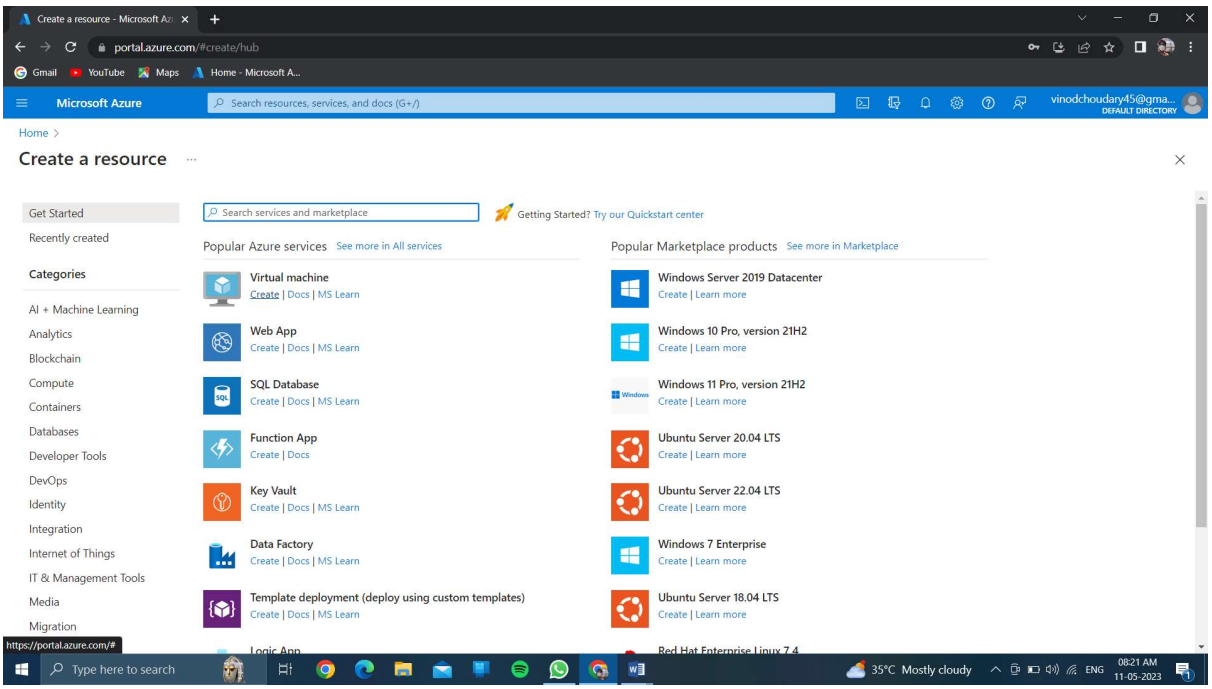
STEP 15: click on rdp <<download>>rdp file after then open the rdp file and you will get the interface

STEP 16: then after you will get output or otherwise you will get the remote connect desktop…

AT FIRST YOU NEED TO CREATE AN ACCOUNT OF MICROSOFT AZURE….

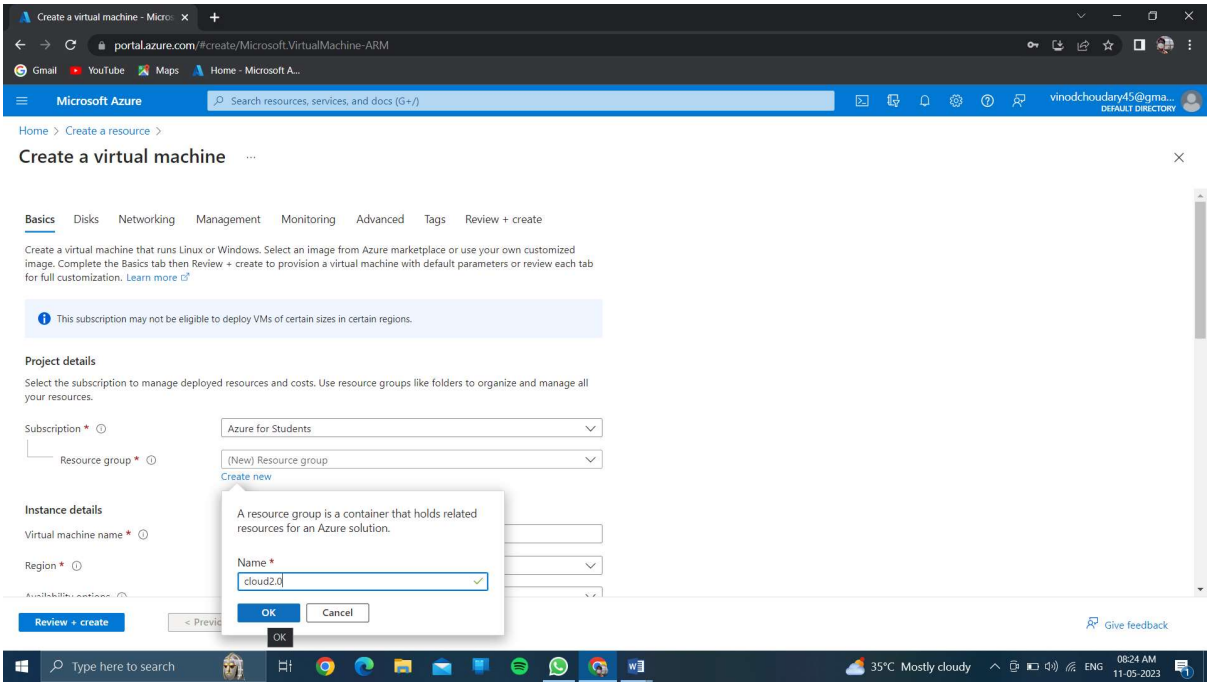


CLICK ON CREATE A RESOURCE…..

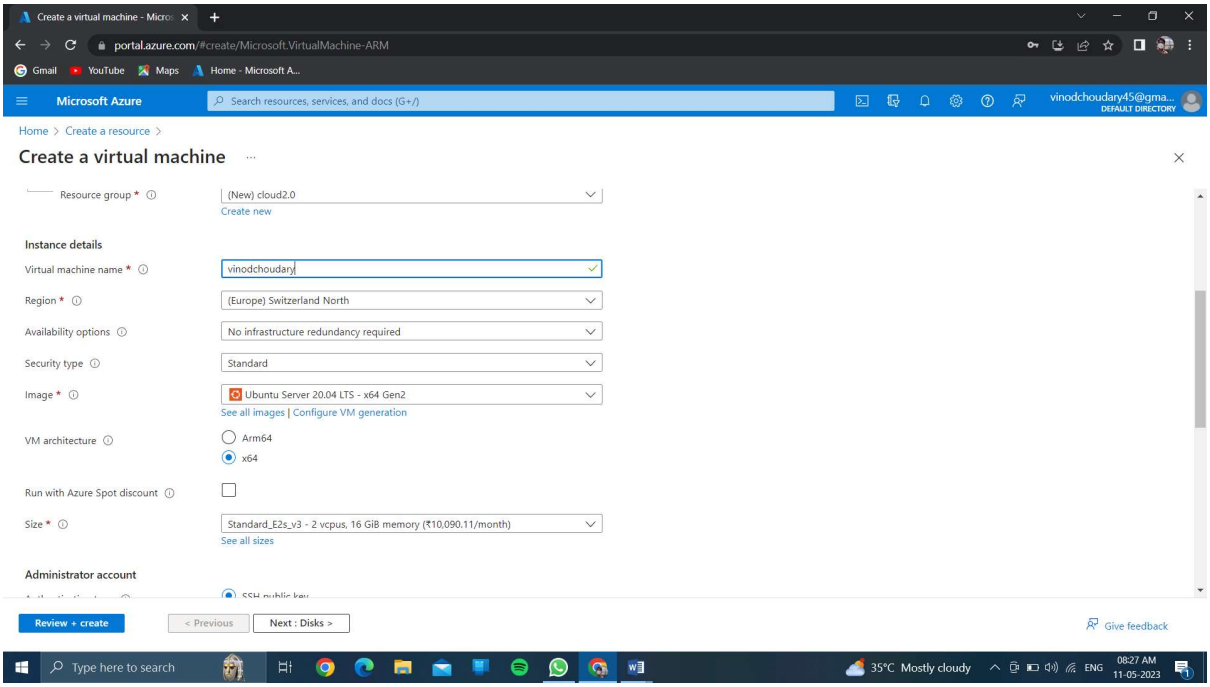


CLICK ON CREATE OF VIRTUAL MACHINE….

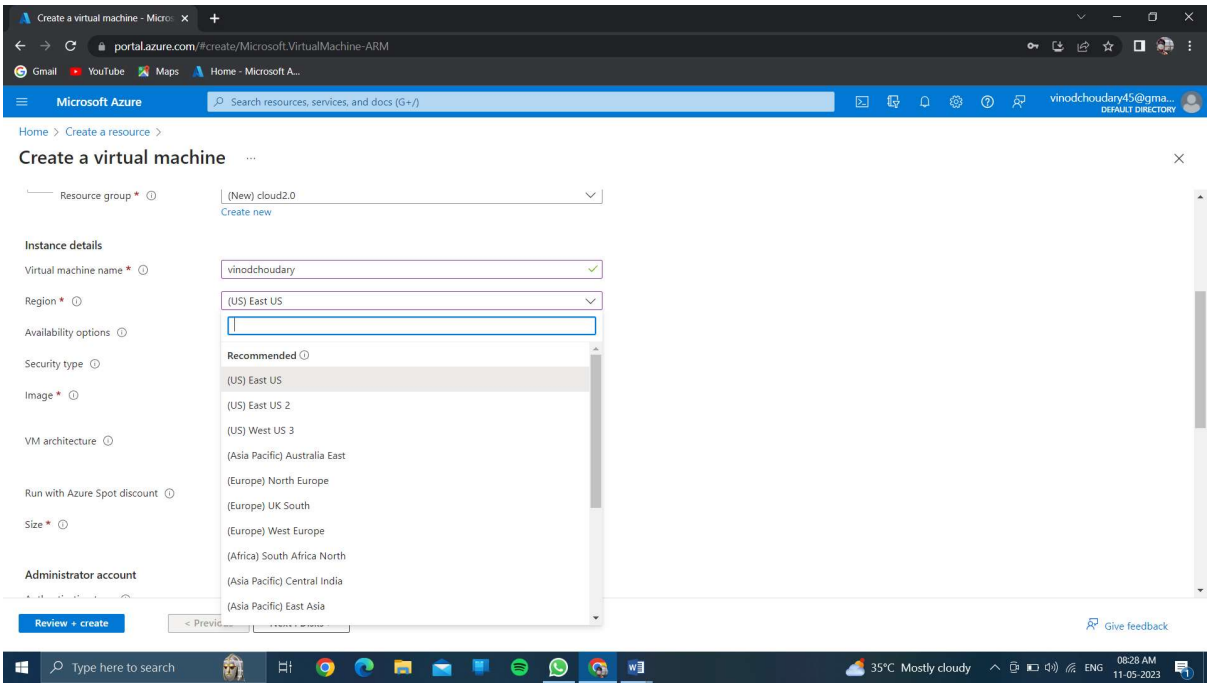
CREATE A RESOURCE GROUP…..



GIVE THE NAME OF VIRTUAL MACHINE....

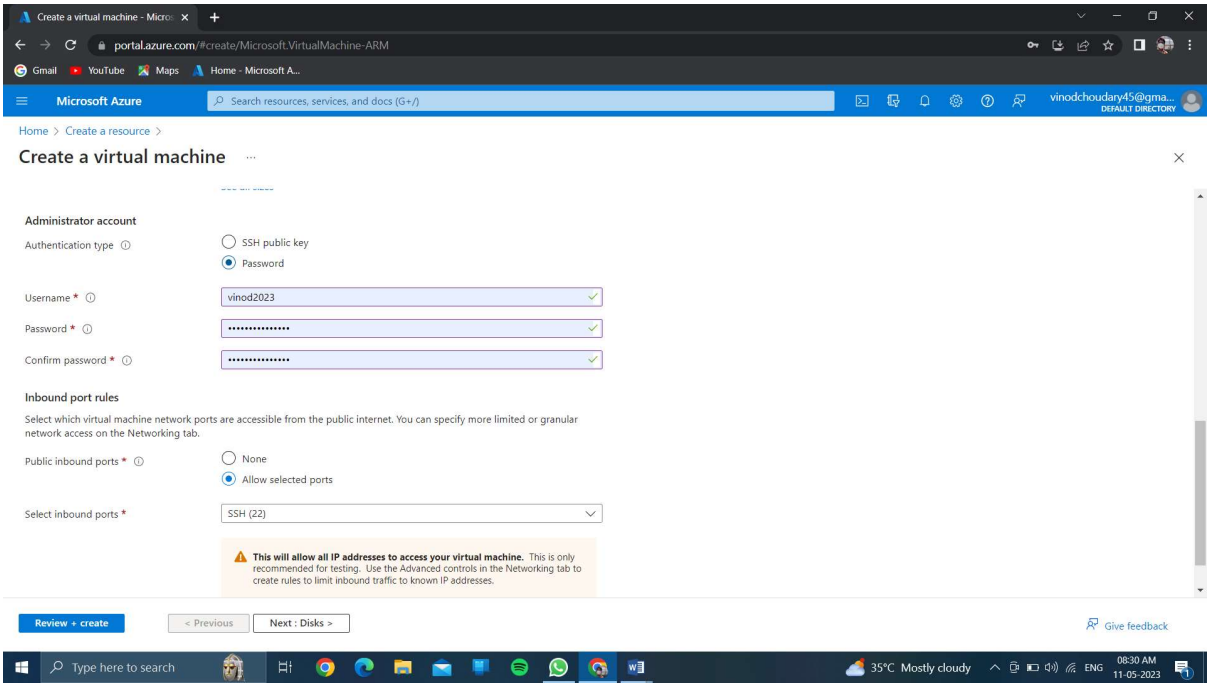


CHOOSE ANY REGION.....BASED ON CPU & RAM CONFIGURATION OF SIZE....

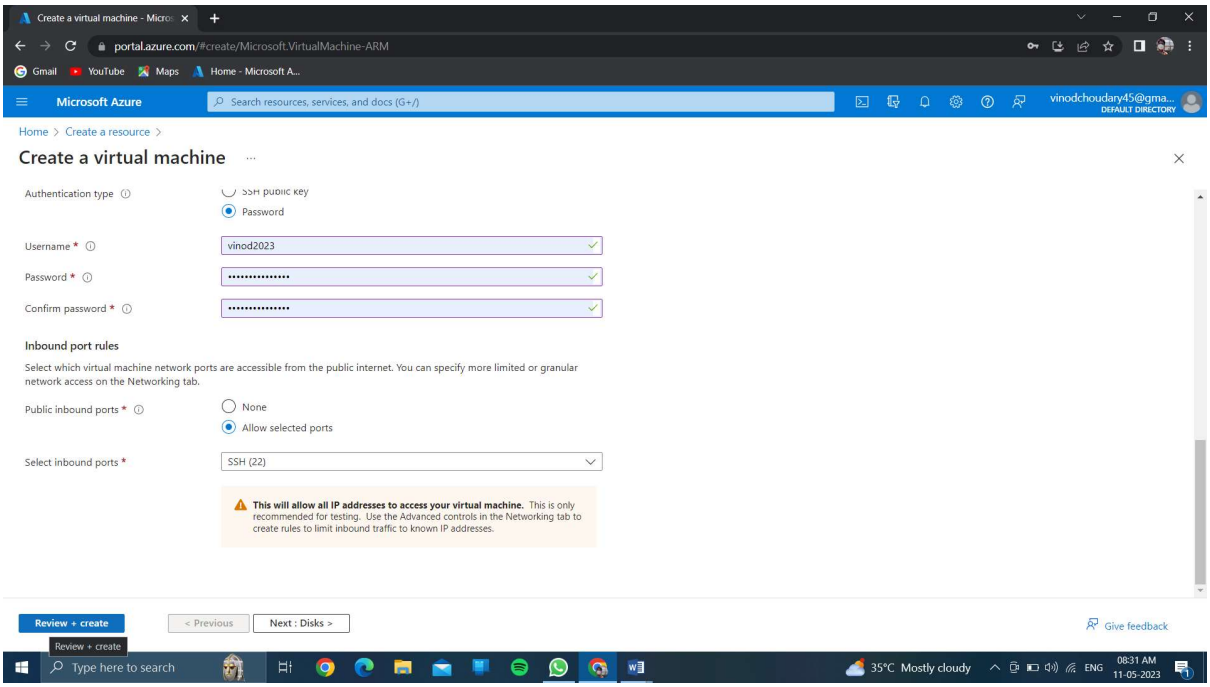


CLICK ON AUTHENTICATED TYPE //AND CHOOSE >>PASSWORD<<

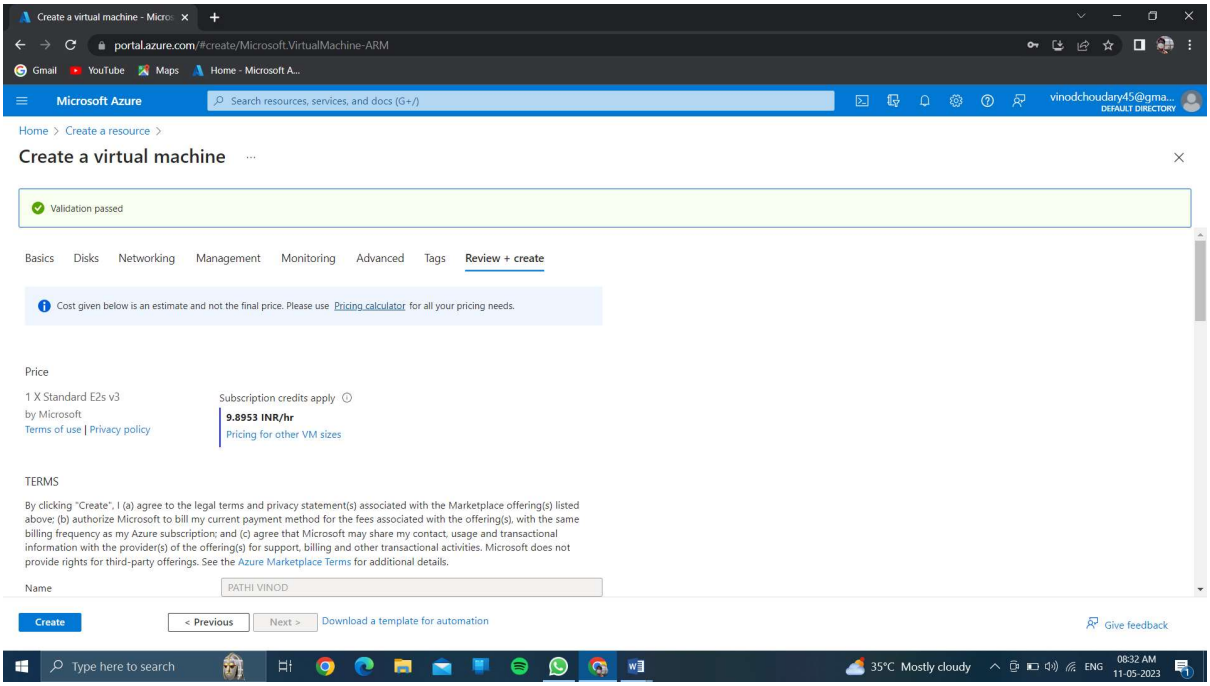
AND CREATE YOUR OWN USERNAME AND PASSWORD.....



