

VARDHAMAN COLLEGE OF ENGINEERING
(AUTONOMOUS)

(Affiliated to JNTUH, Approved by AICTE and Accredited by NBA)

Shamshabad - 501 218, Hyderabad
 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
 (AI&ML)

CERTIFICATE

Certified that this is the bonafied record of practical work done by

Mr. K.PRAHALADH REDDY, roll number 21881A66B2
 of B. Tech

in the CLOUD COMPUTING & VIRTUALIZATION laboratory during the year 2024

No. of Experiments done:

Total No. of Experiments:

Date: HOD staff Member Incharge

Roll Number 21881A66B2

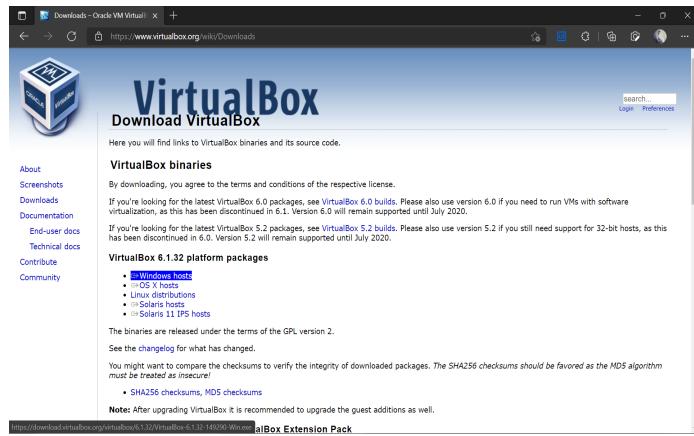
Submitted for the practical exam held on

S.NO	DATE	TITLE	MARKS	SIGNATURE
1		Install Virtual box and making Ubuntu And Window Virtual Machine.		
2		Create a Windows Virtual Machine in Microsoft Azure		
3		Create a Ubuntu Virtual Machine in Microsoft Azure		
4		Create a Virtual machine and do scale up in Azure.		
5		Create a Virtual machine and do lock for VM in AZURE		
6		Create Ubuntu VM and run a python program in it.		
7		Create a Ubuntu VM and transfer files using WinScp.		
8		How to make Linux server as web server in AZURE		
9		Setup and configure AZURE web server for windows server(IIS)		
10		How we are adding new users, login credentials, changing owner, create authorized key files		
11		Create a Windows VM and transfer files from desktop to remote desktopVM.		

Q1. Install Virtual box and making Ubuntu And Window Virtual Machine.

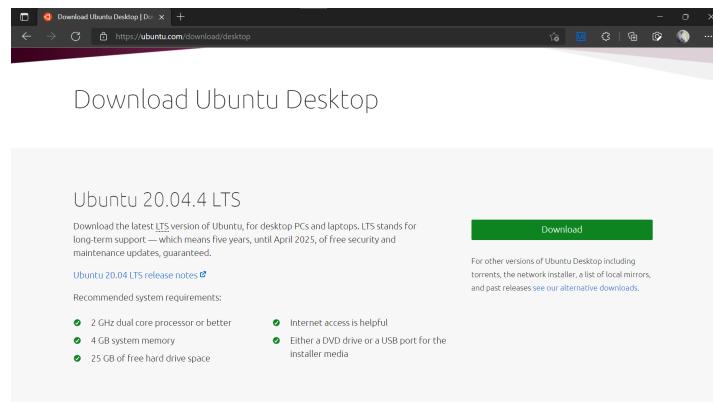
Ubuntu:

Step-1: Download VirtualBox for Windows and install it on your computer



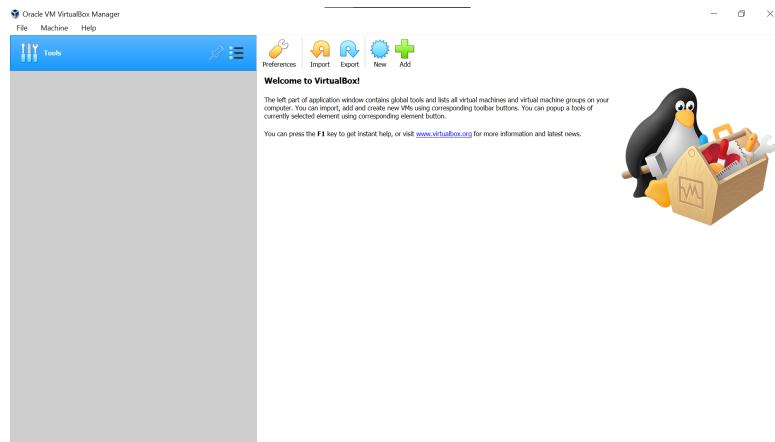
<https://www.virtualbox.org/wiki/Downloads>

Step-2: Download the Ubuntu ISO file you want to install from the Ubuntu download page.

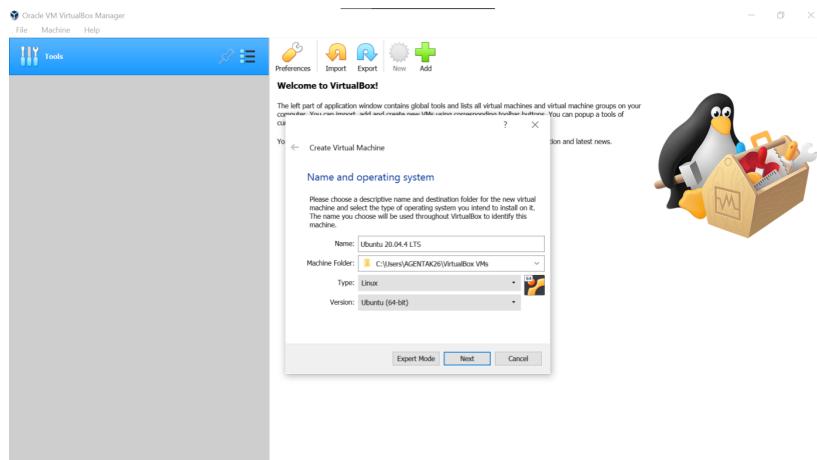


Note: The current version of Ubuntu only works on 64-bit machines.

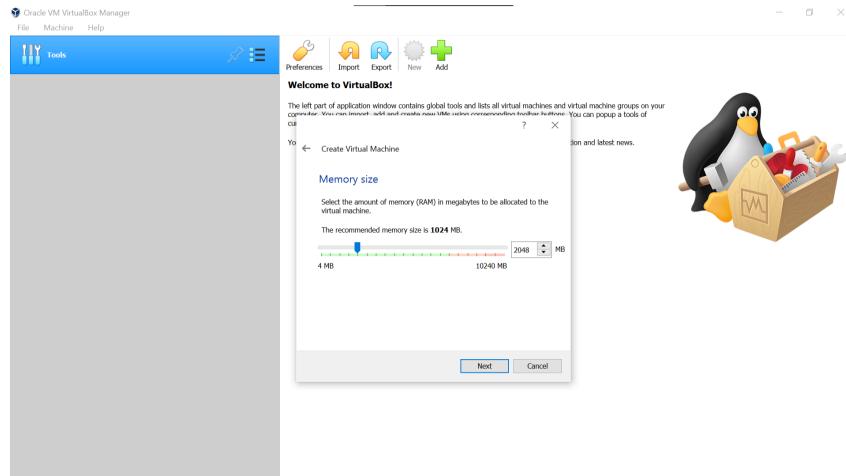
Step-3: Open VirtualBox and select New in the top taskbar.



Step-4: Give your VM a name, choose Linux as the Type, then choose Ubuntu as the Version and select Next.

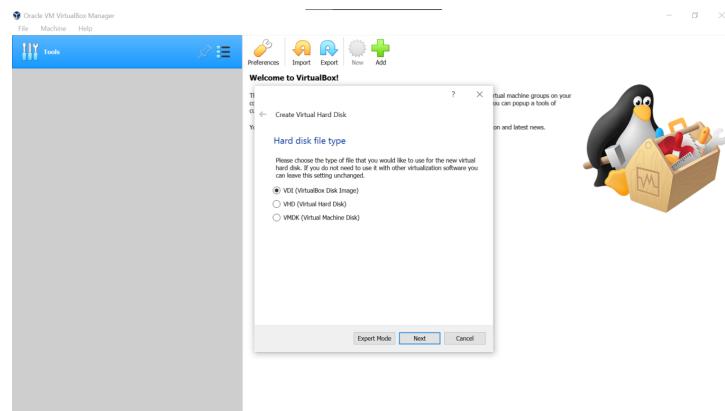


Step-5: Choose how much RAM you want to assign to the virtual machine and select Next. The recommended minimum is 1024 MB.



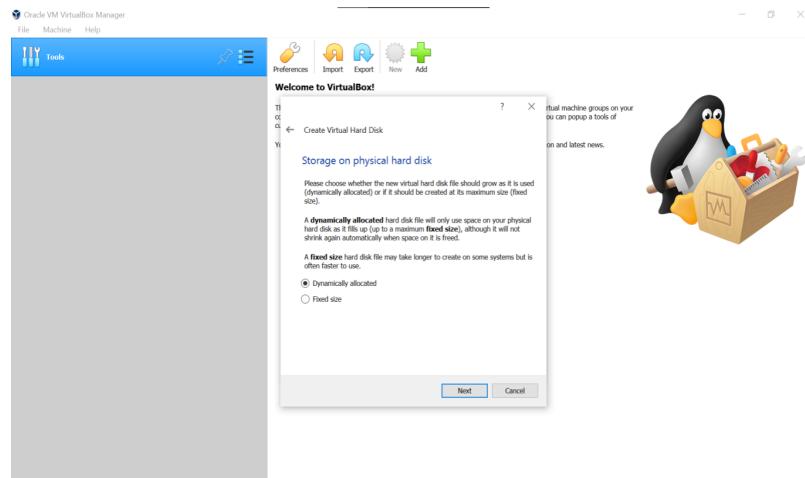
Step-6: Choose Create a virtual hard disk now and select Create.

Step-7: Choose VDI (VirtualBox Disk Image) and select Next.



Note on (VDI): Normally, Oracle VM VirtualBox uses its own container format for guest hard disks. This is called a Virtual Disk Image (VDI) file. This format is used when you create a new virtual machine with a new disk.

Step-8: Choose Dynamically allocated or Fixed size for the storage type and select Next.

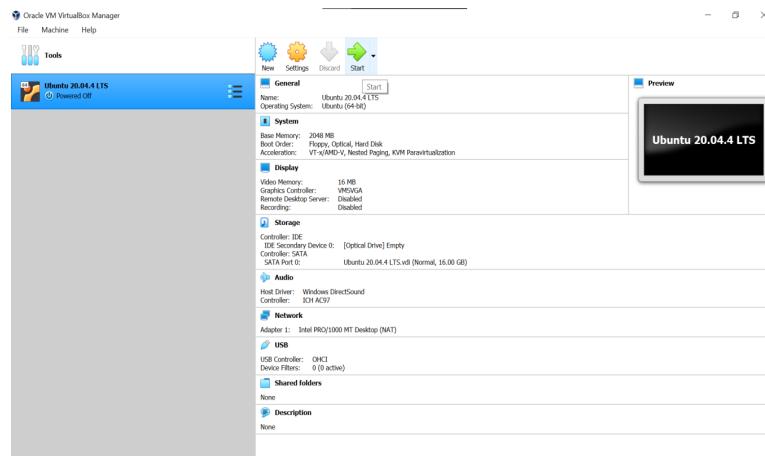


Tip: A fixed size disk performs better because the virtual machine doesn't have to increase the file size as you install software.

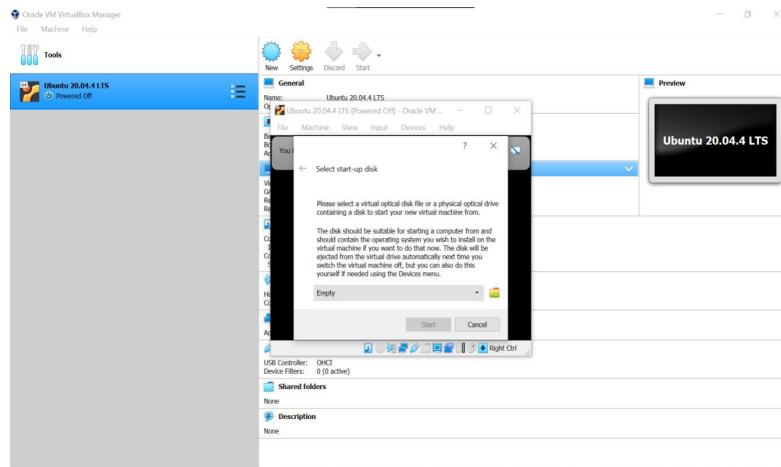
Step-9: Choose how much space you wish to set aside for Ubuntu and select Create.

Note: The amount of space you allocate for your virtual machine determines how much room you must install applications, so set aside a sample amount.

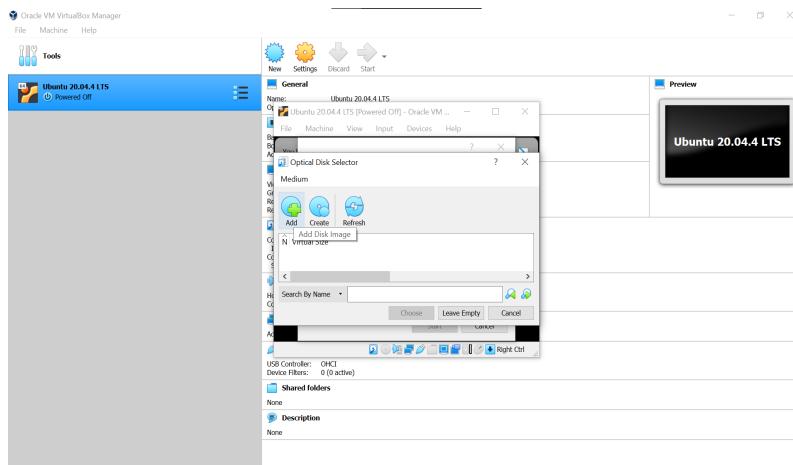
Step-10: The name of your virtual machine will now appear on the left side of the VirtualBox manager. Select Start in the toolbar to launch your VM.