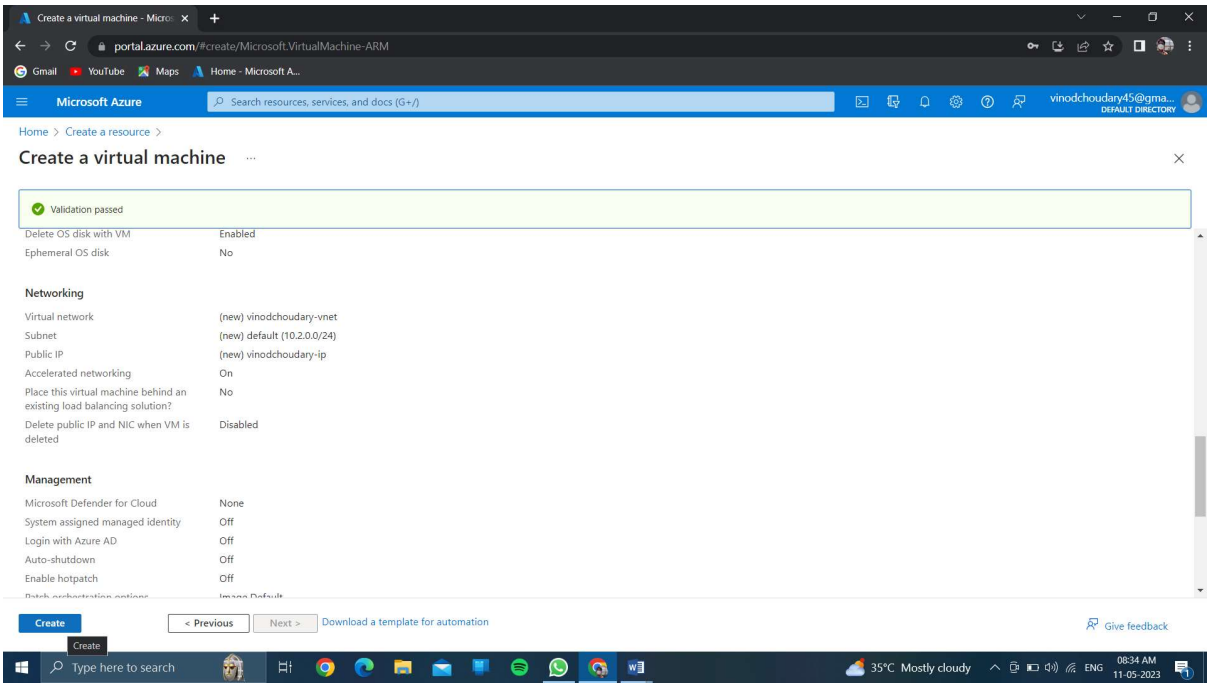
CLICK ON<<REVIEW AND CREATE>>



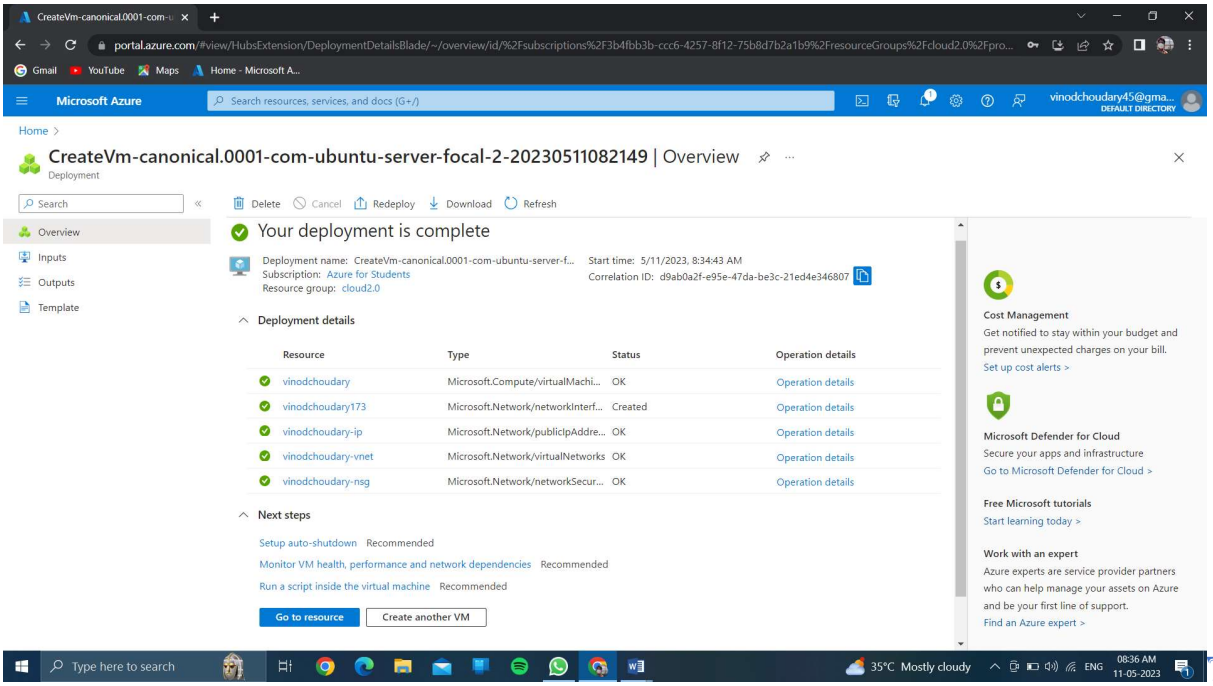
AND WAIT FEW MINUTES FOR GETTING THE VALIDATION PASSED.....



CLICK ON CREATE.....

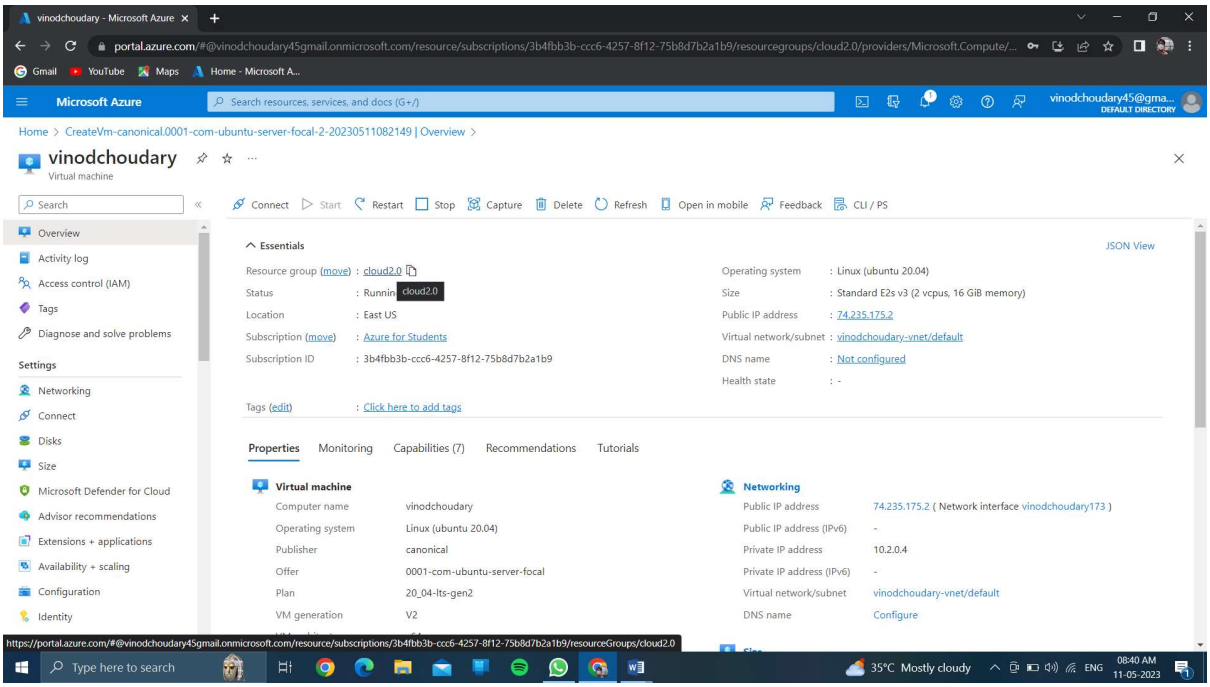


AND WAIT FOR FEW MINUTES FOR COMPLITATION OF DEPLOYMENT PROCESS>>

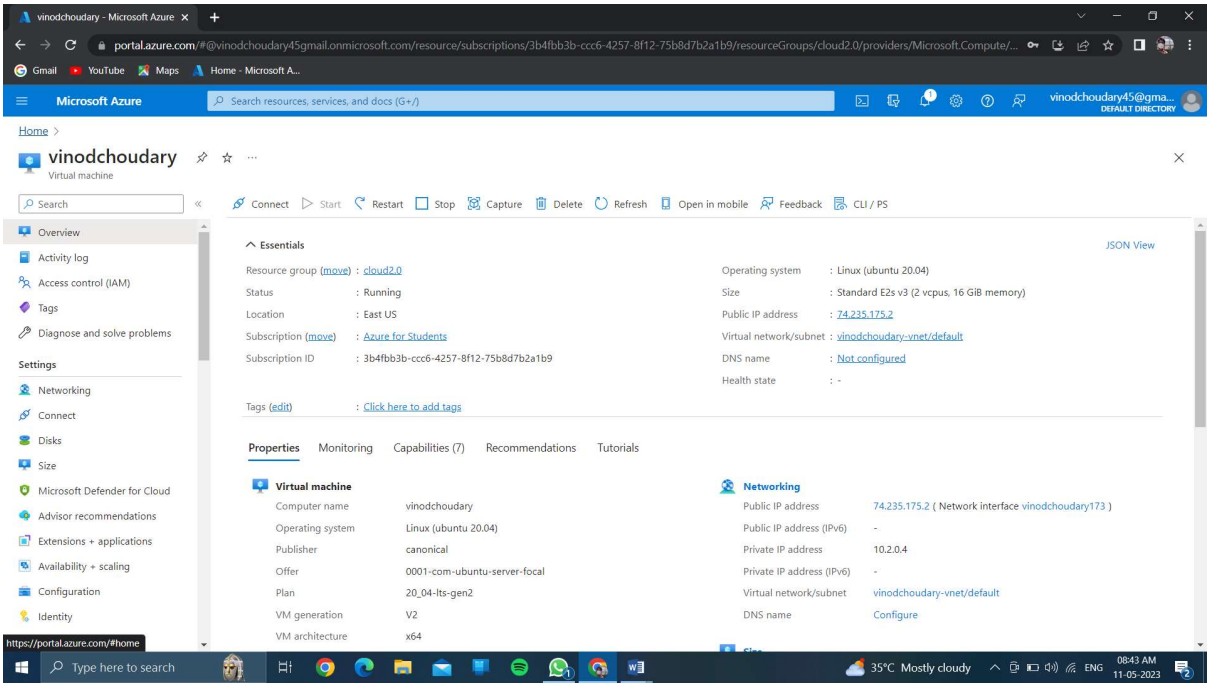


THEN AFTER CLICK ON <<RESOURCE>>....

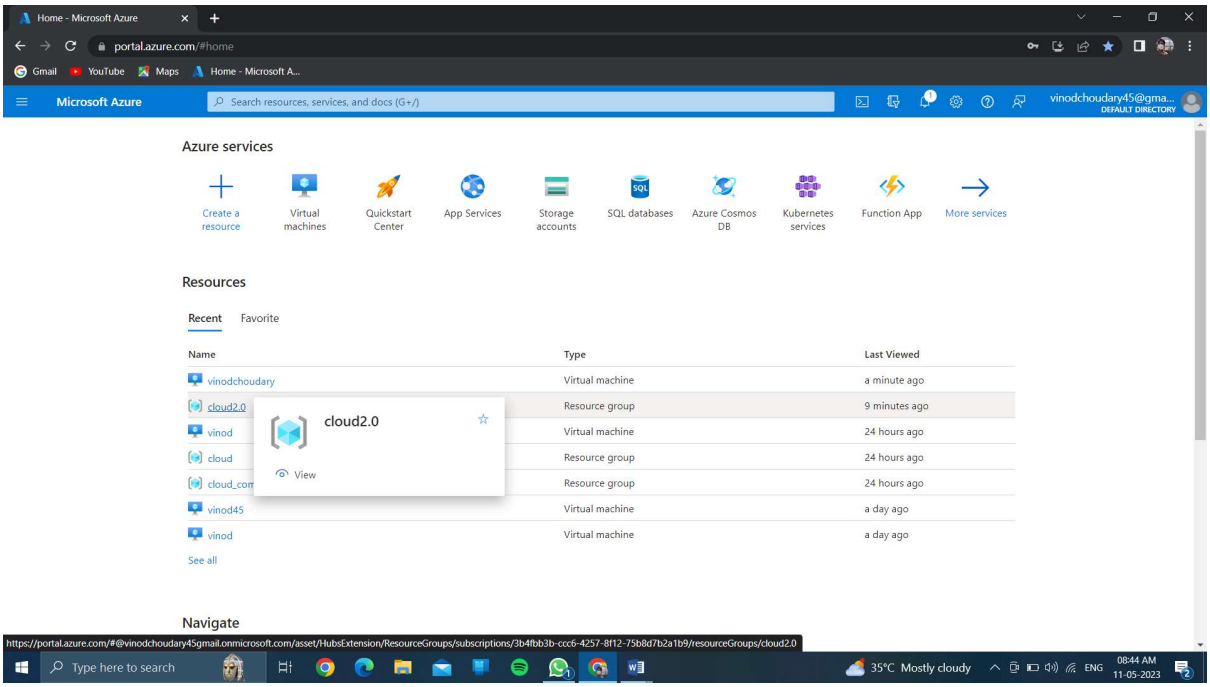
THEN AFTER CLICK ON <<CREATE>>THEN SEE YOUR RESOURCE GROUP IS CREATED AND VIRTUAL MACHINE ALSO.....



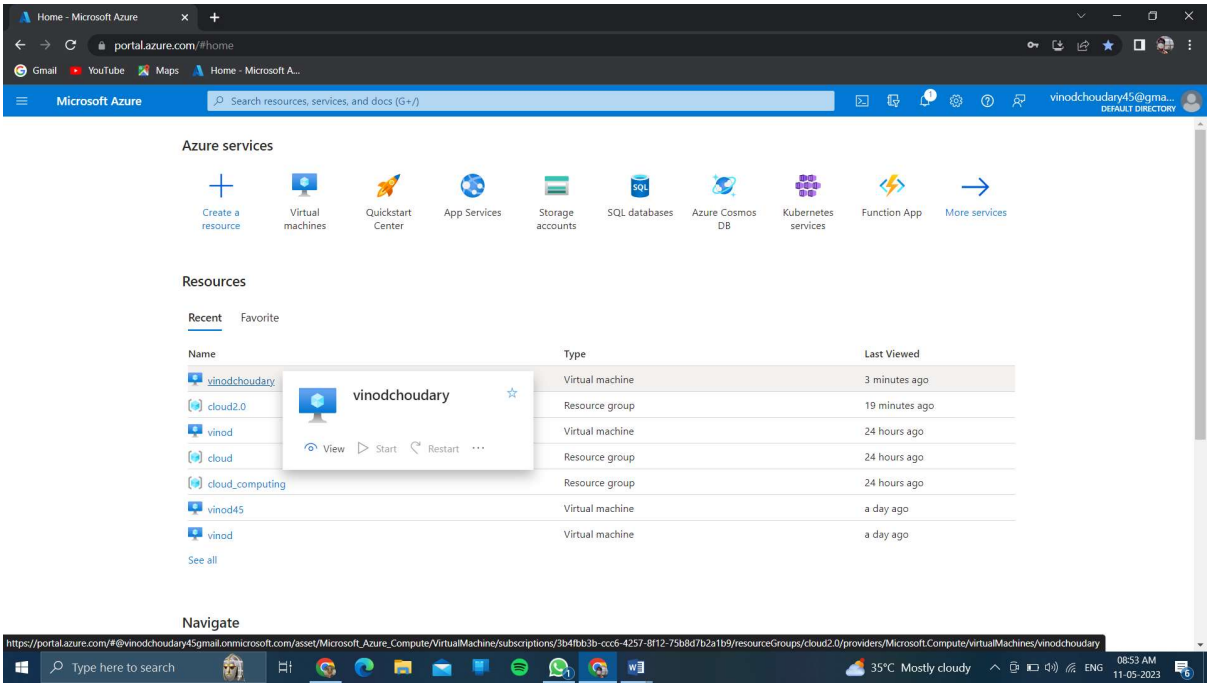
AND CLICK ON << BACK TO HOME >>



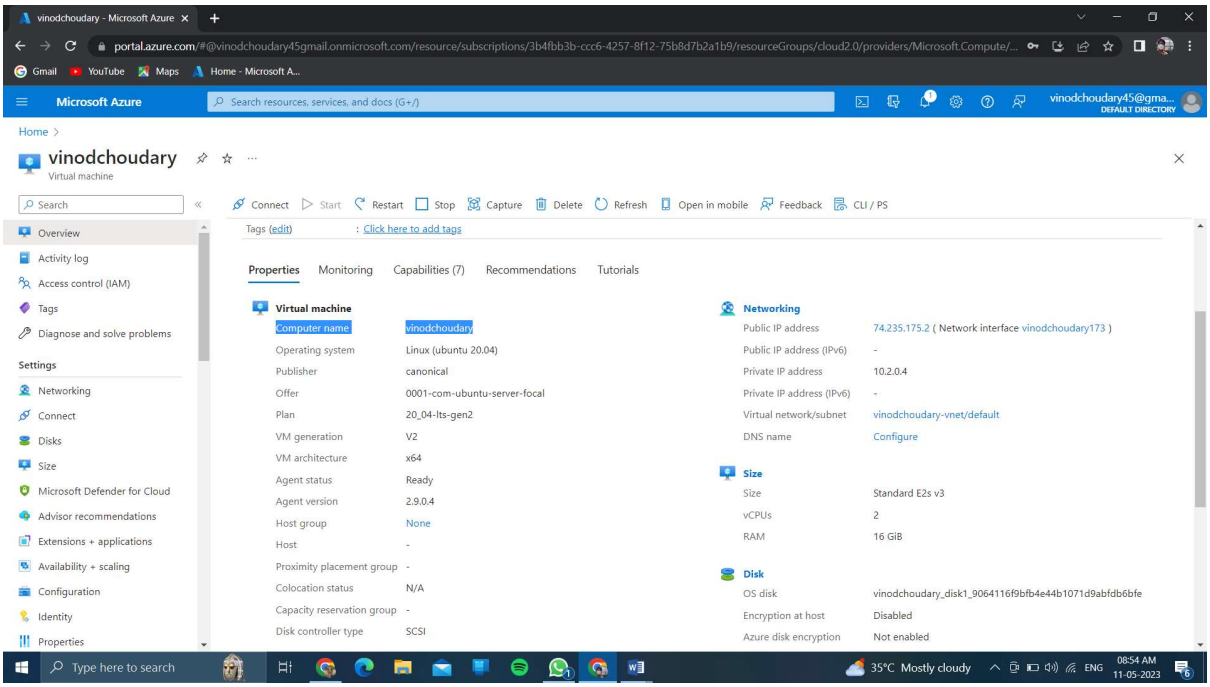
NOW SEE YOUR RESOURCE GROUP AND VIRTUAL MACHINE IS CREATED....