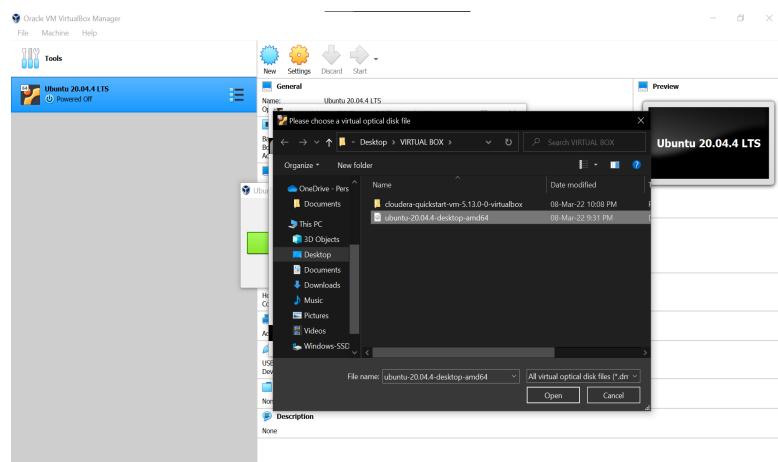
Step-11: This is the point where you need to choose the Ubuntu ISO file you downloaded earlier. If the VM doesn't automatically detect it, select the folder next to the Empty field.



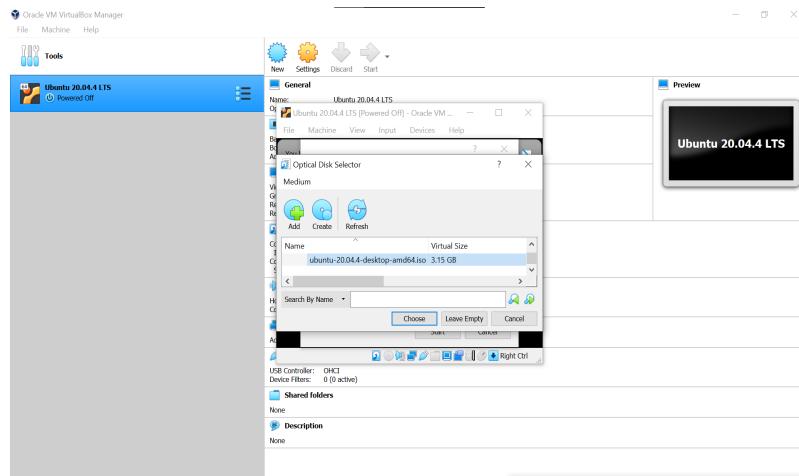
Step-12: Select Add in the window that pops up.



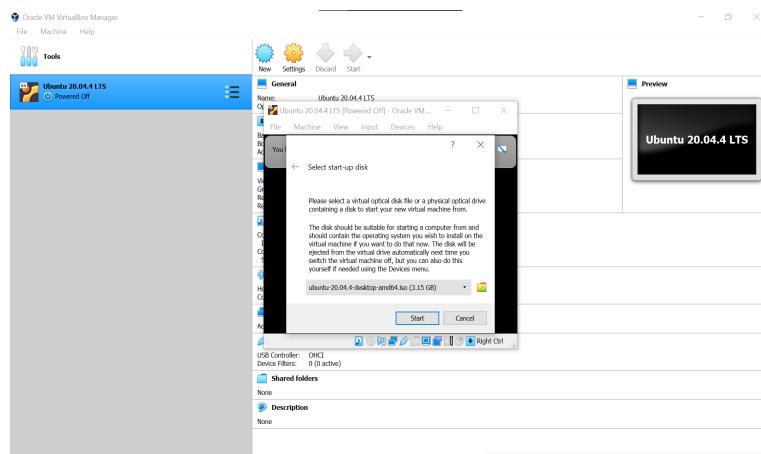
Step-13: Choose your Ubuntu disk image and select Open.



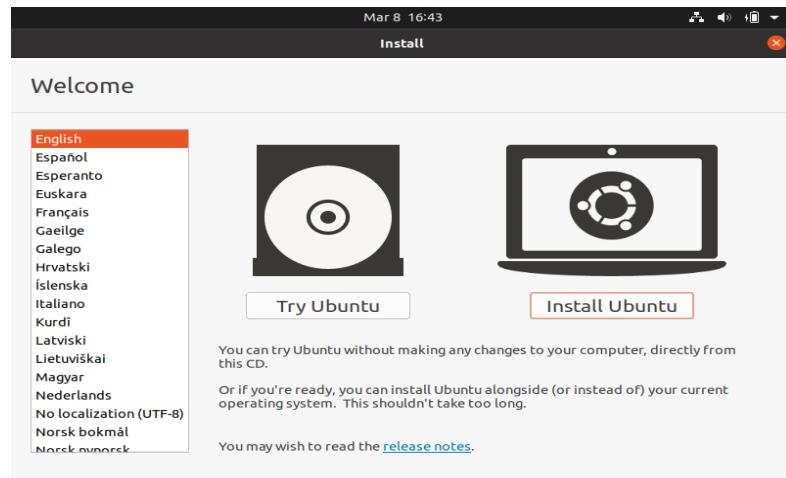
Step-14: - Select Choose



Step-15: Select Start.

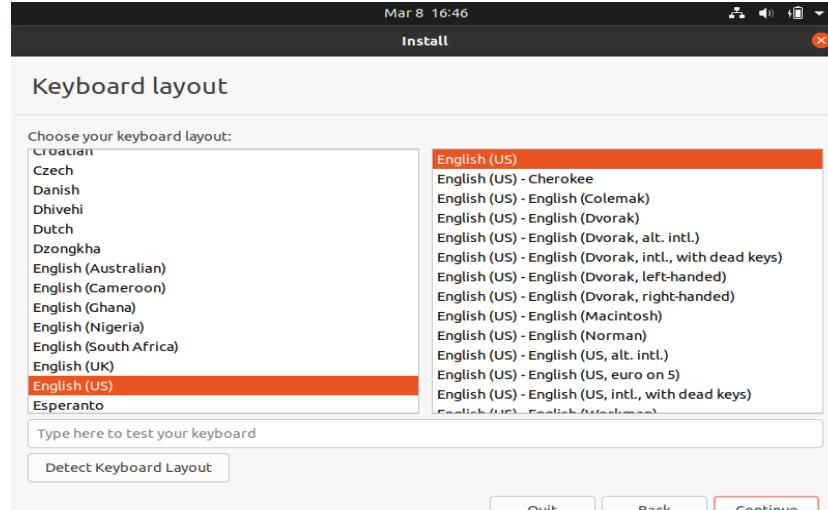


Step-16: Your VM will now boot into a live version of Ubuntu. Choose your language and select Install Ubuntu



u.