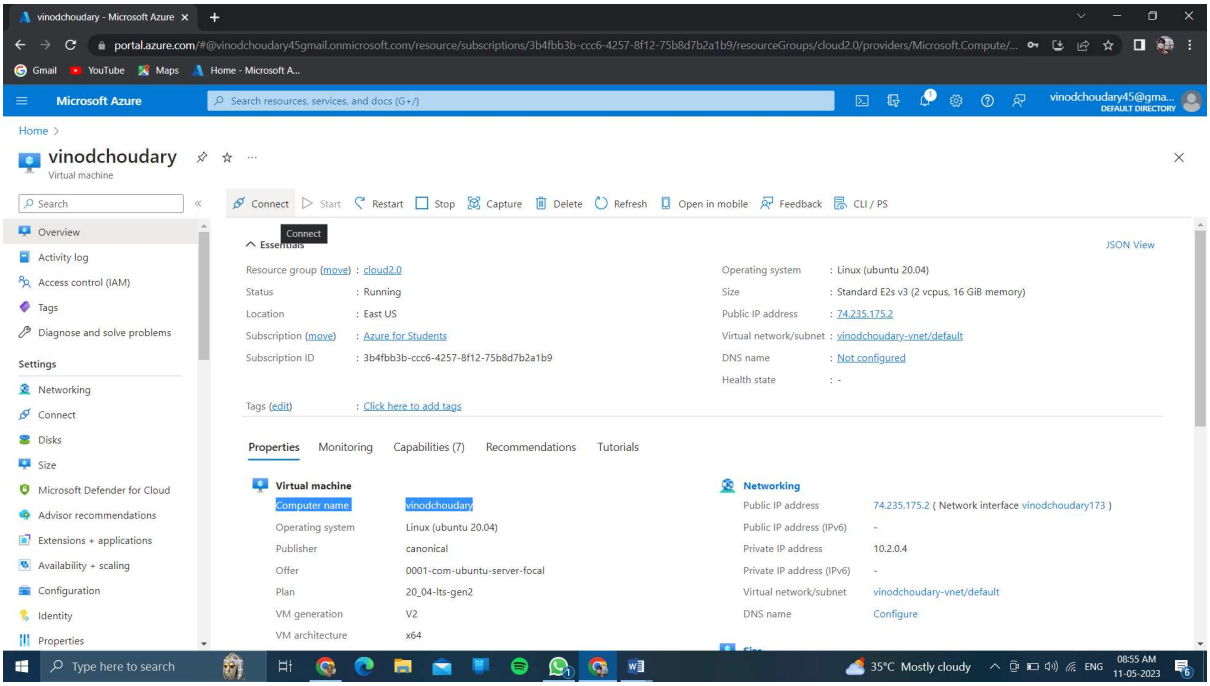
CLICK ON NAME OF THE VIRTUAL MACHINE.....



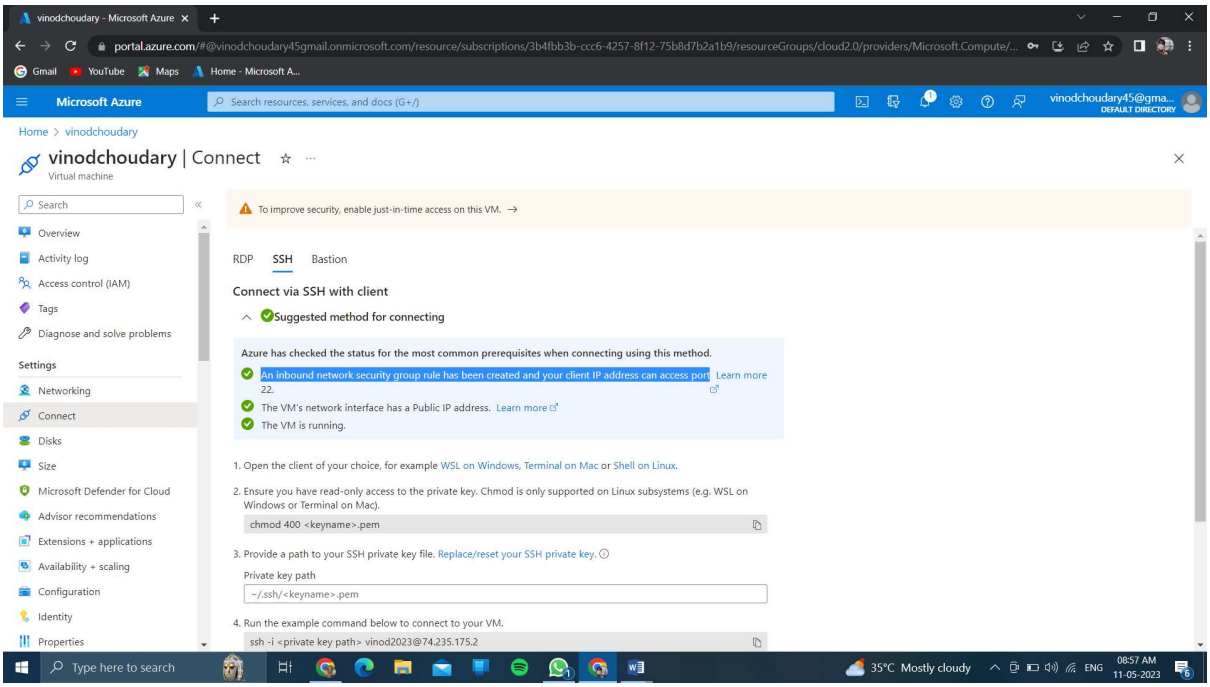
NOW YOU CAN SEE YOUR NAME OF YOUR VIRTUAL MACHINE....



CLICK ON <<CONNECT>>

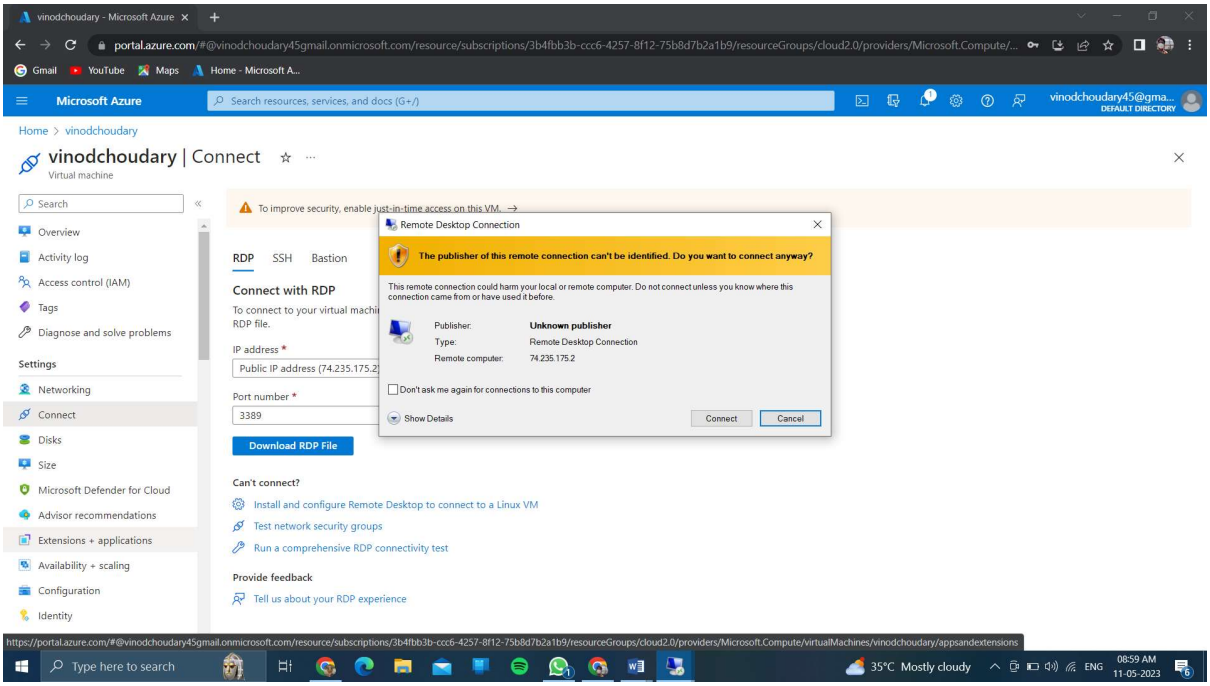


AND WAIT FOR FEW MINUTES FOR CHECKING THE NETWORK SECURITY OF CLIENT IP –ADDRESS IN SSH....

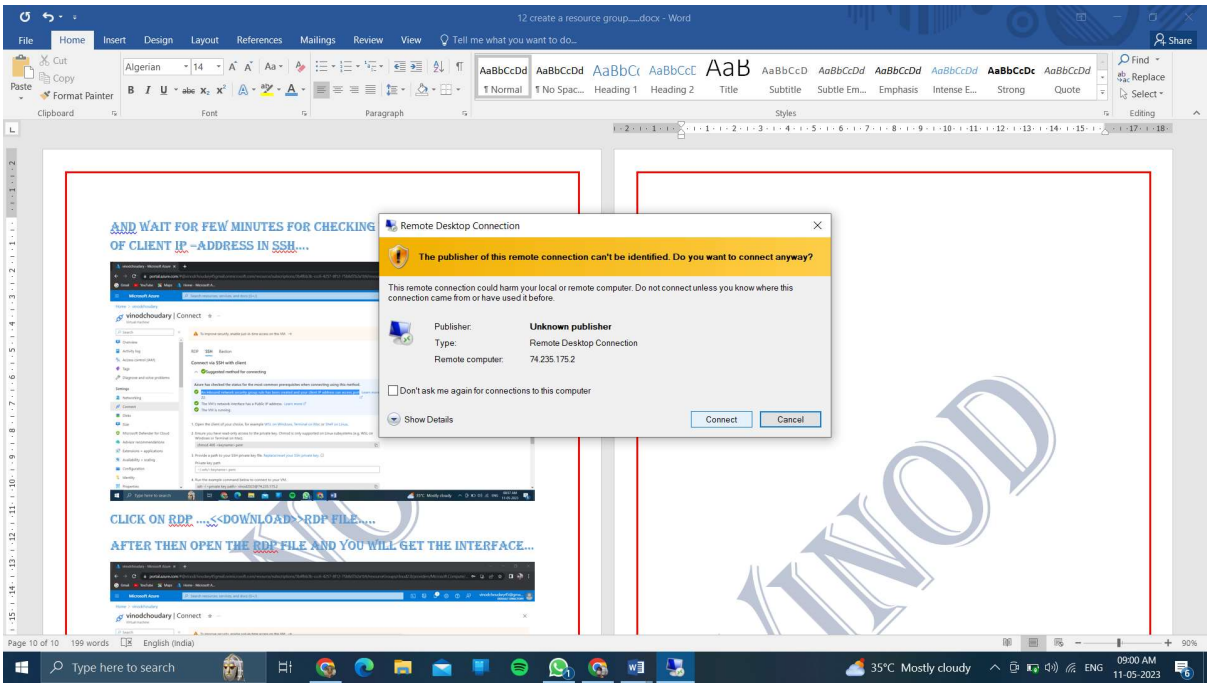


CLICK ON RDP ....<<DOWNLOAD>>RDP FILE.....

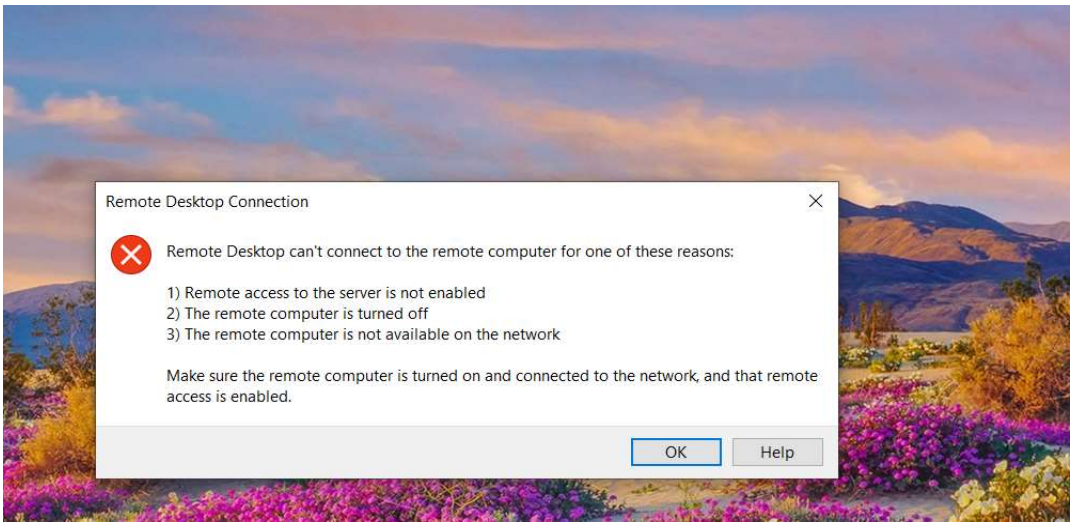
AFTER THEN OPEN THE RDP FILE AND YOU WILL GET THE INTERFACE...



THEN CLICK ON CONNECT....



THEN AFTER YOU WILL GET OUTPUT .....OR OTHERWISE YOU WILL GET THE REMOTE CONNECT DESKTOP...



EXP 16: DEMONSTRATE PLATFORM AS A SERVICE (PAAS) CREATE AND CONFIGURE A NEW VM IMAGE IN ANY PUBLIC CLOUD SERVICE PROVIDER

AIM:

To demonstrate platform as a service (paas) create and configure a new vm image in any public cloud service provider

Procedure:

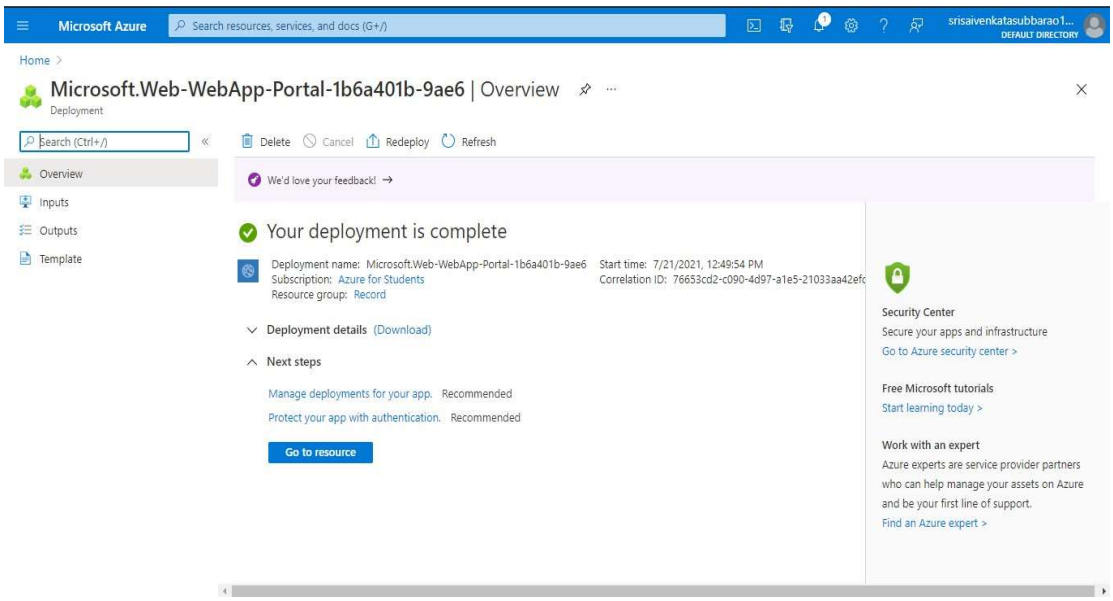
STEP1: FIRSTLY, GO TO APPSERVICE TO CREATE AN WEBAPP.

STEP2: ENTER THE RESOURCE GROUP AND WEBAPP NAME AND REGIONAND SELECT THE LINUX OS.

STEP3: AFTER ENTER THE ALL THE NECESSARY THINGS CLICK THE REVIEW AND CREATE AND CLICK THE CREATE THE WEB APP.

STEP4: AND OUR DEPLOYMENT IS COMPLETED.

OUTPUT:



EXP17. CREATE A SIMPLE WEB APPLICATION USING JAVA OR PYTHON AND HOST IT IN ANY PUBLIC CLOUD SERVICE PROVIDER (AZURE/GCP/AWS) TO DEMONSTRATE PLATFORM AS A SERVICE (PAAS)

AIM: CREATE A SIMPLE WEB SITE USING ANY PUBLIC CLOUD SERVICE PROVIDER (AZURE/GCP/AWS) AND CHECK THE PUBLIC ACCESSIBILITY OFTHE STORED FILE TO DEMONSTRATE STORAGE AS A SERVICE.

Procedure:

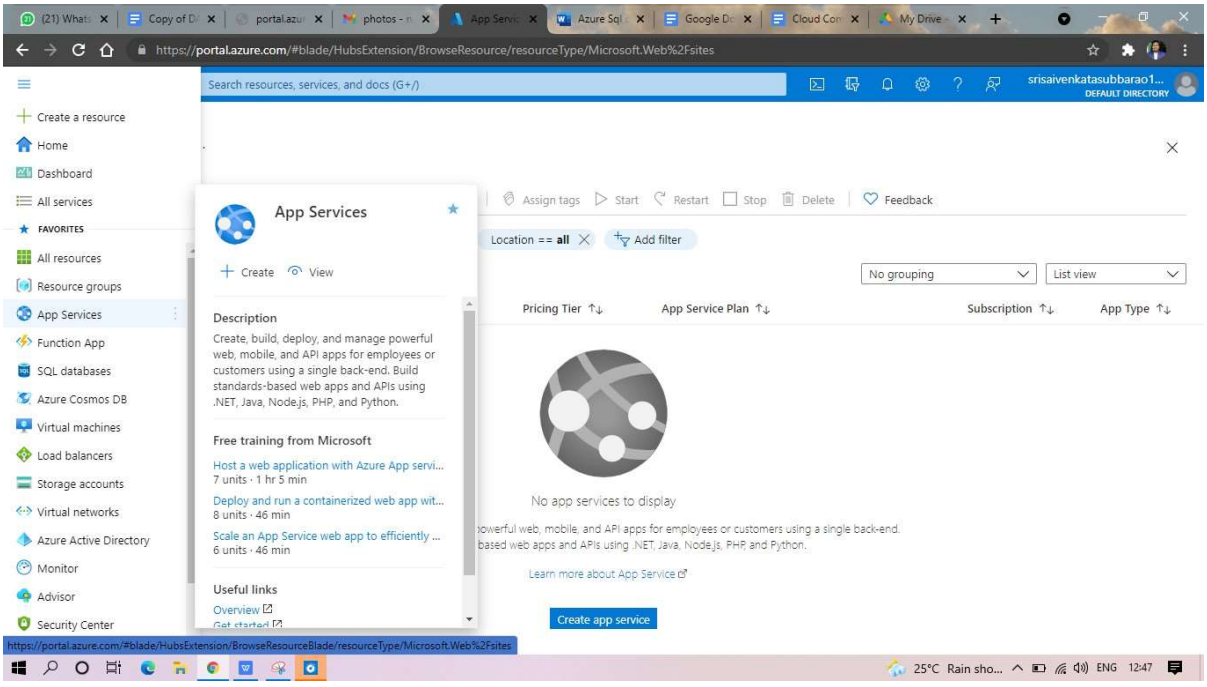
STEP1: FIRSTLY, GO TO APPSERVICE TO CREATE AN WEBAPP.

STEP2: ENTER THE RESOURCE GROUP AND WEBAPP NAME AND REGIONAND SELECT THE LINUX OS.

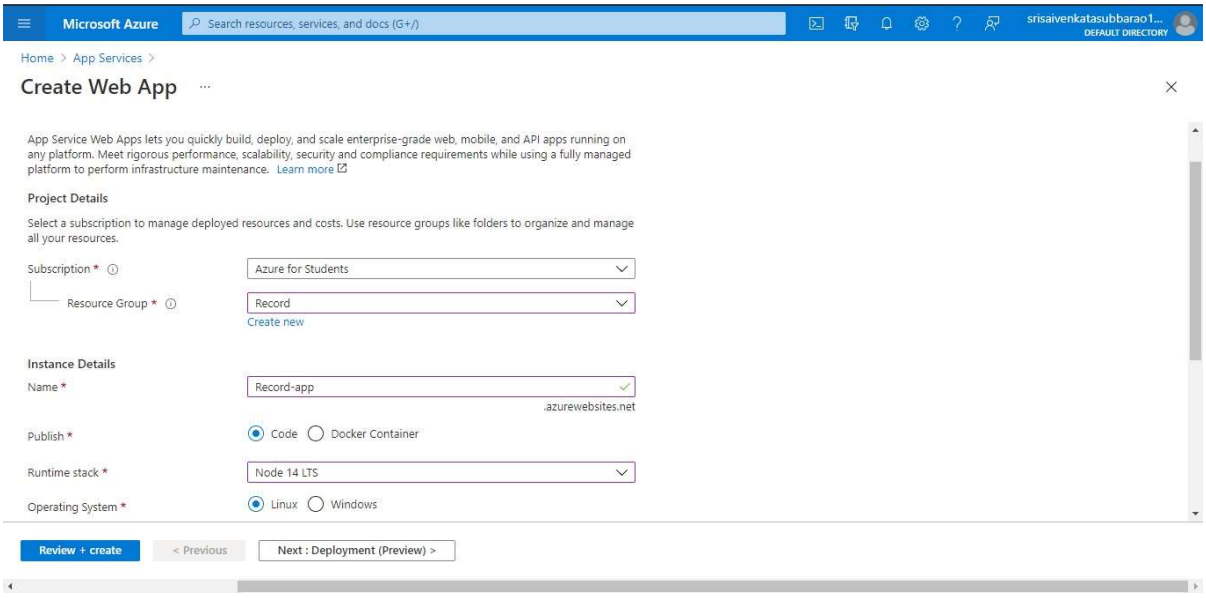
STEP3: AFTER ENTER THE ALL THE NECESSARY THINGS CLICK THEREVIEW AND CREATE AND CLICK THE CREATE THE WEB APP.

IMPLEMENTATION:

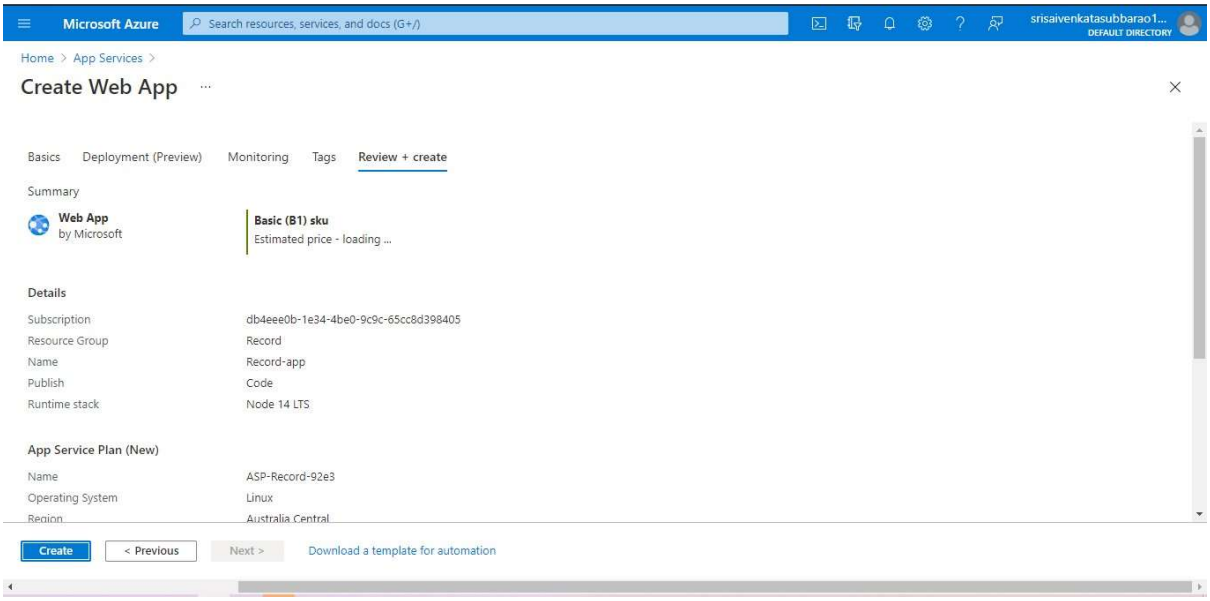
STEP1: FIRSTLY, GO TO APPSERVICE TO CREATE AN WEBAPP.

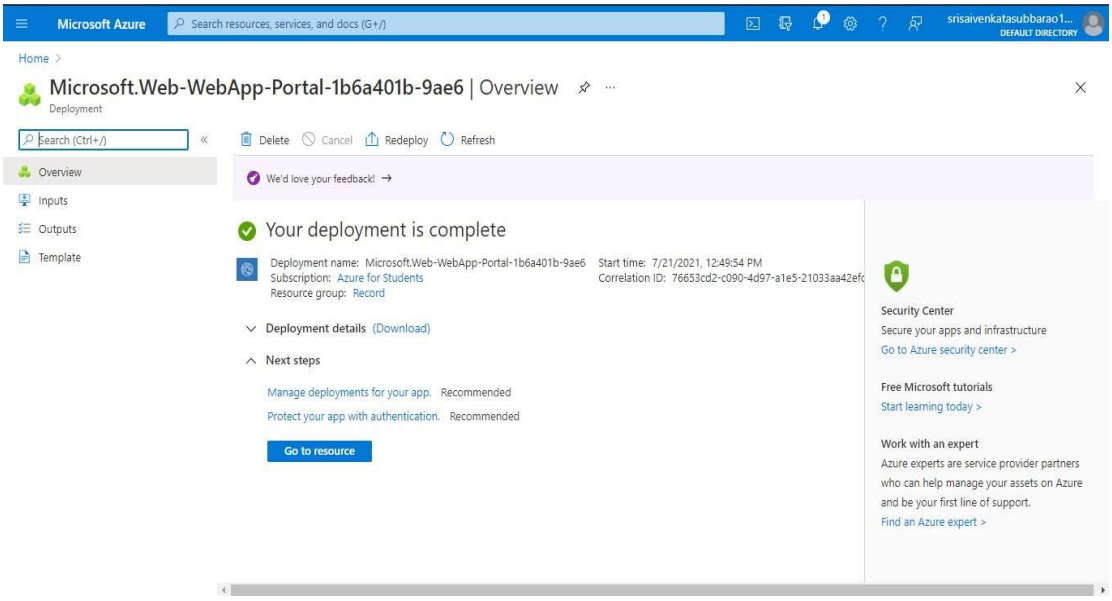


STEP2: ENTER THE RESOURCE GROUP AND WEBAPP NAME AND REGIONAND SELECT THE LINUX OS.



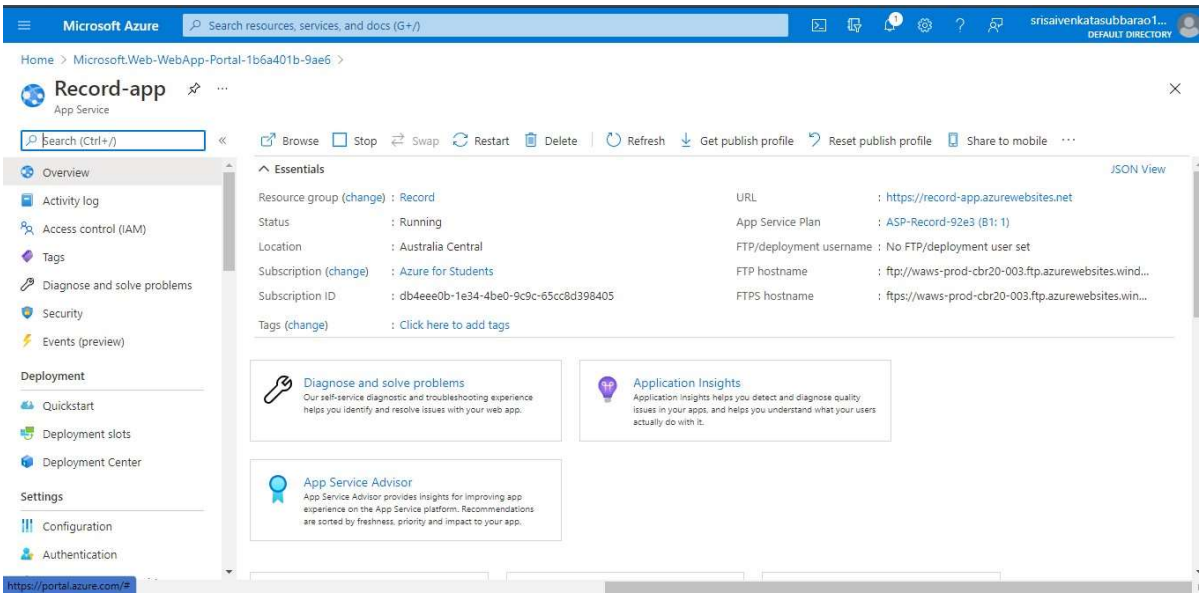
STEP3: AFTER ENTER THE ALL THE NECESSARY THINGS CLICK THEREVIEW AND CREATE AND CLICK THE CREATE THE WEB APP.



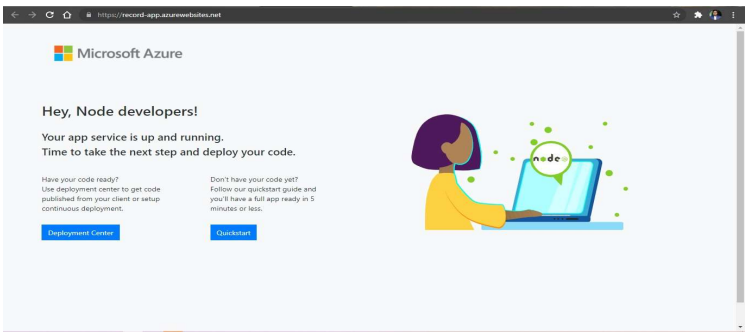


STEP4: AND OUR DEPLOYMENT IS COMPLETED.

STEP5: GOTO WEBSITE URL LINK.



STEP6: THIS IS OUR WEBAPP SERVICE.



EXP 18: DEMONSTRATE STORAGE AS A SERVICE (SAAS) CREATE AND CONFIGURE A NEW VM IMAGE IN ANY PUBLIC CLOUD SERVICE PROVIDER

AIM:

To DEMONSTRATE STORAGE AS A SERVICE (SAAS) CREATE AND CONFIGURE A NEW VM IMAGE IN ANY PUBLIC CLOUD SERVICE PROVIDER.

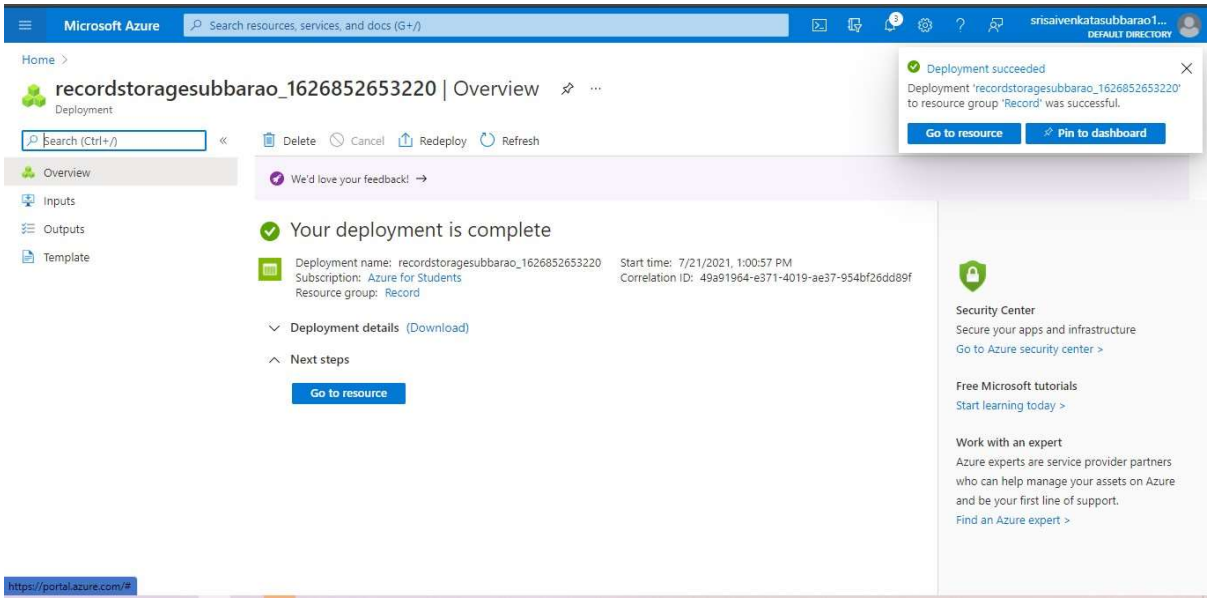
PROCEDURE:

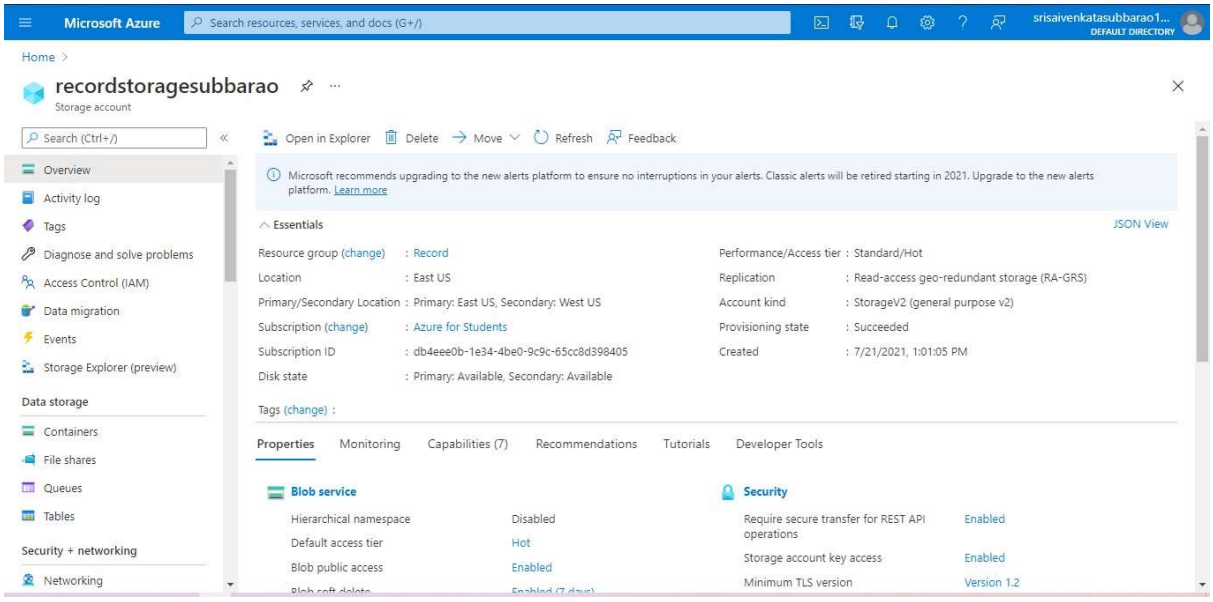
PROCEDURE:

STEP1: OPEN AZURE AND GOTO STORAGE ACCOUNTS AND CREATESTOROAGE ACCOUNT

STEP2: ENTER THE RESOURC GROUP AND AND STORAGE ACCOUNT NAMEAND REVIEW AND CREATE AND CLICK TH CREATE AND YOUR STORAGE ACCOUNT WILL BE DEPLOYED SUCESSFULLY.

OUTPUT:





EXP19.CREATE A STORAGE SERVICE USING ANY PUBLIC CLOUD SERVICE PROVIDER (AZURE/GCP/AWS) AND CHECK THE PUBLIC ACCESSIBILITY OFTHE STORED FILE TO DEMONSTRATE STORAGE AS A SERVICE.

AIM:

To create a storage service using any public cloud service provider (azure/gcp/aws) and check the public accessibility ofthe stored file to demonstrate storage as a service.

PROCEDURE:

STEP1: OPEN AZURE AND GOTO STORAGE ACCOUNTS AND CREATESTOROAGE ACCOUNT

STEP2: ENTER THE RESOURC GROUP AND AND STORAGE ACCOUNT NAMEAND REVIEW AND CREATE AND CLICK TH CREATE AND YOUR STORAGE ACCOUNT WILL BE DEPLOYED SUCESSFULLY.

STEP3: OUR STORAGE ACCOUNT IS CREATED.

STEP4: GOTO STATIC WEBSITE

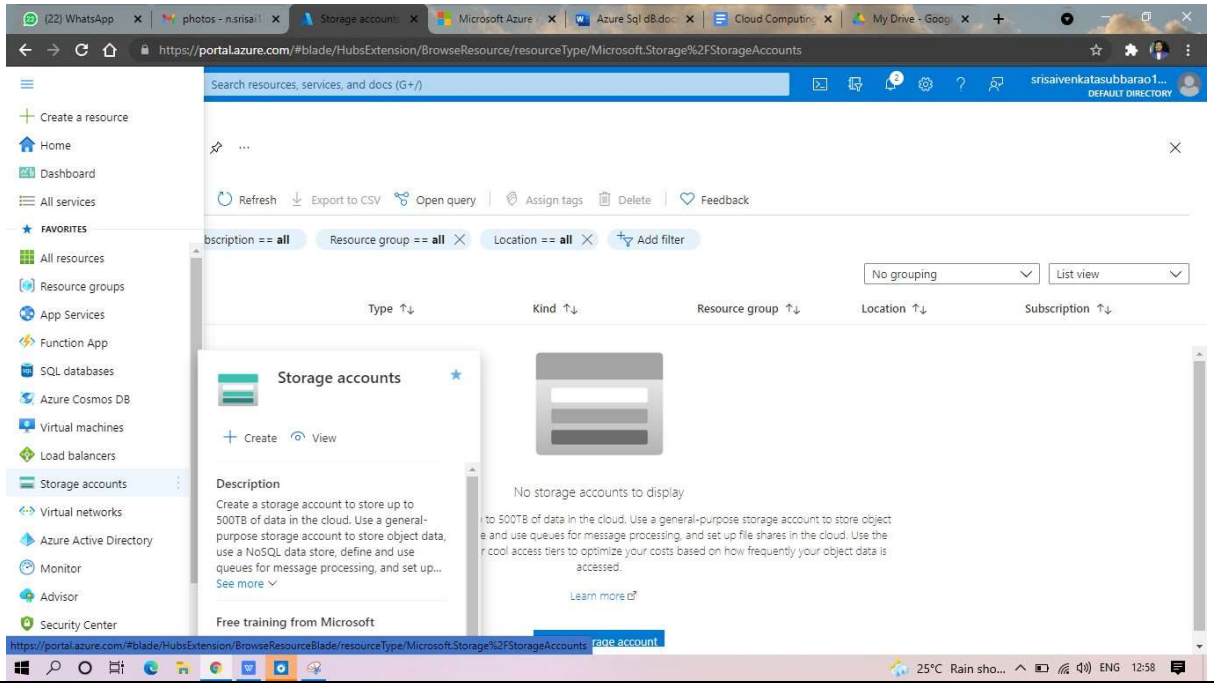
STEP5: AND ENABLE AND ENTER YOUR INDEX AND ERROR HTML FILES NAMES.