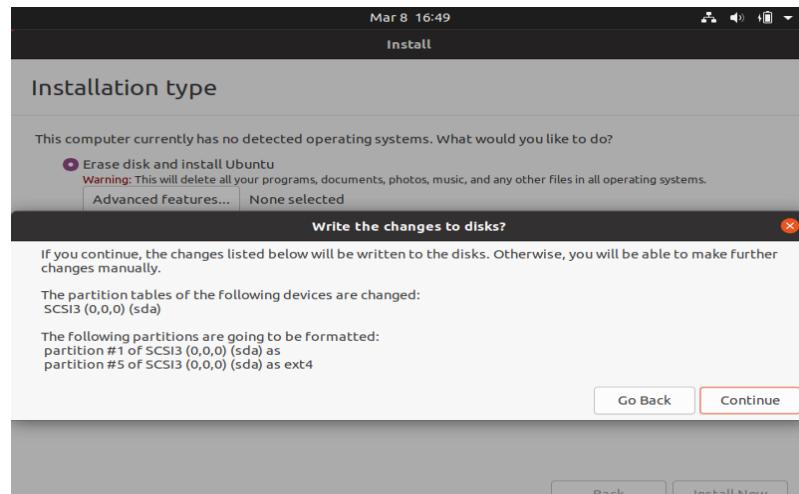
Step-17: Choose your keyboard layout and select Continue.



Step-18: Choose Normal installation or Minimal installation, then select Continue.

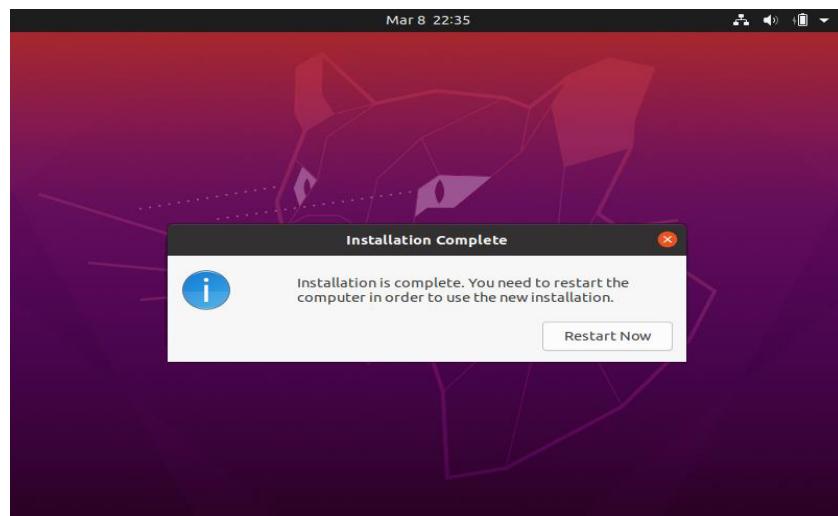
Step-19: Choose Erase disk and install Ubuntu and select Install Now, then select Continue to ignore the warning.

Note: This step will not erase your computer's physical hard drive; it only applies to the virtual machine.



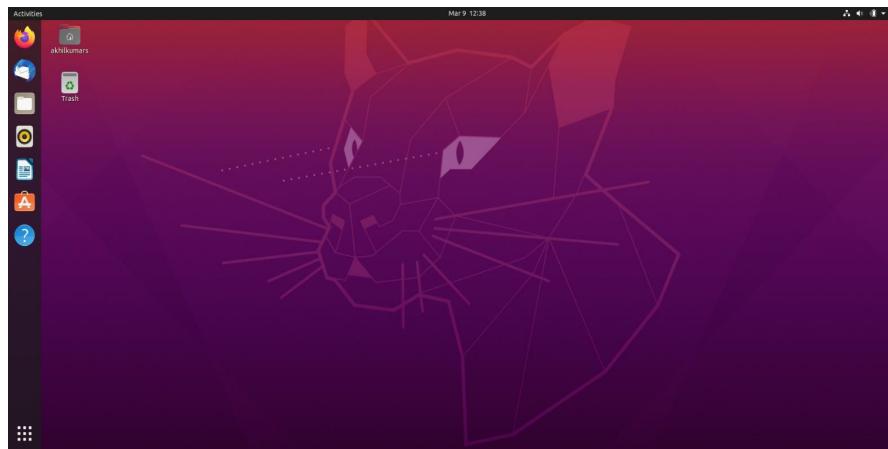
Step-20: - Choose your time zone on the map, then select Continue.

Step-21: - Select Restart Now.



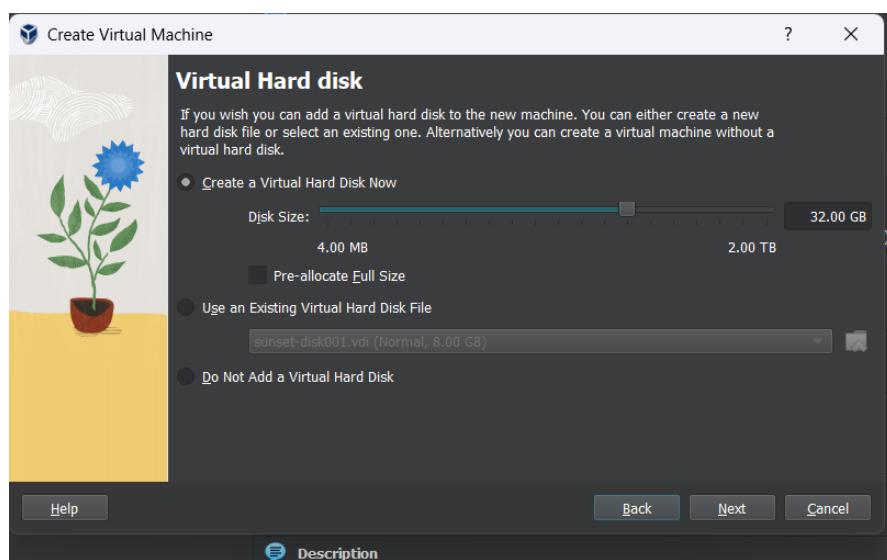
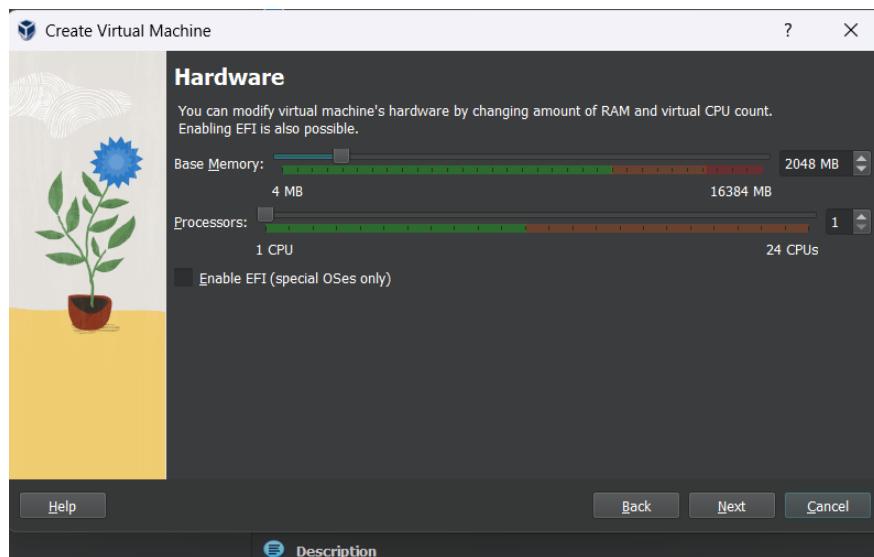
Step-22: - After restarting your VM and booting into Ubuntu, you may notice that the desktop doesn't scale correctly if you choose to view it in full-screen mode. You can fix this problem by selecting the VBox_Gas icon to install VirtualBox Guest Additions.

Output:

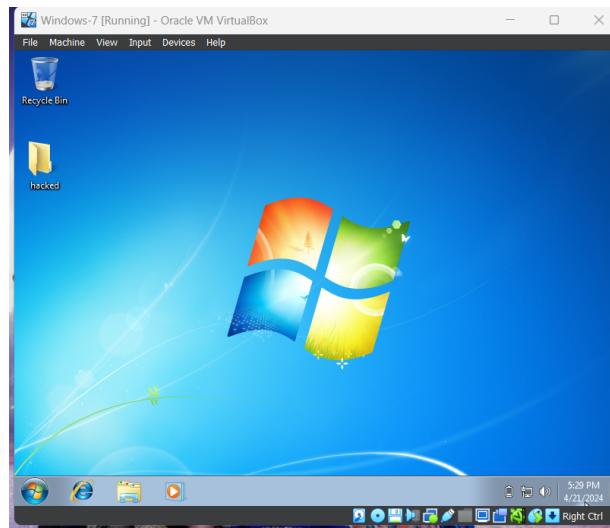


Windows:

Similarly, Follow the same steps above to Build Windows Virtual Machine.



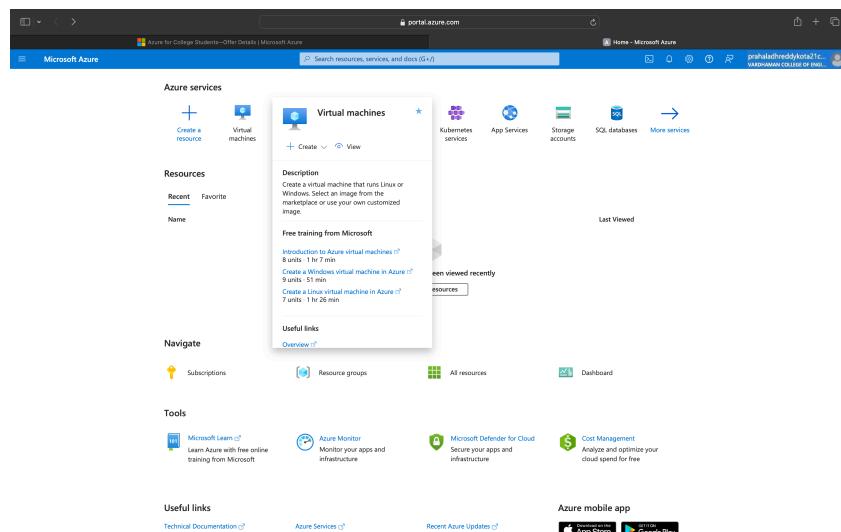
Output:



Q2) Create a Windows Virtual Machine in Microsoft Azure

Step-1: Sign in to your Microsoft Azure account.

Step-2: Go To Virtual machine, and click on “Create” to create a window virtual machine.



Step-3: Fill the details in that window by creating a “Resource Group”, Zone: Asia, Image: window, Select the disk storage and so on. After that click on “Create + Review”. And Finally click on “Create”

Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * Resource group * [Create new](#)

Instance details

Virtual machine name *

Region *

Availability options

Availability zone * You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type [Configure security features](#)

Image *

VM architecture Arm64 x64 Arm64 is not supported with the selected image.

Run with Azure Spot discount

Size * [See all sizes](#)

Enable Hibernation (preview) Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernate to enable this feature. [Learn more](#)

Administrator account

Username *

Password *

Confirm password *

Inbound port rules
Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * None Allow selected ports

Select inbound ports *

All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.

[< Previous](#) [Next : Disks >](#) [Review + create](#)

Basics Disks Networking Management Monitoring Advanced Tags Review + create

 Cost given below is an estimate and not the final price. Please use [Pricing calculator](#) for all your pricing needs.

Price

1 X Standard D2s v3
by Microsoft
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply 

16.3894 INR/hr

[Pricing for other VM sizes](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

 **You have set RDP port(s) open to the internet.** This is only recommended for testing. If you want to change this setting, go back to Basics tab.

[< Previous](#) [Next >](#) **Create**

Step-4: After Deployment is over, Go to the remote desktop connection.

✓ Your deployment is complete



Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe... Start time: 4/21/2024, 6:09:11 PM
Subscription: [Azure for Students](#) Correlation ID: a159c86d-ada8-4ab9-8ab5-ef854e7dd3e9 

✓ Deployment details

^ Next steps

[Setup auto-shutdown](#) Recommended

[Monitor VM health, performance and network dependencies](#) Recommended

[Run a script inside the virtual machine](#) Recommended

Go to resource

[Create another VM](#)

[Give feedback](#)