STEP6: AND GOTO STORAGE EXPLORR(REVIEW) AND AND GOTO BLOBCONTAINERS AND WEB AND UPLOAD THE TWO HTML FILES INIT

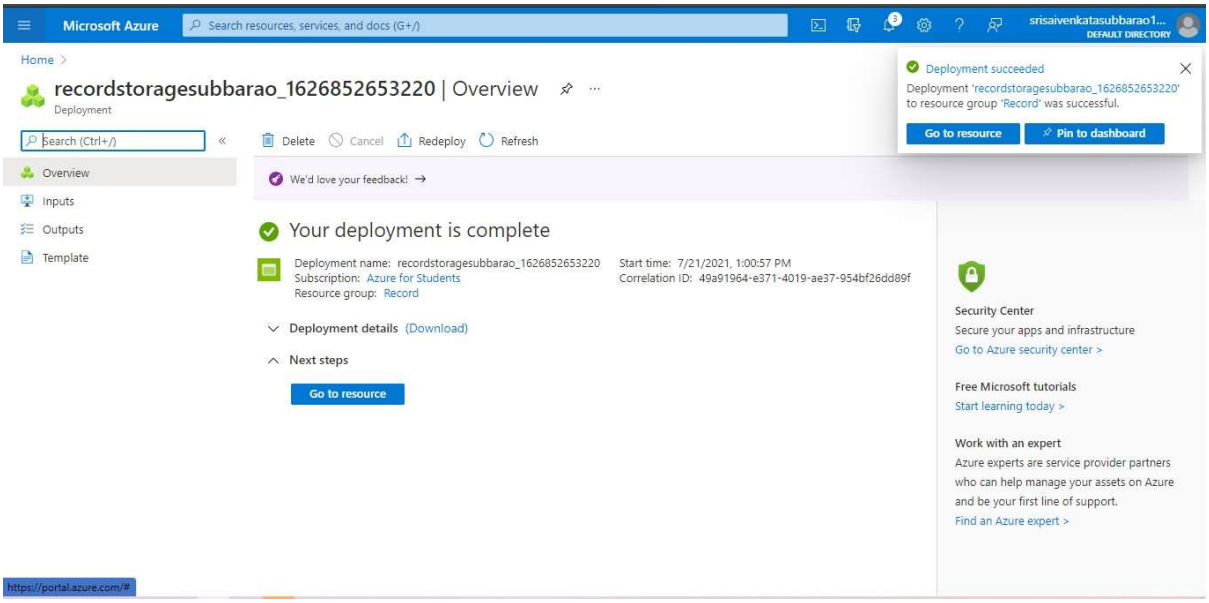
STEP7: AND AGAIN RETURN TO STATIC WEBSITE AND OPEN THE PRIMARYLINK AND YOUR WEB PAGE IS CREATED

IMPLEMENTATION:

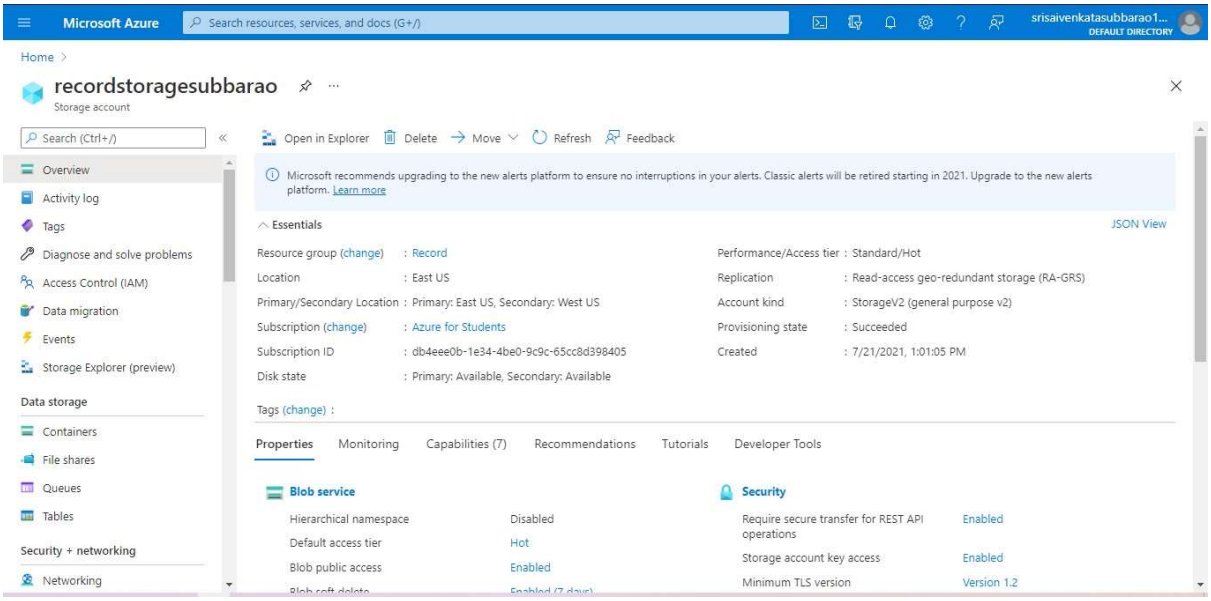
STEP1: OPEN AZURE AND GOTO STORAGE ACCOUNTS AND CREATESTOROAGE ACCOUNT



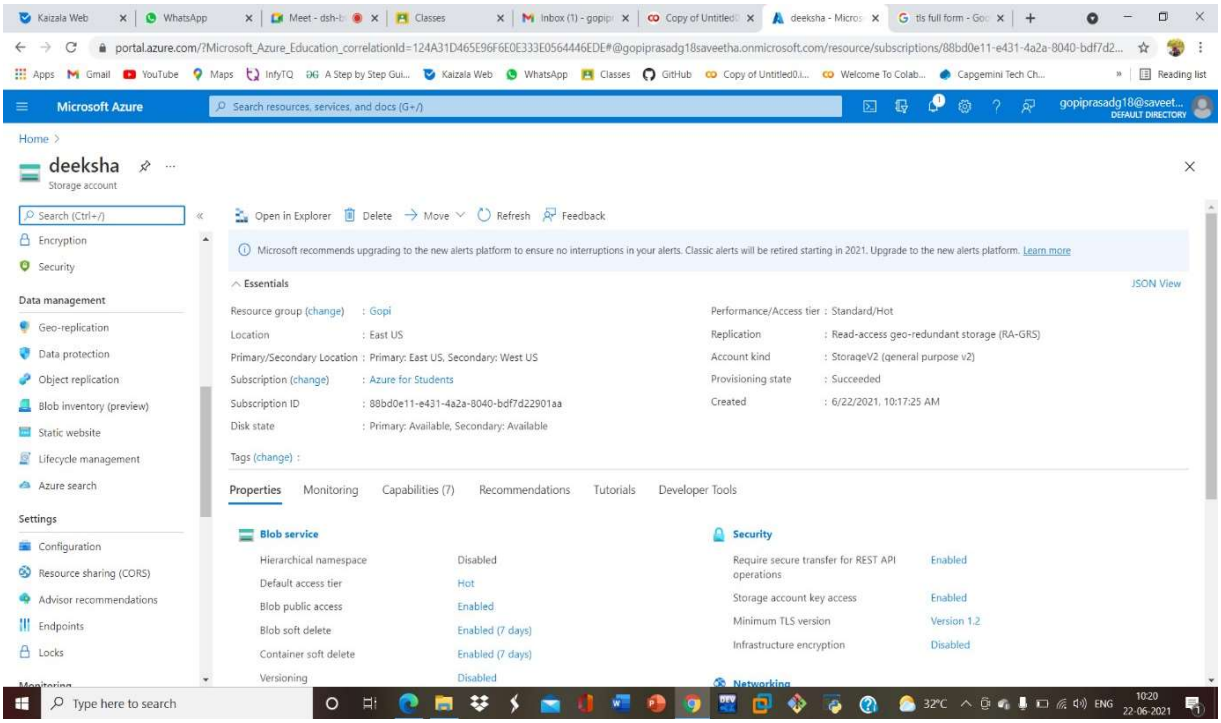
STEP2: ENTER THE RESOURC GROUP AND AND STORAGE ACCOUNT NAMEAND REVIEW AND CREATE AND CLICK TH CREATE AND YOUR STORAGE ACCOUNT WILL BE DEPLOYED SUCESSFULLY.



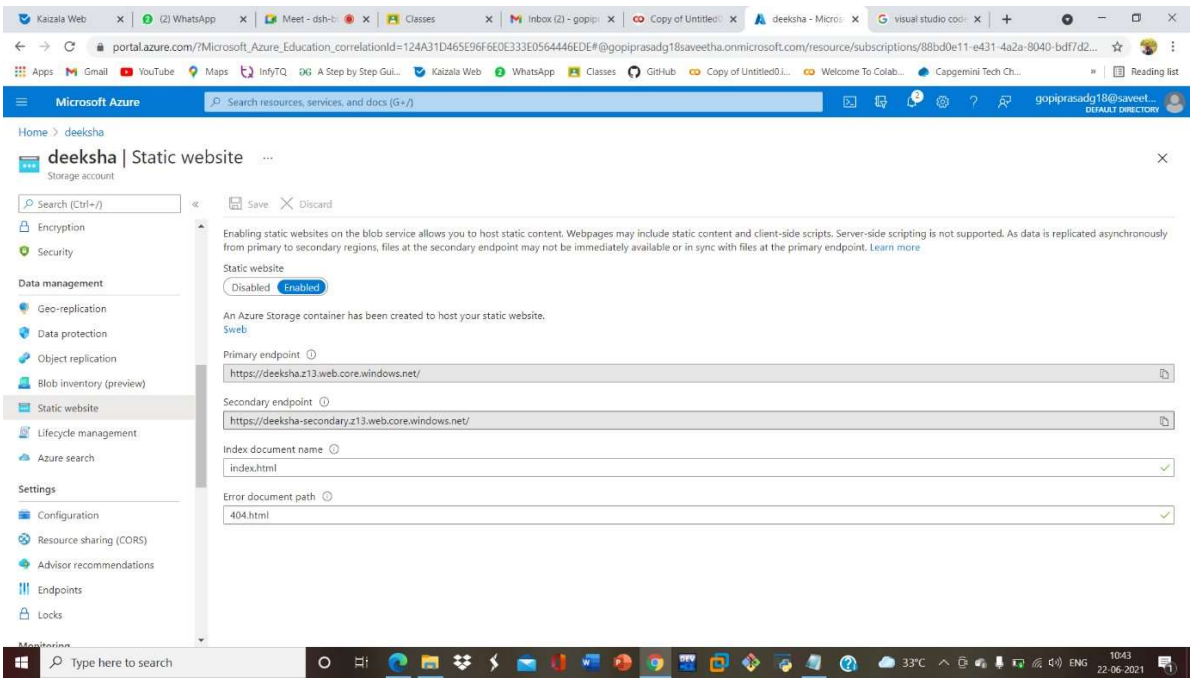
STP3: AND OUR STORAGE ACCOUNT IS CREATED.



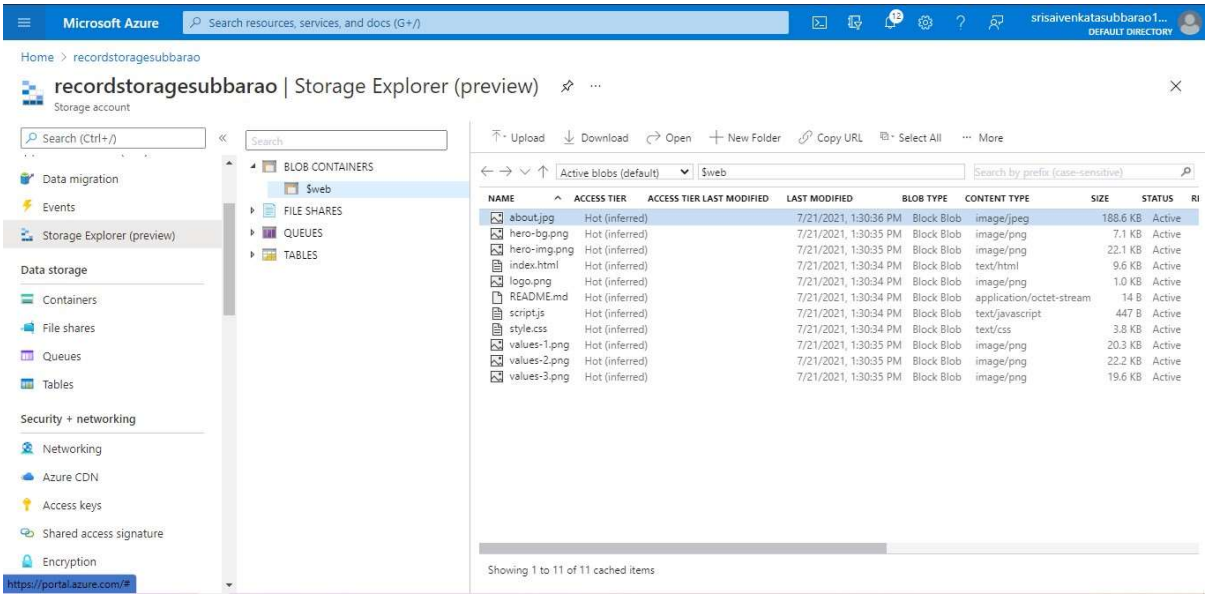
STEP4: GOTO STATIC WEBSITE



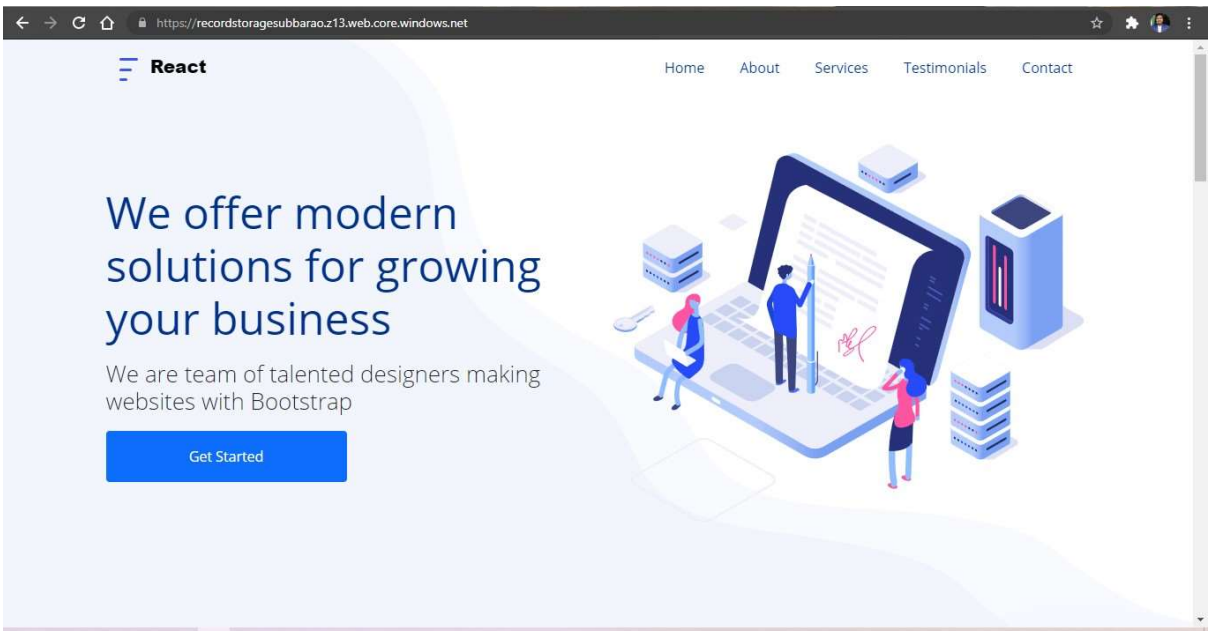
STEP5: AND ENABLE AND ENTER YOUR INDEX AND ERROR HTMLFILESNAMES.



STEP6: AND GOTO STORAGE EXPLORR(REVIEW) AND AND GOTO BLOBCONTAINERS AND WEB AND UPLOAD THE TWO HTML FILES INIT



STEP7: AND AGAIN RETURN TO STATIC WEBSITE AND OPEN THE PRIMARYLINK AND YOUR WEB PAGE IS CREATED



EXP 20: DATABASE AS A SERVICE (DAAS) CREATE AND CONFIGURE A NEW VM IMAGE IN ANY PUBLIC CLOUD SERVICE PROVIDER

AIM:

TO CREATE DATABASE AS A SERVICE (DAAS) CREATE AND CONFIGURE A NEW VM IMAGE IN ANY PUBLIC CLOUD SERVICE PROVIDER.

PROCEDURE:

STEP1: GOTO AZURE AND GOTO SQLDATABASE.

STEP 02: NOW CREATE A SQL DATABSE

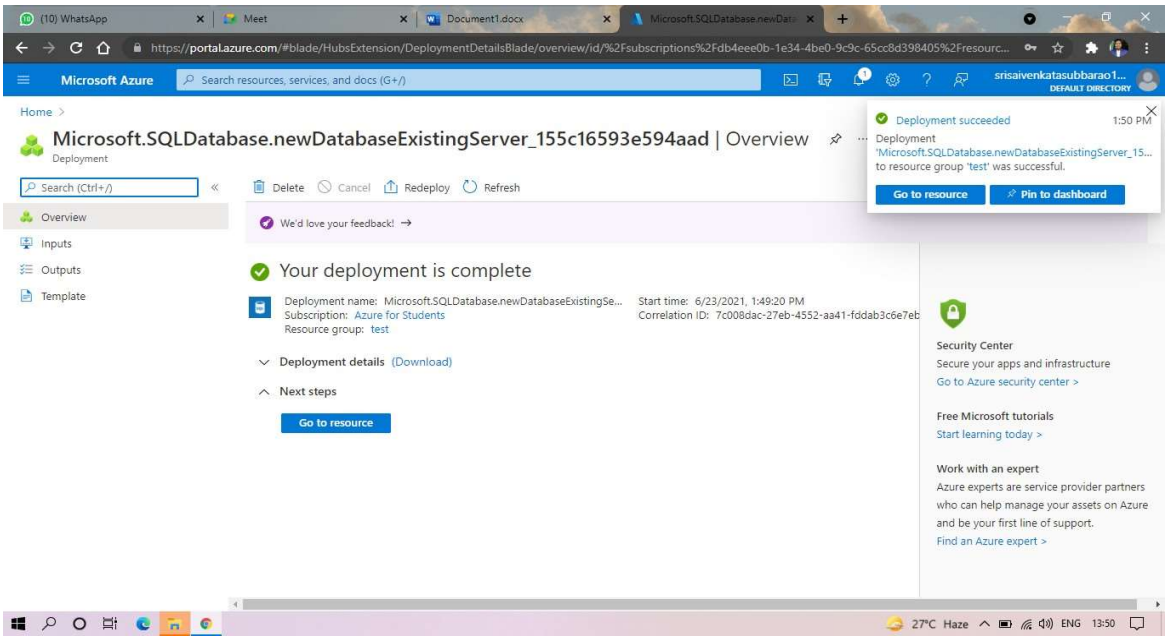
STEP3: SELECT THE RESOURCE GROUP AND ENTER THE SERVERNAMETHAT APPLICABLE.

STEP4: IN NETWORKING SELECT ALLOW AZURE SERVICES AND RESOURCES TO ACCESS THIS SERVER.

STEP5: IN ADDITIONAL SETTINGS SELECT SAMPLE.