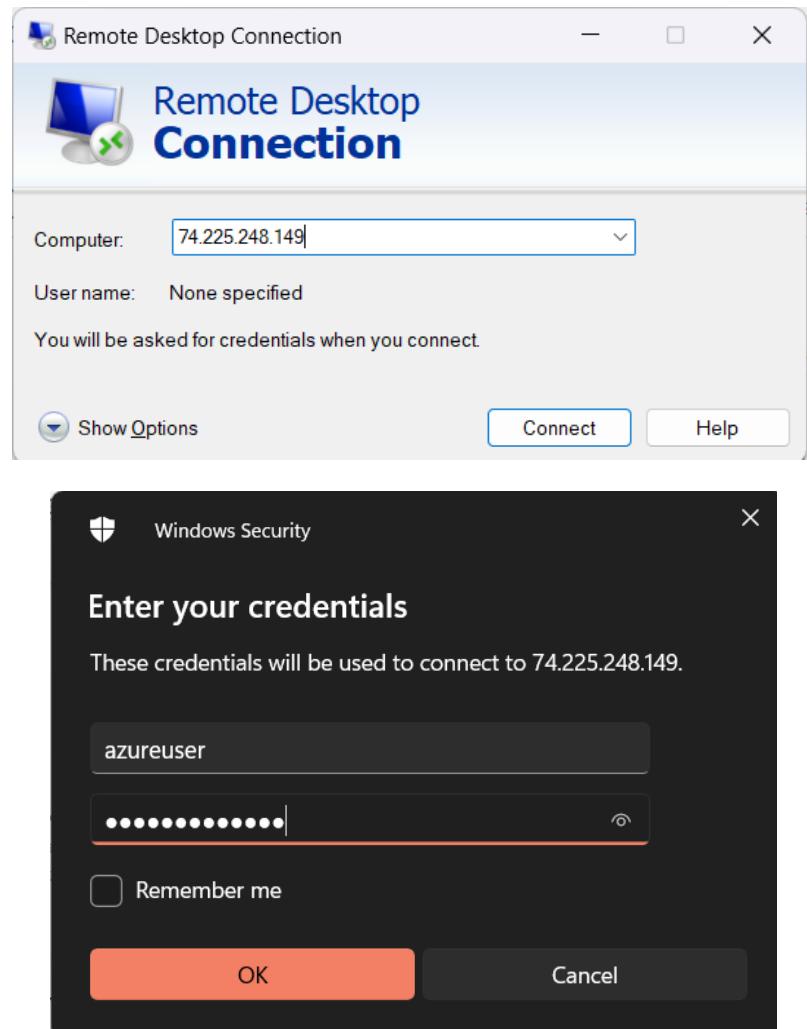
[Tell us about your experience with deployment](#)

^ Essentials

Resource group (move)	: AZ22	Operating system	: Windows (Windows Server 2019 Datacenter)
Status	: Running	Size	: Standard D2s v3 (2 vcpus, 8 GiB memory)
Location	: Central India (Zone 1)	Public IP address	: 74.225.248.149
Subscription (move)	: Azure for Students	Virtual network/subnet	: Window-vnet/default
Subscription ID	: f3c55ae6-bd1f-4731-805e-48c71c8d7f77	DNS name	: Not configured
Availability zone	: 1	Health state	: -
Tags (edit)	: Add tags		

[JSON View](#)

Step-5: Firstly, copy the public IP Address of that created virtual machine.



Step-6: By using that copied IP Address open the window virtual machine through remote desktop connection.

Output



Q3) Create a Ubuntu Virtual Machine in Microsoft Azure

Step-1: Sign in to your Microsoft Azure account.

Step-2: Go To Virtual machine, and click on “Create” to create a window virtual machine.

Step-3: Fill the details in that ubuntu by creating a “Resource Group”, Zone: Asia, Image: ubuntu, select “SSH”, Select the disk storage and so on. After that click on “Create + Review”. And Finally click on “Create”.

your resources.

Subscription * ⓘ Azure for Students

Resource group * ⓘ AZ24 [Create new](#)

Instance details

Virtual machine name * ⓘ Ubuntu

Region * ⓘ (Asia Pacific) Central India

Availability options ⓘ Availability zone

Availability zone * ⓘ Zone 1

ⓘ You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type ⓘ Trusted launch virtual machines [Configure security features](#)

Image * ⓘ Ubuntu Server 20.04 LTS - x64 Gen2 [See all images](#) | [Configure VM generation](#)

Home - Microsoft Azure

portal.azure.com/#home

Microsoft Azure Search resources, services, and docs (G+)

Azure services

- Create a resource**
- Resource groups**
- Virtual machines**

Virtual machines

- Azure virtual machine** Create a virtual machine hosted by Azure
- Azure virtual machine with preset configuration** Create a virtual machine with presets based on your workloads
- More VMs and related solutions** Discover and deploy full workloads and Azure products for your business needs

Resources

Recent Favorite

Name

Navigate

Useful links

Overview

Virtual machines

Vardhaman College of Engineering (vardhaman.org)

+ Create Switch to classic Reservations Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop Delete Services Maintenance

Filter for any field... Subscription equals all Type equals all Resource group equals all Location equals all Add filter

No grouping List view

Showing 0 to 0 of 0 records.

Name	Type	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address	Disk
------	------	--------------	----------------	----------	--------	------------------	------	-------------------	------

No virtual Create a virtual machine that runs Linux or Windows

- Azure virtual machine** Create a virtual machine hosted by Azure
- Azure virtual machine with preset configuration** Create a virtual machine with presets based on your workloads
- More VMs and related solutions** Discover and deploy full workloads and Azure products for your business needs

Create

Learn more about Windows virtual machines Learn more about Linux virtual machines

Give feedback

Administrator account

Authentication type SSH public key Password

SSH public key Azure now automatically generates an SSH key pair for you and allows you to store it for future use. It is a fast, simple, and secure way to connect to your virtual machine.

Username * ✓

SSH public key source ✓

Key pair name * ✓

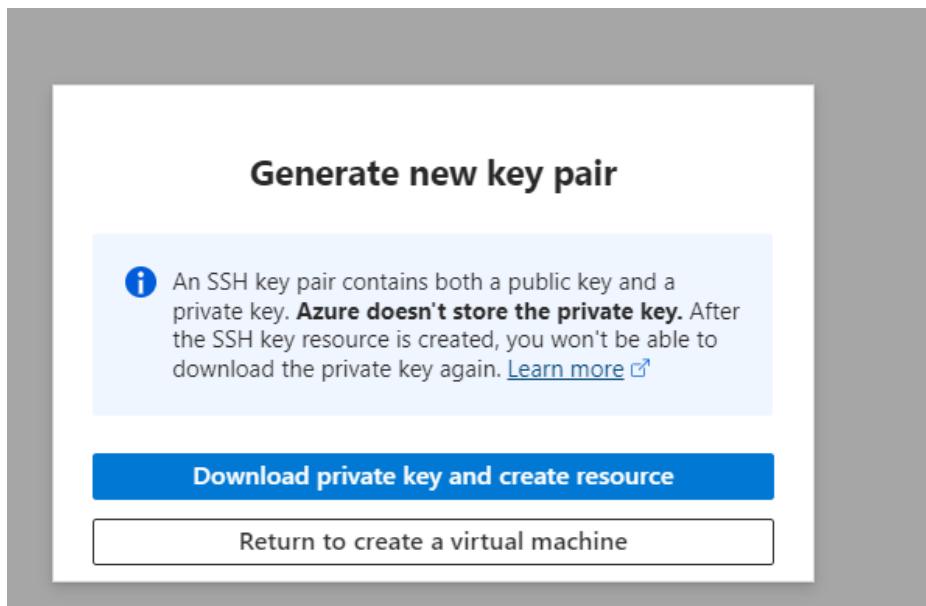
Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * None Allow selected ports

< Previous Next : Disks > **Review + create**

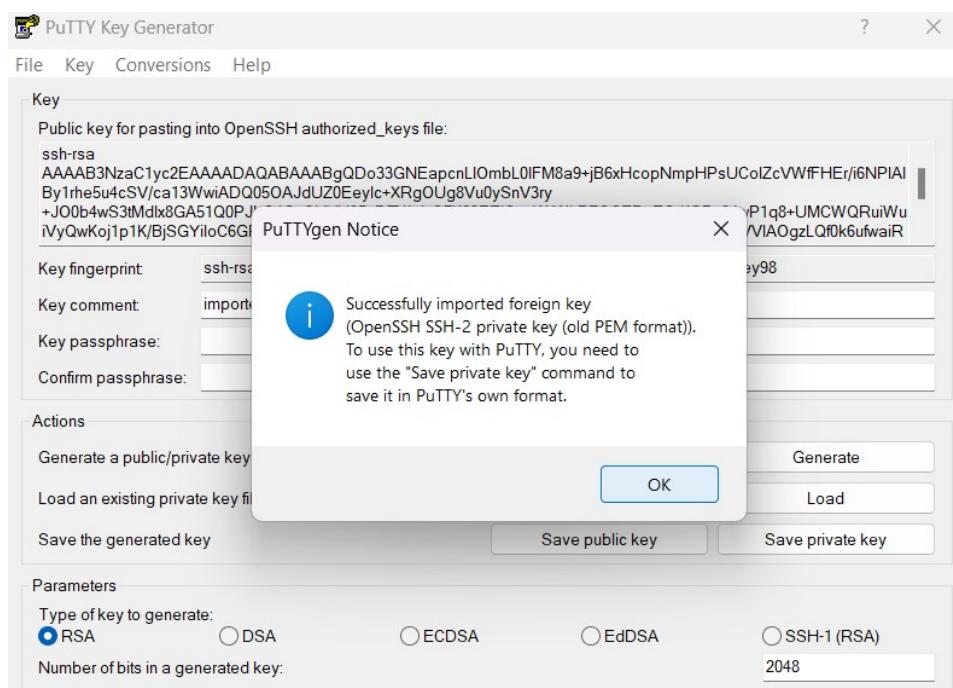
Step-4: After Deployment is over, Go to the remote desktop connection.

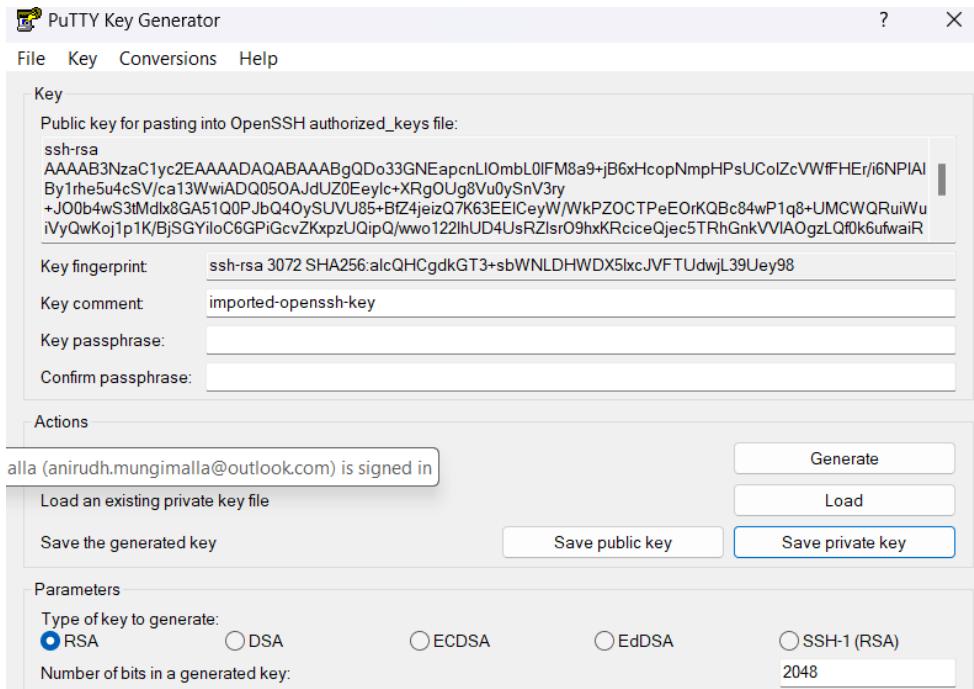


Step-5: Firstly, copy the public IP Address of that created virtual machine.

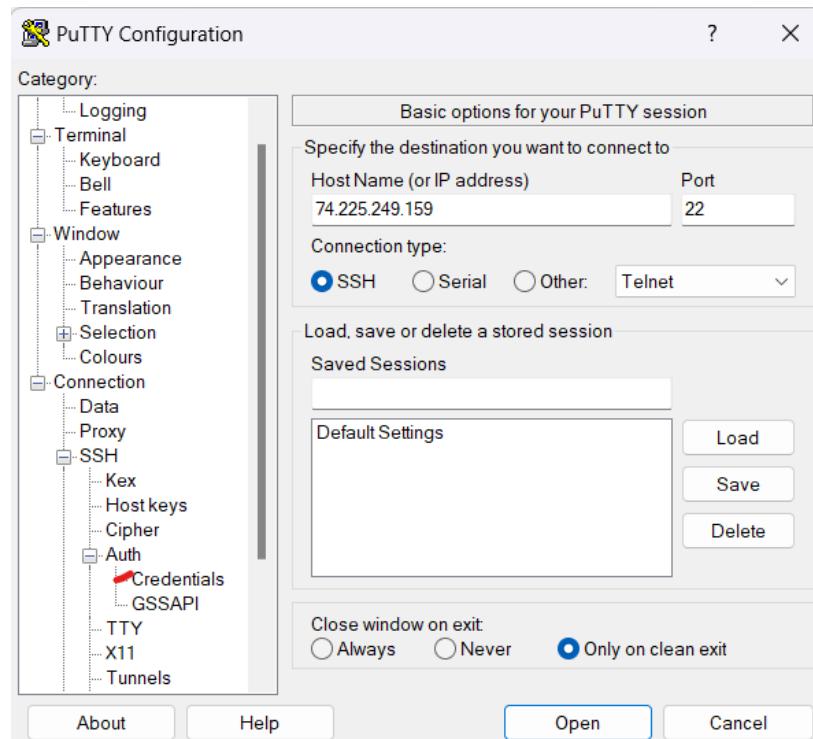
Essentials		JSON View
Resource group (move)	: AZ24	
Status	: Creating	Operating system : Linux
Location	: Central India (Zone 1)	Size : Standard D1s, 8 GiB memory
Subscription (move)	: Azure for Students	Public IP address : 74.225.249.159
Subscription ID	: f3c55ae6-bd1f-4731-805e-48c71c8d7f77	Virtual network/subnet : Window-vnet/default
Availability zone	: 1	DNS name : Not configured
Tags (edit)	: Add tags	Health state : -