STEP6:AND THE SQL DATABASE IS DEPLOYED

OUTPUT:



EXP21.CREATE A SQL STORAGE SERVICE AND PERFORM A BASIC QUERY USINGANY PUBLIC CLOUD SERVICE PROVIDER (AZURE/GCP/AWS) TO DEMONSTRATE DATABASE AS A SERVICE (DAAS)

AIM: CREATE A SQL STORAGE SERVICE AND PERFORM A BASIC QUERY USINGANY PUBLIC CLOUD SERVICE PROVIDER (AZURE/GCP/AWS) TO DEMONSTRATE DATABASE AS A SERVICE (DAAS)

PROCEDURE:

STEP1: GOTO AZURE AND GOTO SQLDATABASE.

STEP 02: Now Create a Sql Databse

STEP3: SELECT THE RESOURCE GROUP AND ENTER THE SERVERNAMETHAT APPLICABLE.

STEP4: IN NETWORKING SELECT ALLOW AZURE SERVICES AND RESOURCES TO ACCESS THIS SERVER.

STEP5: IN ADDITIONAL SETTINGS SELECT SAMPLE.

STEP6:AND THE SQL DATABASE IS DEPLOYED

TEP7: NOW GOTO QUERY EDITOR.

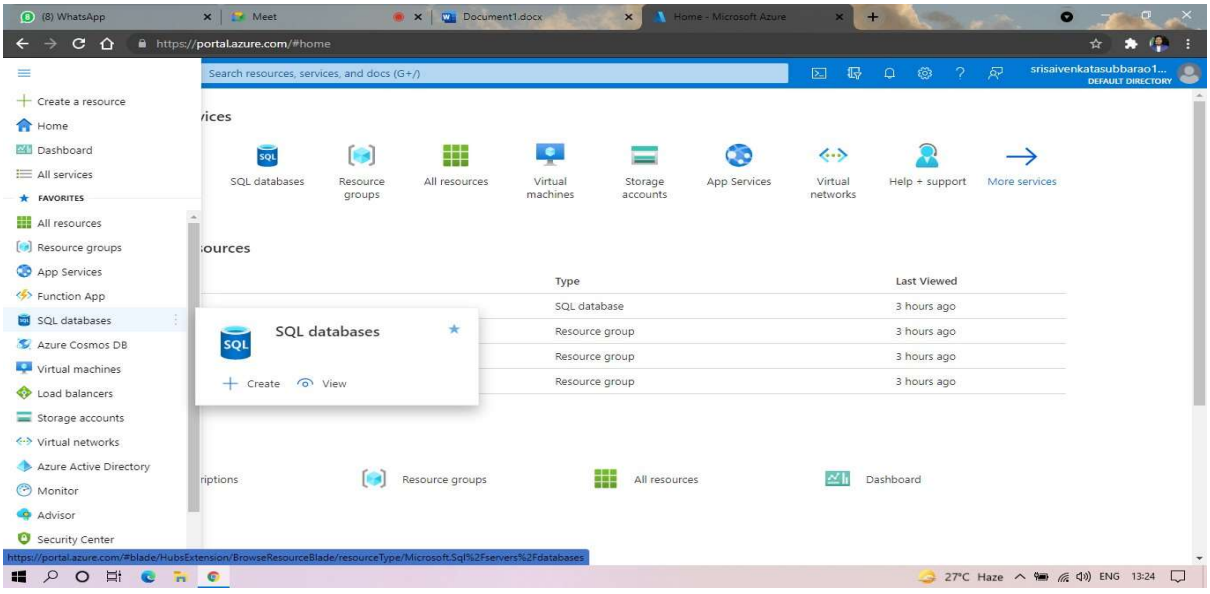
STEP8:NOW AGAIN LOGIN TO THE SQLDATADATABASE

STEP9: OUR TABLES WILL SHOWN AND TYPE THE QUERY TO EXCUTED

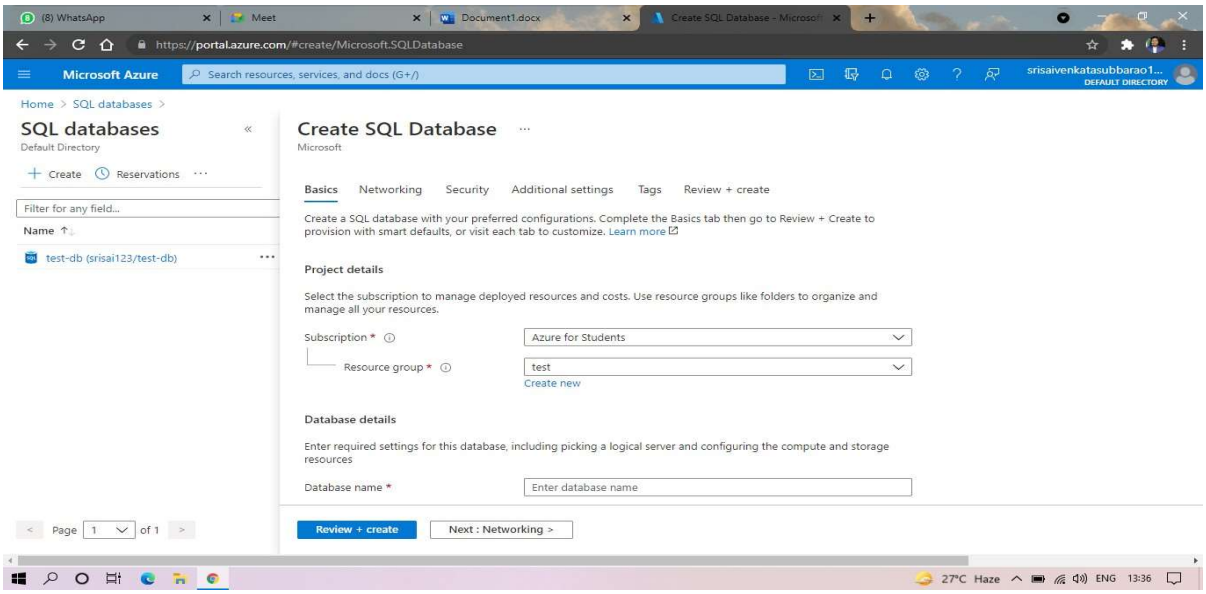
IMPLEMENTATION:

STEP1: GOTO AZURE AND GOTO SQLDATABASE.

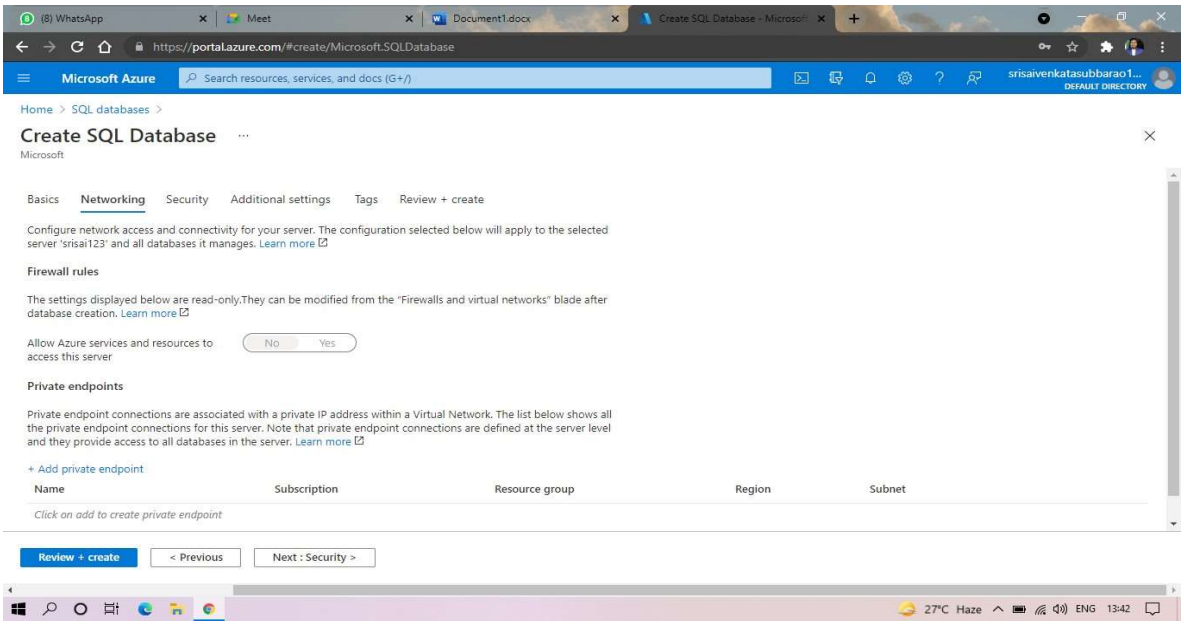
STEP 02:- Now Create a Sql Databse



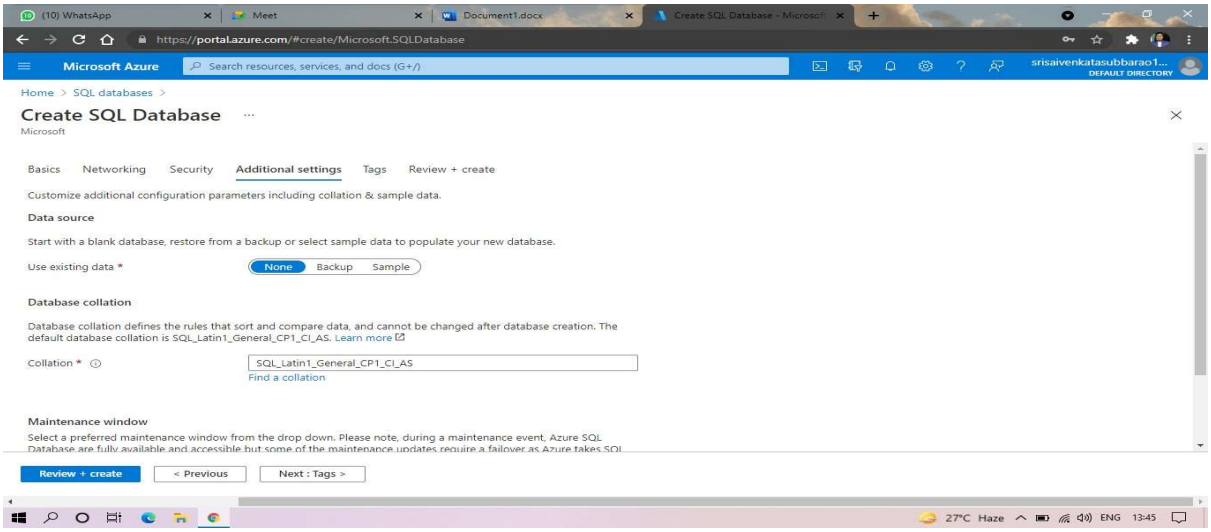
STEP3: SELECT THE RESOURCE GROUP AND ENTER THE SERVERNAMETHAT APPLICABLE.



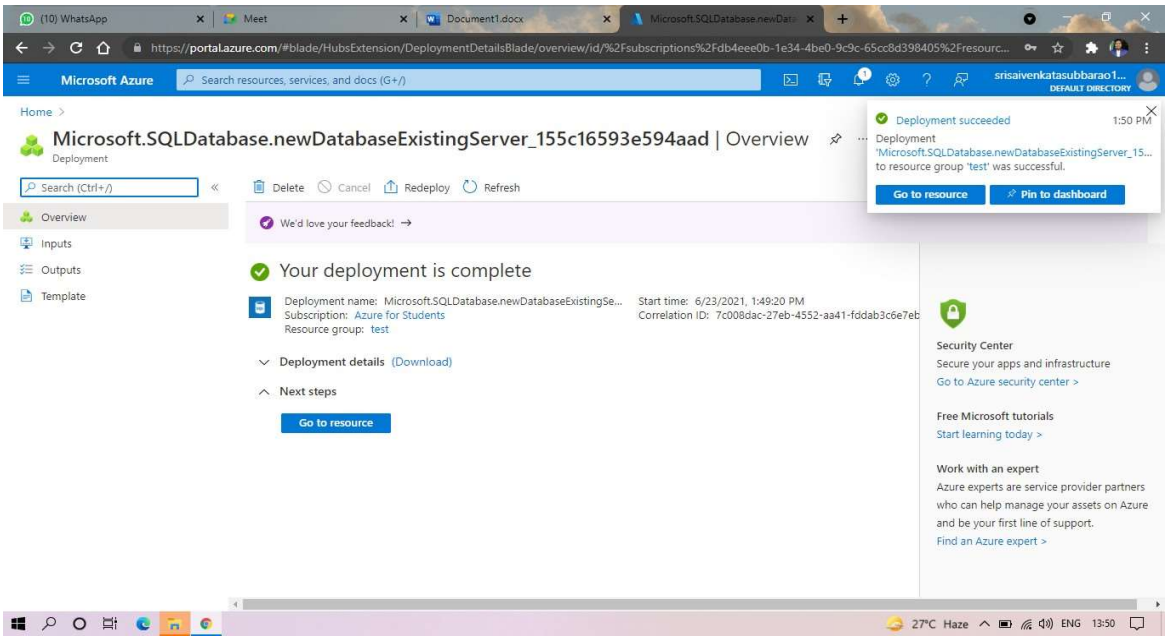
STEP4: IN NETWORKING SELECT ALLOW AZURE SERVICES AND RESOURCES TO ACCESS THIS SERVER.



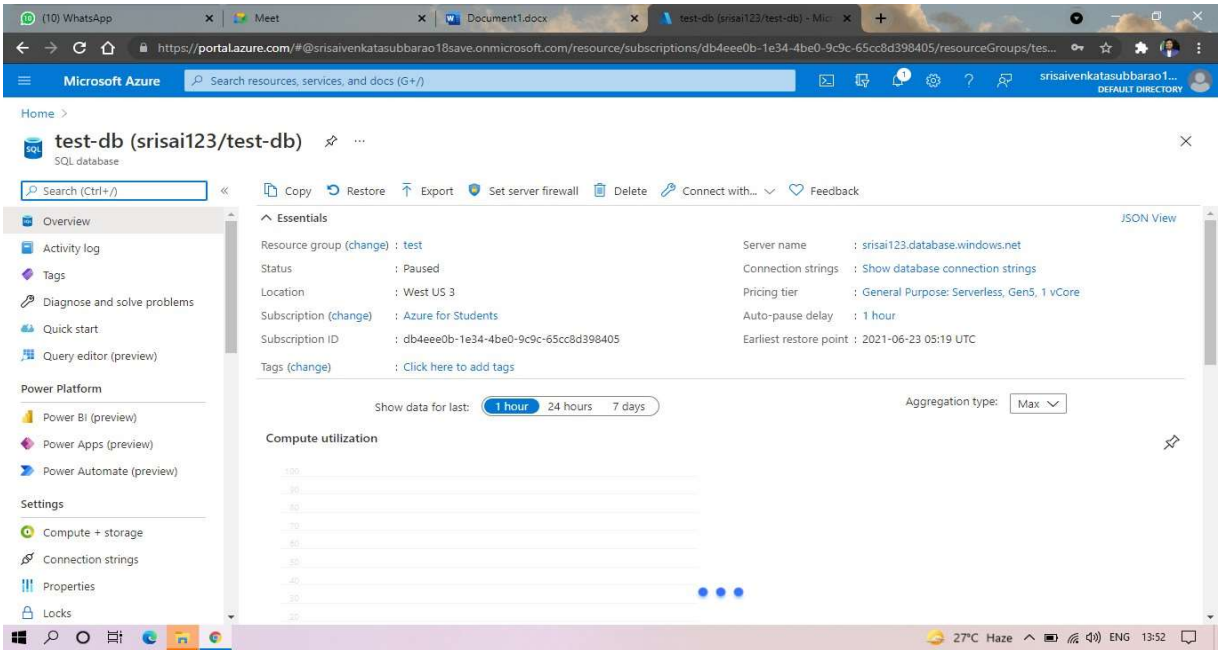
STEP5: IN ADDITIONAL SETTINGS SELECT SAMPLE.



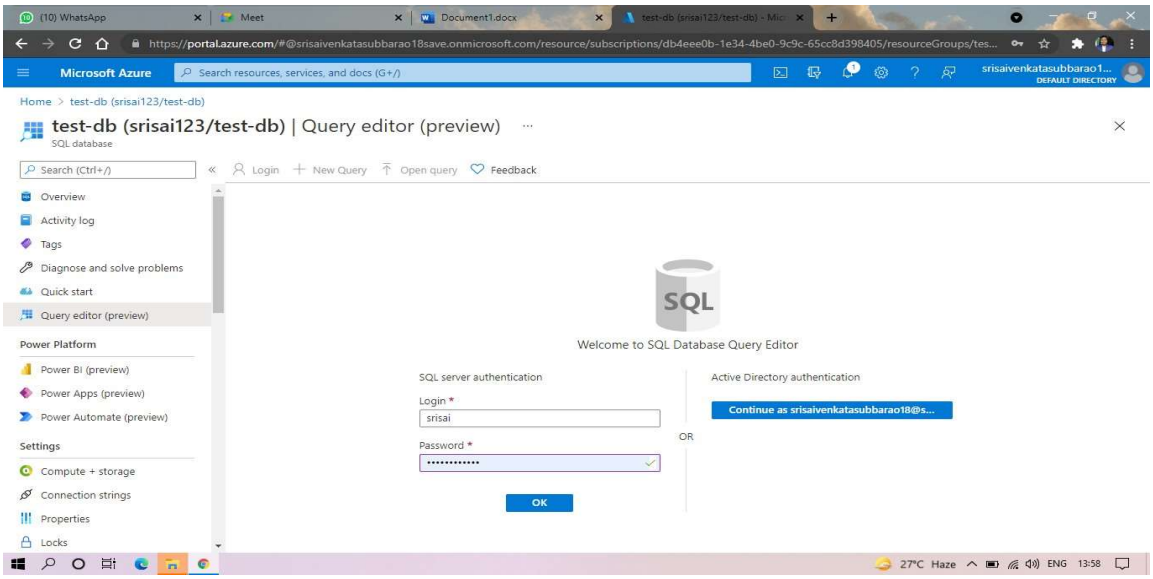
STEP6:AND THE SQL DATABASE IS DEPLOYED.



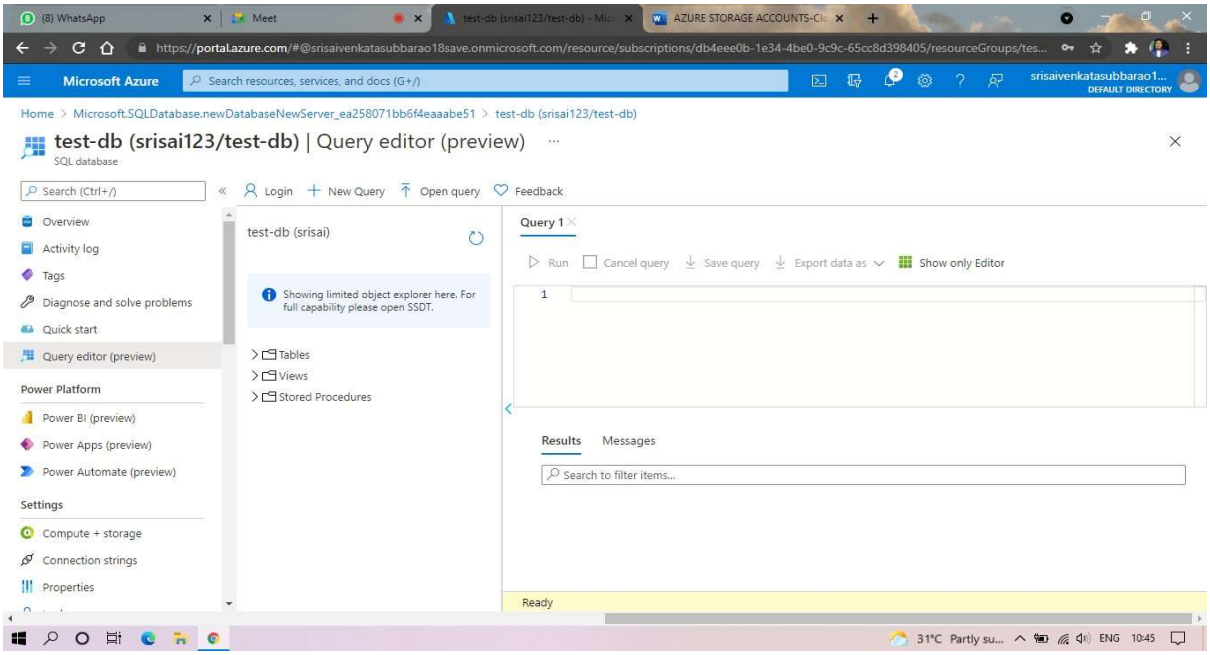
STEP7:AND NOW GOTO QUERY EDITOR.



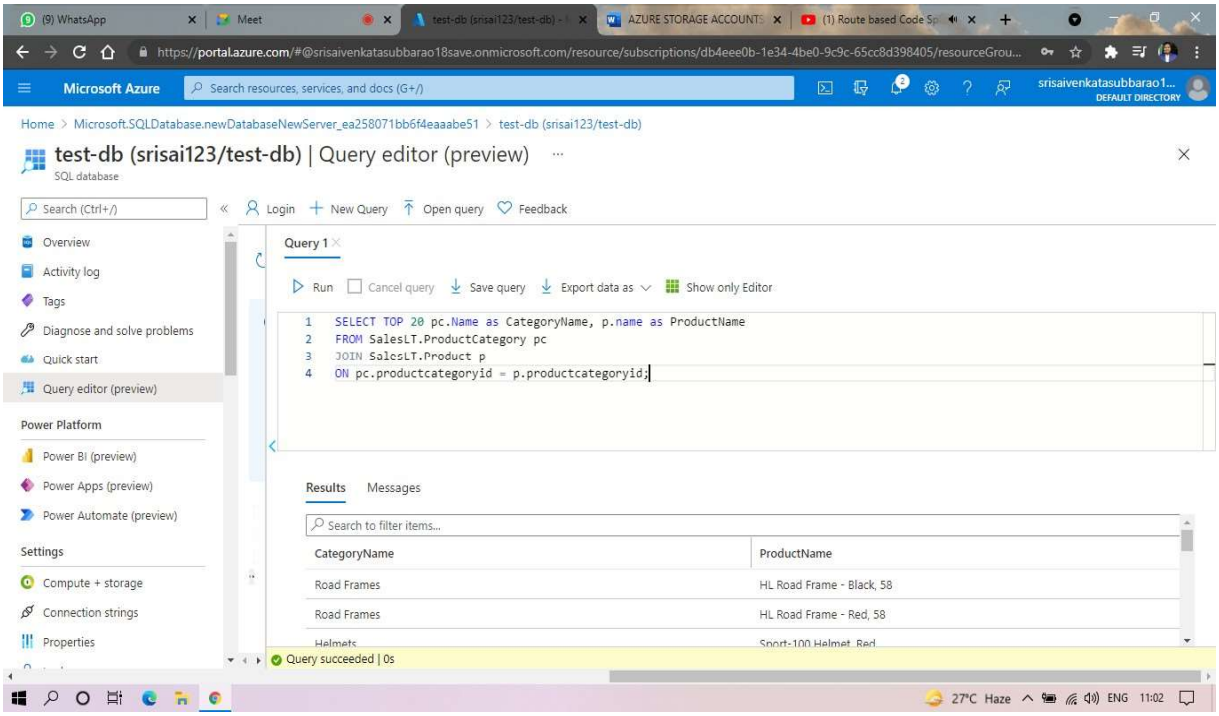
STEP8:AND NOW AGAIN LOGIN TO THE SQLDATADATABASE



STEP9: AND OUR TABLES WILL SHOWN AND TYPE THE QUERY TOEXCUTED.



STEP10: AND OUR OUTPUT IS READY.



EXP. 22: PERFORM THE BASIC CONFIGURATION SETUP FOR INSTALLINGHADOOP 2.X LIKE CREATING THE HDUSER AND SSH LOCALHOST

AIM: PERFORM THE BASIC CONFIGURATION SETUP FOR INSTALLINGHADOOP 2.X LIKE CREATING THE HDUSER AND SSH LOCALHOST

PROCEDURE:

Step 1 – System Update

$ sudo apt-get update

Step 2 – Install Java and Set JAVA_HOME
//This first thing to do is to setup the webupd8 ppa on your system. Run the following command and proceed.
$ sudo apt-add-repository ppa:webupd8team/java
$ sudo apt-get update
//After setting up the ppa repository, update the package cache as well.
//Install the Java 8 installer
$ sudo apt-get install oracle-java8-installer

// After the installation is finished, Oracle Java is setup. Run the java command again to check the version and vendor.

[or]

$ sudo apt-get install default-jdk
$ java -version

Step 3 – Add a dedicated Hadoop user
$ sudo addgroup hadoop

$ sudo adduser --ingroup hadoop hduser

// Add hduser to sudo user group

$ sudo adduser hduser sudo

Step 4 – Install SSH and Create Certificates
$ sudo apt-get install ssh

$ su hduser

$ ssh-keygen -t rsa -P ""

// Set Environmental variables
$ cat $HOME/.ssh/id_rsa.pub >> $HOME/.ssh/authorized_keys

Step 5 – Check if SSH works

$ ssh localhost

Step 6 – Install Hadoop

// Extract Hadoop-2.7.2
$ sudo tar xvzf hadoop-2.7.2.tar.gz

// Create a folder 'hadoop' in /usr/local
$ sudo mkdir –p /usr/local/hadoop

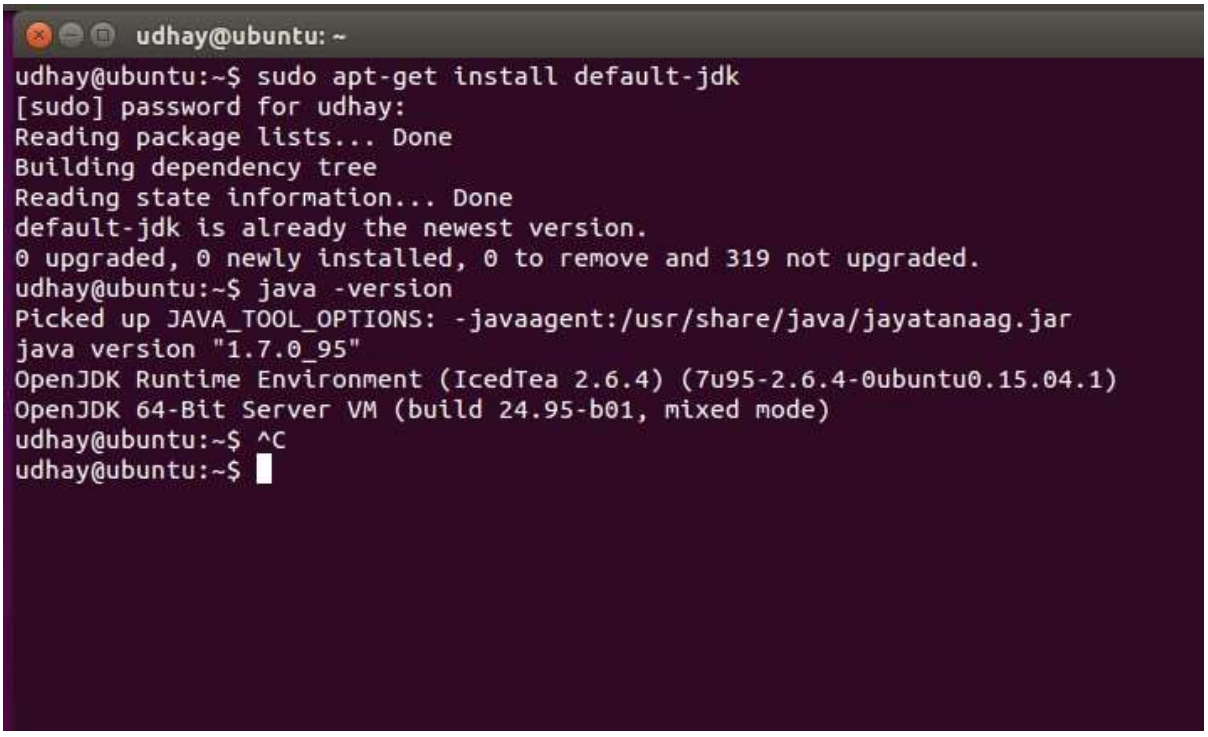
// Move the Hadoop folder to /usr/local/hadoop

$ sudo mv hadoop-2.7.2 /usr/local/hadoop

// Assigning read and write access to Hadoop folder

$ sudo chown –R hduser:hadoop /usr/local/hadoop

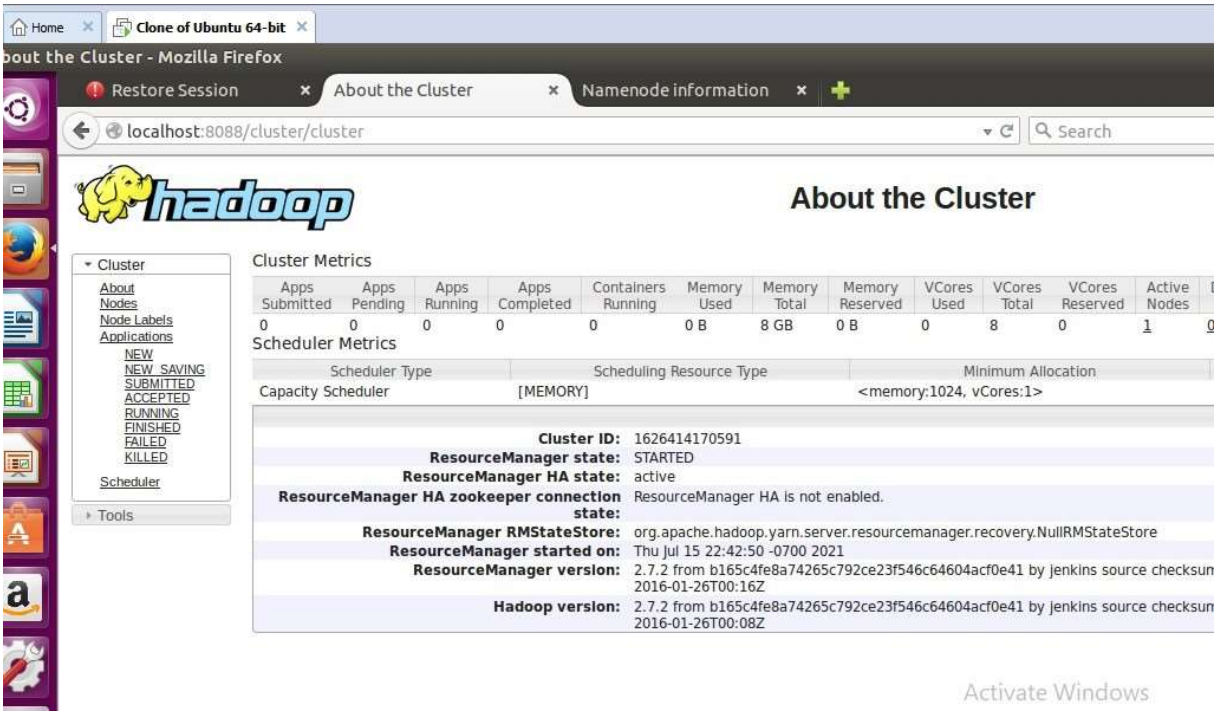
Implementation:



```
udhay@ubuntu:~$ sudo apt-get install ssh
Reading package lists... Done
Building dependency tree
Reading state information... Done
ssh is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 319 not upgraded.
udhay@ubuntu:~$ su hduser
Password:
hduser@ubuntu:/home/udhay$
```

```
udhay@ubuntu:~$ su hduser
Password:
hduser@ubuntu:/home/udhay$ ssh-keygen -t rsa -P ""
Generating public/private rsa key pair.
Enter file in which to save the key (/home/hduser/.ssh/id_rsa):
/home/hduser/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Your identification has been saved in /home/hduser/.ssh/id_rsa.
Your public key has been saved in /home/hduser/.ssh/id_rsa.pub.
The key fingerprint is:
09:0f:15:f2:b2:b7:5e:11:1a:6c:d3:2f:c3:09:02:15 hduser@ubuntu
The key's randomart image is:
+---[RSA 2048]----+
|     ..E.o.      |
|      . = .      |
|       = B o     |
|        O B +    |
|       . S * .   |
|        . . +    |
|         . .     |
|        . .      |
|         .       |
+-----------------+
hduser@ubuntu:/home/udhay$
```

```
hduser@ubuntu:/home/udhay$ cat $HOME/.ssh/id_rsa.pub >> $HOME/.ssh/authorized_keys
hduser@ubuntu:/home/udhay$ ssh localhost
Welcome to Ubuntu 15.04 (GNU/Linux 3.19.0-84-generic x86_64)

 * Documentation:  https://help.ubuntu.com/

Last login: Thu Jul 15 22:00:14 2021 from localhost
hduser@ubuntu:~$
```


Home
Clone of Ubuntu 64-bit
bout the Cluster - Mozilla Firefox
Restore Session
About the Cluster
Namenode information
localhost:8088/cluster/cluster
Search
hadoop
About the Cluster
Cluster
About
Nodes
Node Labels
Applications
NEW
NEW_SAVING
SUBMITTED
ACCEPTED
RUNNING
FINISHED
FAILED
KILLED
Scheduler
Tools
Cluster Metrics
Apps Submitted
Apps Pending
Apps Running
Apps Completed
Containers Running
Memory Used
Memory Total
Memory Reserved
VCores Used
VCores Total
VCores Reserved
Active Nodes
0 0 0 0 0 0 B 8 GB 0 B 0 8 0 1
Scheduler Metrics
Scheduler Type
Scheduling Resource Type
Minimum Allocation
Capacity Scheduler
[MEMORY]
<memory:1024, vCores:1>
Cluster ID: 1626414170591
ResourceManager state: STARTED
ResourceManager HA state: active
ResourceManager HA zookeeper connection state: ResourceManager HA is not enabled.
ResourceManager RMStateStore: org.apache.hadoop.yarn.server.resourcemanager.recovery.NullRMStateStore
ResourceManager started on: Thu Jul 15 22:42:50 -0700 2021
ResourceManager version: 2.7.2 from b165c4fe8a74265c792ce23f546c64604acf0e41 by jenkins source checksum 2016-01-26T00:16Z
Hadoop version: 2.7.2 from b165c4fe8a74265c792ce23f546c64604acf0e41 by jenkins source checksum 2016-01-26T00:08Z
Activate Windows

EXP. 23: INSTALL HADOOP 2.X AND CONFIGURE THE NAME NODE AND DATANODE.

AIM: INSTALL HADOOP 2.X AND CONFIGURE THE NAME NODE AND DATANODE.

PROCEDURE:

Step 7 - Modify Hadoop config files
//Hadoop Environmental variable setting – The following files will be modified

1. ~/.bashrc
2. /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/hadoop-env.sh
3. /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/core-site.xml
4. /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/hdfs-site.xml
5. /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/yarn-site.xml
6. /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/mapred-site.xml.template

$ sudo nano ~/.bashrc

// Add the following lines at the end of the file

```
export JAVA_HOME=/usr/lib/jvm/java-8-oracle
export HADOOP_HOME=/usr/local/hadoop/hadoop-2.7.2
export PATH=$PATH:$HADOOP_HOME/bin
export PATH=$PATH:$HADOOP_HOME/sbin
export HADOOP_MAPRED_HOME=$HADOOP_HOME
export HADOOP_COMMON_HOME=$HADOOP_HOME
export HADOOP_HDFS_HOME=$HADOOP_HOME
export YARN_HOME=$HADOOP_HOME
HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native
export HADOOP_OPTS="-D.java.library.path=$HADOOP_HOME/lib"
export PATH=$PATH:/usr/local/hadoop/hadoop-2.7.2/bin
```

// Configure Hadoop Files

$ cd /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/

$ sudo nano hadoop-env.sh

// Add following line in hadoop-env.sh – Set JAVA variable in Hadoop

```
# The java implementation to use.
export JAVA_HOME=/usr/lib/jvm/java-8-oracle
```

// Create datanode and namenode

$ sudo mkdir –p /usr/local/hadoop_tmp/hdfs/namenode

$ sudo mkdir –p /usr/local/hadoop_tmp/hdfs/datanode

// Changing ownership to hadoop_tmp

$ sudo chown –R hduser:hadoop /usr/local/hadoop_tmp

// Edit hdfs-site.xml

$ sudo nano hdfs-site.xml

// Add the following lines between <configuration> …… </configuration>

```
<configuration>
<property>
<name>dfs.replication</name>
<value>1</value>
</property>
<property>
<name>dfs.namenode.name.dir</name>
<value>file:/usr/local/hadoop_tmp/hdfs/namenode</value>
</property>
<property>
<name>dfs.datanode.data.dir</name>
<value>file:/usr/local/hadoop_tmp/hdfs/datanode</value>
</property>
</configuration>
```

// Edit core-site.xml

$ sudo nano core-site.xml

// Add the following lines between <configuration> …… </configuration>

```
<configuration>
<property>
<name>fs.default.name</name>
<value>hdfs://localhost:9000</value>
</property>
</configuration>
```

// Edit yarn-site.xml

$ sudo nano yarn-site.xml

// Add the following lines between <configuration> …… </configuration>

```
<configuration>
<property>
<name>yarn.nodemanager.aux-services</name>
<value>mapreduce_shuffle</value>
</property>
<property>
```

```
<name>yarn.nodemanager.aux-services.mapreduce.shuffle.class</name>
<value>org.apache.hadoop.mapred.Shuffle-Handler</value>
</property>
</configuration>
```

// Edit mapred-site.xmsudo

$ cp /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/mapred-site.xml.template /usr/local/hadoop/hadoop-2.7.2/etc/hadoop/mapred-site.xml

$ sudo nano mapred-site.xml

// Add the following lines between <configuration> …… </configuration>

```
<configuration>
<property>
<name>mapreduce.framework.name</name>
<value>yarn</value>
</property>
</configuration>
```

Step-8 – Format Hadoop File System

$ cd /usr/local/hadoop/hadoop-2.7.2/bin
$ hadoop namenode -format

Step 9 - Start Hadoop

$ cd /usr/local/hadoop/hadoop-2.7.2/sbin

// Starting dfs services

$ start-dfs.sh

// Starting mapreduce services

$ start-yarn.sh

$ jps

Step 10 - Check Hadoop through web UI

Go to browser type http://localhost:8088 – All Applications Hadoop Cluster

Go to browser type http://localhost:50070 – Hadoop Namenode

Step 11 - Stop Hadoop

$ stop-dfs.sh

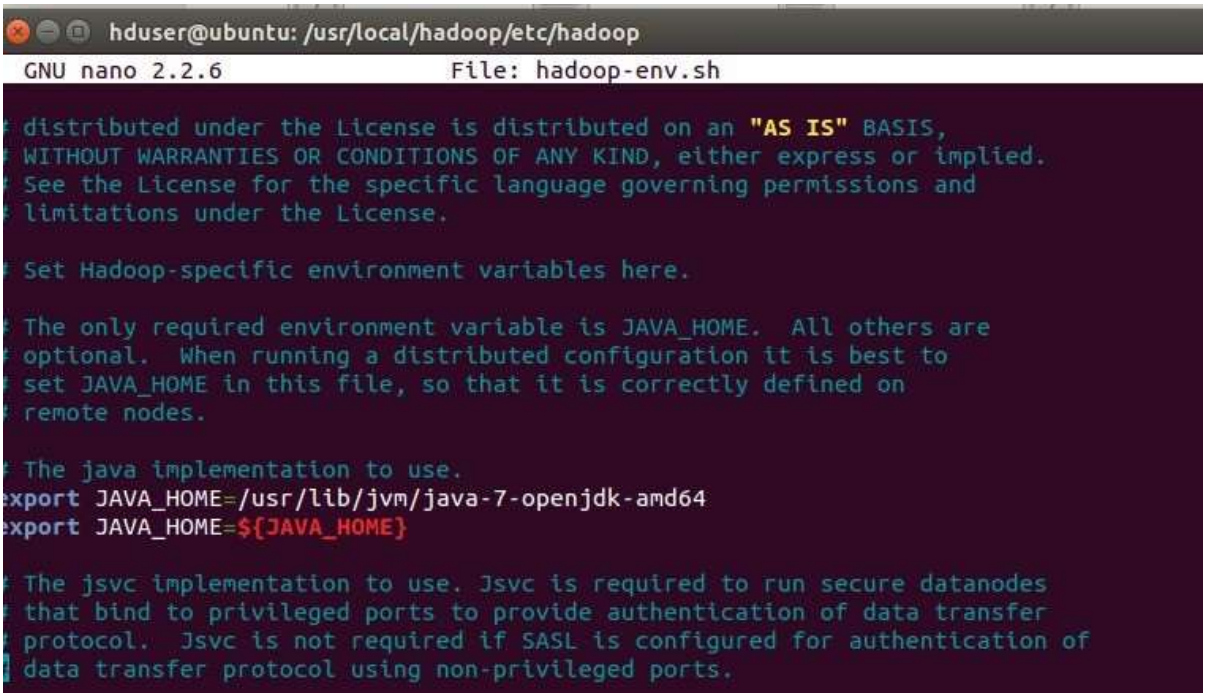
$ stop-yarn.sh

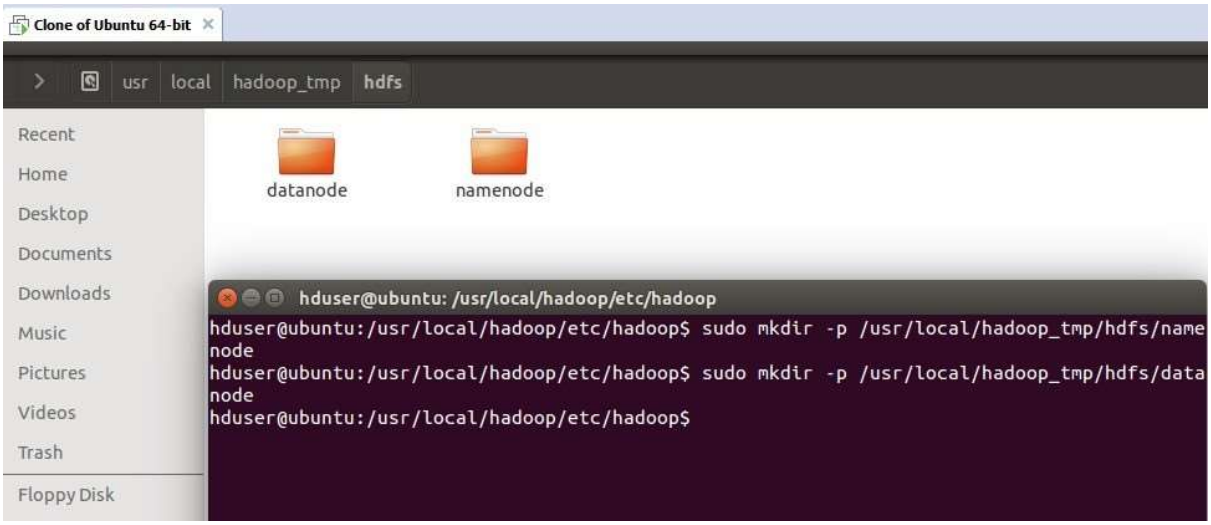
IMPLEMENTAION:

Clone of Ubuntu 64-bit

```
  GNU nano 2.2.6                                File: /home/hduser/.bashrc

# See /usr/share/doc/bash-doc/examples in the bash-doc package.

if [ -f ~/.bash_aliases ]; then
    . ~/.bash_aliases
fi

# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
  if [ -f /usr/share/bash-completion/bash_completion ]; then
    . /usr/share/bash-completion/bash_completion
  elif [ -f /etc/bash_completion ]; then
    . /etc/bash_completion
  fi
fi


#HADOOP VARIABLES START
export JAVA_HOME=/usr/lib/jvm/java-7-openjdk-amd64
export HADOOP_INSTALL=/usr/local/hadoop
export PATH=$PATH:$HADOOP_INSTALL/bin
export PATH=$PATH:$HADOOP_INSTALL/sbin
export HADOOP_MAPRED_HOME=$HADOOP_INSTALL
export HADOOP_COMMON_HOME=$HADOOP_INSTALL
export HADOOP_HDFS_HOME=$HADOOP_INSTALL
export YARN_HOME=$HADOOP_INSTALL
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_INSTALL/lib/native
export HADOOP_OPTS="-Djava.library.path=$HADOOP_INSTALL/lib"
#HADOOP VARIABLES END
```

```
hduser@ubuntu:/home$ cd ..
hduser@ubuntu:/$ cd usr
hduser@ubuntu:/usr$ cd local
hduser@ubuntu:/usr/local$ cd hadoop
hduser@ubuntu:/usr/local/hadoop$ cd etc
hduser@ubuntu:/usr/local/hadoop/etc$ cd hadoop
hduser@ubuntu:/usr/local/hadoop/etc/hadoop$ ls
capacity-scheduler.xml      httpfs-env.sh            mapred-env.sh
configuration.xsl           httpfs-log4j.properties  mapred-queues.xml.template
container-executor.cfg      httpfs-signature.secret  mapred-site.xml
core-site.xml               httpfs-site.xml          mapred-site.xml.template
hadoop-env.cmd              kms-acls.xml             slaves
hadoop-env.sh               kms-env.sh               ssl-client.xml.example
hadoop-metrics2.properties  kms-log4j.properties     ssl-server.xml.example
hadoop-metrics.properties   kms-site.xml             yarn-env.cmd
hadoop-policy.xml           log4j.properties         yarn-env.sh
hdfs-site.xml               mapred-env.cmd           yarn-site.xml
hduser@ubuntu:/usr/local/hadoop/etc/hadoop$
```


hduser@ubuntu: /usr/local/hadoop/etc/hadoop
GNU nano 2.2.6 File: hadoop-env.sh
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
Set Hadoop-specific environment variables here.
The only required environment variable is JAVA_HOME. All others are
optional. When running a distributed configuration it is best to
set JAVA_HOME in this file, so that it is correctly defined on
remote nodes.
The java implementation to use.
export JAVA_HOME=/usr/lib/jvm/java-7-openjdk-amd64
export JAVA_HOME=${JAVA_HOME}
The jsvc implementation to use. Jsvc is required to run secure datanodes
that bind to privileged ports to provide authentication of data transfer
protocol. Jsvc is not required if SASL is configured for authentication of
data transfer protocol using non-privileged ports.


Clone of Ubuntu 64-bit
usr
local
hadoop_tmp
hdfs
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Floppy Disk
datanode
namenode
hduser@ubuntu: /usr/local/hadoop/etc/hadoop
hduser@ubuntu:/usr/local/hadoop/etc/hadoop$ sudo mkdir -p /usr/local/hadoop_tmp/hdfs/name
node
hduser@ubuntu:/usr/local/hadoop/etc/hadoop$ sudo mkdir -p /usr/local/hadoop_tmp/hdfs/data
node
hduser@ubuntu:/usr/local/hadoop/etc/hadoop$

EXP 24: LAUNCH THE HADOOP 2.X AND TEST THE MAP-REDUCE PLATFORM WITH HADOOP

AIM:

TO CREATE THE HADOOP 2.X AND TEST THE MAP-REDUCE PLATFORM WITH HADOOP

PROCEDURE:

Step 1 - Open Terminal

$ su

hduser

Password:

Step 2 - Start dfs and mapreduce services

$ cd /usr/local/hadoop/hadoop-2.7.2/sbin

$ start-dfs.sh

$ start-yarn.sh

$ jps

Step 3 - Check Hadoop through web UI

// Go to browser type http://localhost:8088 – All Applications Hadoop Cluster

// Go to browser type http://localhost:50070 – Hadoop Namenode

Step 4 – Open New Terminal

$ cd Desktop/

$ mkdir inputdata

$ cd inputdata/

$ echo “Hai, Hello, How are you? How is your health?” >> hello.txt

$ cat >> hello.txt

Step 5 – Go back to old Terminal

$ hadoop fs –copyFromLocal /home/hduser/Desktop/inputdata/hello.txt /folder/hduser

// Check in hello.txt in Namenode using Web UI

Step 6 – Download and open eclipse by creating workspace

Create a new java project.

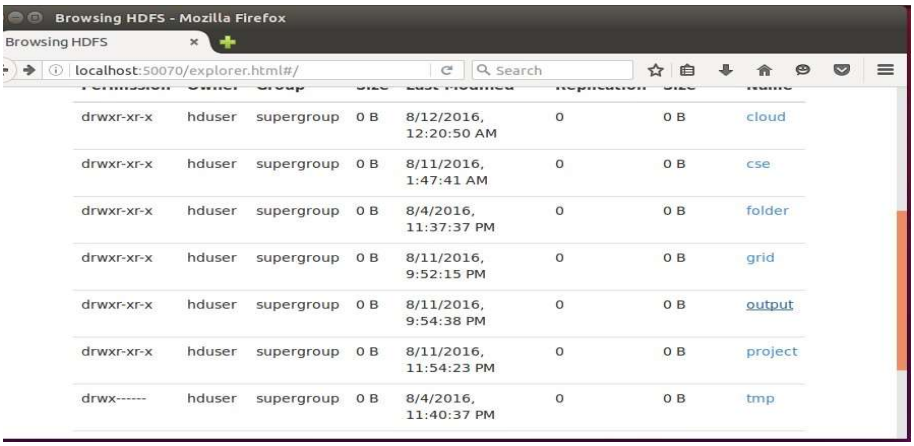
Step 7 – Add jar to the project

You need to remove dependencies by adding jar files in the hadoop source folder. Now Clickon **Project** tab and go to Properties.Under Libraries tab, click Add External JARs and select all the jars in the folder (click on 1st jar, and Press Shift and Click on last jat to select all jars in between and click ok)

/usr/local/hadoop/hadoop-2.7.2/share/hadoop/commonand

/usr/local/hadoop/hadoop-2.7.2/share/hadoop/mapreduce folders.

OUTPUT:



EXP. 25: LAUNCH THE HADOOP 2.X AND PERFORM MAPREDUCE PROGRAM FOR A WORD COUNT PROBLEM

AIM: LAUNCH THE HADOOP 2.X AND PERFORM MAPREDUCE PROGRAMFOR A WORD COUNT PROBLEM

PROCEDURE:

Step 1 - Open Terminal

$ su

hduser

Password:

Step 2 - Start dfs and mapreduce services

$ cd /usr/local/hadoop/hadoop-2.7.2/sbin

$ start-dfs.sh

$ start-yarn.sh

$ jps

Step 3 - Check Hadoop through web UI

// Go to browser type http://localhost:8088 – All Applications Hadoop Cluster

// Go to browser type http://localhost:50070 – Hadoop Namenode

Step 4 – Open New Terminal

$ cd Desktop/

$ mkdir inputdata

$ cd inputdata/

$ echo “Hai, Hello, How are you? How is your health?” >> hello.txt

$ cat >> hello.txt

Step 5 – Go back to old Terminal

$ hadoop fs –copyFromLocal /home/hduser/Desktop/inputdata/hello.txt /folder/hduser

// Check in hello.txt in Namenode using Web UI

Step 6 – Download and open eclipse by creating workspace

Create a new java project.

Step 7 – Add jar to the project

You need to remove dependencies by adding jar files in the hadoop source folder. Now Clickon **Project** tab and go to Properties.Under Libraries tab, click Add External JARs and select all the jars in the folder (click on 1st jar, and Press Shift and Click on last jat to select all jars in between and click ok)

/usr/local/hadoop/hadoop-2.7.2/share/hadoop/commonand

/usr/local/hadoop/hadoop-2.7.2/share/hadoop/mapreduce folders.

Step -8 – WordCount Program

Create 3 java files named

- **WordCount.java**
- **WordCountMapper.java**
- **WordCountReducer.java**

WordCount.java

```
import org.apache.hadoop.conf.Configured;
import org.apache.hadoop.fs.Path;

import org.apache.hadoop.io.IntWritable;

import org.apache.hadoop.mapred.FileInputFormat;
import
org.apache.hadoop.mapred.FileOutputFormat;import
org.apache.hadoop.mapred.JobClient;

import org.apache.hadoop.mapred.JobConf;


import org.apache.hadoop.util.Tool;

import org.apache.hadoop.util.ToolRunner;
import org.apache.hadoop.io.Text;


public class WordCount extends Configured implements Tool {@Override

        public int run(String[] arg0) throws Exception {

                // TODO Auto-generated method
                stubif(arg0.length<2)

                {

                        System.out.println("check the command line arguments");

                }

                JobConf conf=new JobConf(WordCount.class);
                FileInputFormat.setInputPaths(conf, new Path(arg0[0]));

                        FileOutputFormat.setOutputPath(conf, new Path(arg0[1]));
                        conf.setMapperClass(WordMapper.class);
                        conf.setReducerClass(WordReducer.class);
                        conf.setOutputKeyClass(Text.class);
                        conf.setOutputValueClass(IntWritable.class);
```

```
        }
}
```

WordCountMapper.java

```
import java.io.IOException;

import    org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.LongWritable;

import
org.apache.hadoop.mapred.MapReduceBase;
import
org.apache.hadoop.mapred.OutputCollector;
import org.apache.hadoop.mapred.Reporter;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.mapred.Mapper;


public class WordCountMapper extends MapReduceBase implements
Mapper<LongWritable,Text,Text,IntWritable>

{

        @Override

        public void map(LongWritable arg0, Text arg1, OutputCollector<Text, IntWritable> arg2,
Reporter arg3)
```

IOException

WordCountReducer.java

```
import java.io.IOException;import
java.util.Iterator;

import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.mapred.JobConf;

import org.apache.hadoop.mapred.OutputCollector;
import org.apache.hadoop.mapred.Reducer;

import org.apache.hadoop.mapred.Reporter;
import org.apache.hadoop.io.Text;


public class WordCountReducer implements Reducer<Text,IntWritable,Text,IntWritable> {
        @Override

        public void configure(JobConf arg0) {
```

```
        }
        @Override
        public void reduce(Text arg0, Iterator<IntWritable> arg1, OutputCollector<Text, IntWritable>
arg2, Reporter arg3)
                        throws IOException {
                // TODO Auto-generated method
                stubint count=0;
                while(arg1.hasNext())
                {
                        IntWritable i=arg1.next();
                        count+=i.get();
```

Step 9 - Creatr JAR file

Now Click on the Run tab and click Run-Configurations. Click on New Configuration button on the left-top side and Apply after filling the following properties.

Step 10 - Export JAR file

Now click on File tab and select Export. under Java, select Runnable Jar.

In Launch Config – select the config fie you created in **Step 9** (WordCountConfig).

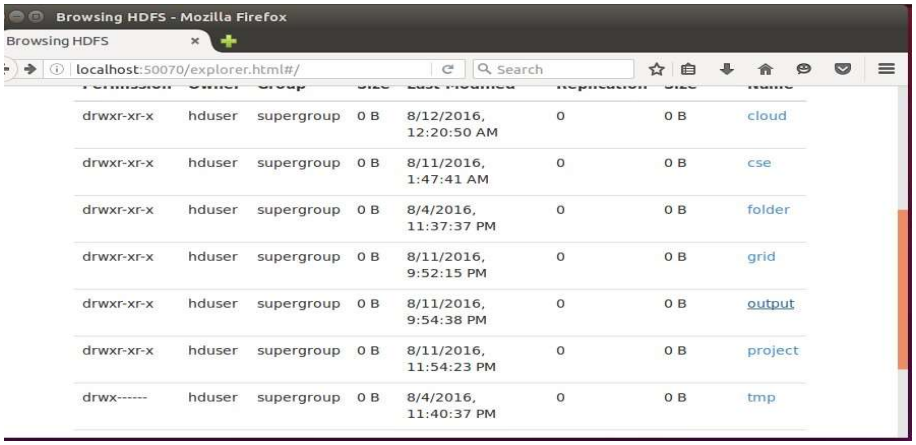
Select an export destination (lets say desktop.)

Under Library handling, select Extract Required Libraries into generated JAR and click Finish.

Right-Click the jar file, go to Properties and under **Permissions**tab, Check Allow executingfile as a program. and give Read and Write access to all the users

Step 11 – Go back to old Terminal for Execution of WordCount Program

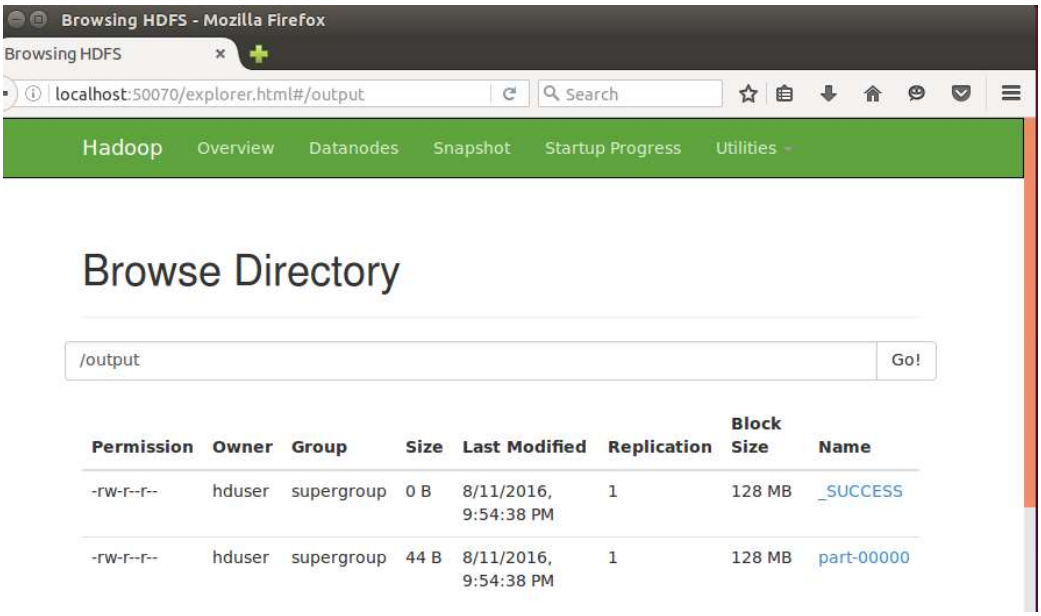
$hadoop jar wordcount.jar**/**usr**/**local**/**hadoop**/**input**/**usr**/**local**/**hadoop**/**output



Step 12 – To view results in old Terminal

$hdfs dfs -cat /usr/local/hadoop/output/part-r-00000

```
hadoop1@ubuntu-1:~/project$ hadoop fs -cat /output/wordcount4/part-r-00000
.       1
a       1
and     1
as      1
count   1
counts  1
file    2
for     1
input   1
is      1
job     1
job.    1
map     1
returns 1
sample  1
takes   1
```



Step 13 - To Remove folders created using hdfs

$ hdfs dfs -rm -R /usr/local/hadoop/output