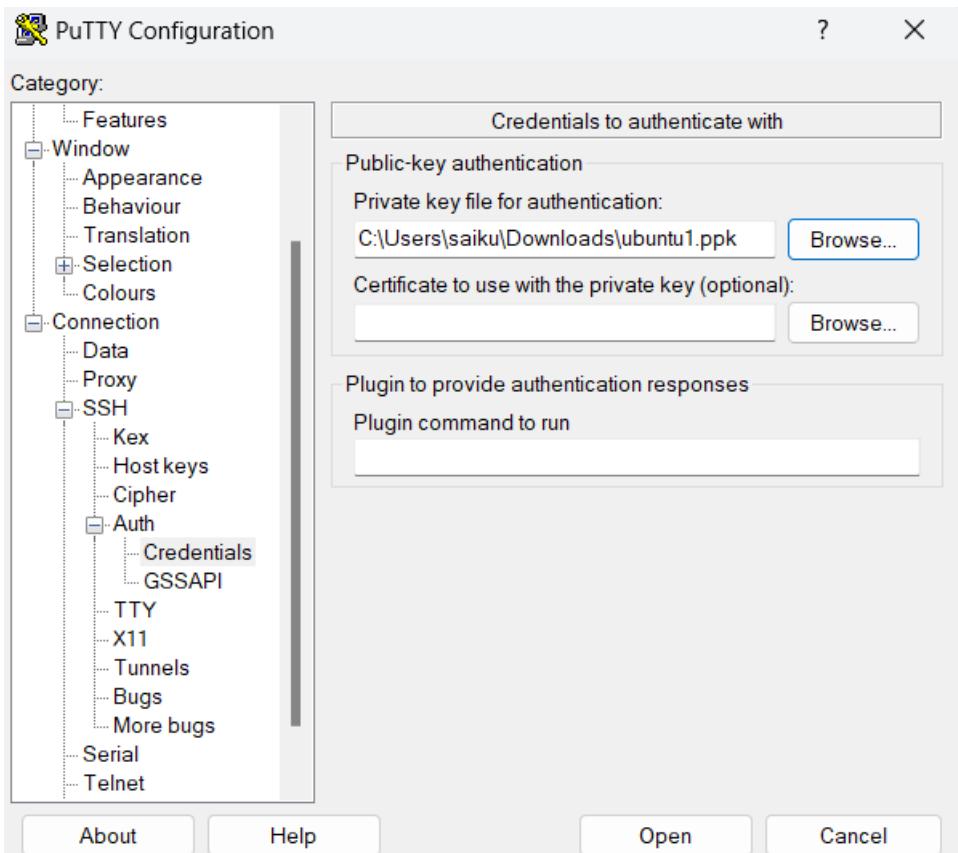
Step-6: Go to putty gen and click on load the key generator that you have downloaded.





Step-7: In putty, put the Copied IP Adress into it, and then go to ssh->auth->credentials And then put the generated private key.





Step-8: A login page will be opened in that type your username and you will be into the ubuntu.

Step-9: After this delete its resource group and virtual machine.

Output:

```
azureuser@ubuntu: ~
login as: azureuser
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Sun Apr 21 13:11:06 UTC 2024

 System load: 0.08349609375   Processes:          126
 Usage of /:  5.1% of 28.89GB  Users logged in:    0
 Memory usage: 4%              IPv4 address for eth0: 10.0.0.5
 Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
```

Stop this virtual machine

Do you want to stop 'ubuntu'?

Deallocation operations usually complete within 1-2 minutes but may take up to 90 minutes in some cases. You can leave the page and track the progress via notifications.

Subscription ID: b4e59686-6e71-45af-8ab9-20d96493254e

Availability zone: 1

Tags (edit) Add tags

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name	ubuntu
Operating system	Linux (ubuntu 20.04)
VM generation	V2

Networking

Public IP address	4.240.81.175 (Network interface: ubuntu613_z1)
Public IP address (IPv6)	-
Private IP address	10.0.0.4

Networking

Availability zone: 1

Tags (edit) Add tags

Q4) Create a Virtual machine and do scale up in Azure.

Step-1: Create a virtual machine (ubuntu or windows).

Step-2: After deployment of VM stop VM for scaling.

OS disk

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (...	Encryption (...	Host caching (...
ubuntu_OsDisk_1_d61391d7982045bd9f	Premium SSD LRS	30	120	25	SSE with PMK	Read/write

Data disks

Filter by name: Showing 0 of 0 attached data disks

Create and attach a new disk Attach existing disks

LUN (...	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (...	Encryption (...	Host caching (...
No data disks attached							

Apply Discard changes

Size	Disk tier	Provisioned IOPS	Provisioned through...	Max Shares	Max burst IOPS	Max burst throughput
4 GiB	P1	120	25	3	3500	170
8 GiB	P2	120	25	3	3500	170
16 GiB	P3	120	25	3	3500	170
32 GiB	P4	120	25	3	3500	170
64 GiB	P6	240	50	3	3500	170
128 GiB	P10	500	100	3	3500	170
256 GiB	P15	1100	125	3	3500	170
512 GiB	P20	2300	150	3	3500	170
1024 GiB	P30	5000	200	5	-	-
2048 GiB	P40	7500	250	5	-	-
4096 GiB	P50	7500	250	5	-	-
8192 GiB	P60	16000	500	10	-	-
16384 GiB	P70	18000	750	10	-	-

Step-3: On the left side there will be settings and click on disks.

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (...	Encryption	Host caching
ubuntu_OsDisk_1_d61391d7982045bd9f4e022d16bf1229	Premium SSD LRS	30	120	25	SSE with PMK	Read/write

Step-4: click on disk name and select your preferred size, save it.

Step-5: On the left side there will be select + performance and click on size.

Step-6: click on disk name and select your preferred ram size, save it.

Q6) Create Ubuntu VM and run a python program in it.

Step-1: Create a ubuntu virtual machine using SSH key same as previous experiment.

Step-2: Login with your username and type python3, write your python program and execute it.

ubuntu Virtual machine

Essentials

- Resource group (move) AZ65
- Status Stopped (deallocated)
- Location Central India (Zone 1)
- Subscription (move) Azure for Students
- Subscription ID b4e59686-6e71-45af-8ab9-20d96493254e
- Availability zone 1
- Tags (edit) Add tags

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine		Networking	
Computer name	ubuntu	Public IP address	4.240.81.175 (Network interface)
Operating system	Linux	Public IP address (IPv6)	-
VM generation	V2	Private IP address	10.0.0.4

Networking

Public IP address: 4.240.81.175 (Network interface)

Private IP address: 10.0.0.4

Properties

Page 1 of 1

ubuntu - Microsoft Azure

Virtual machines

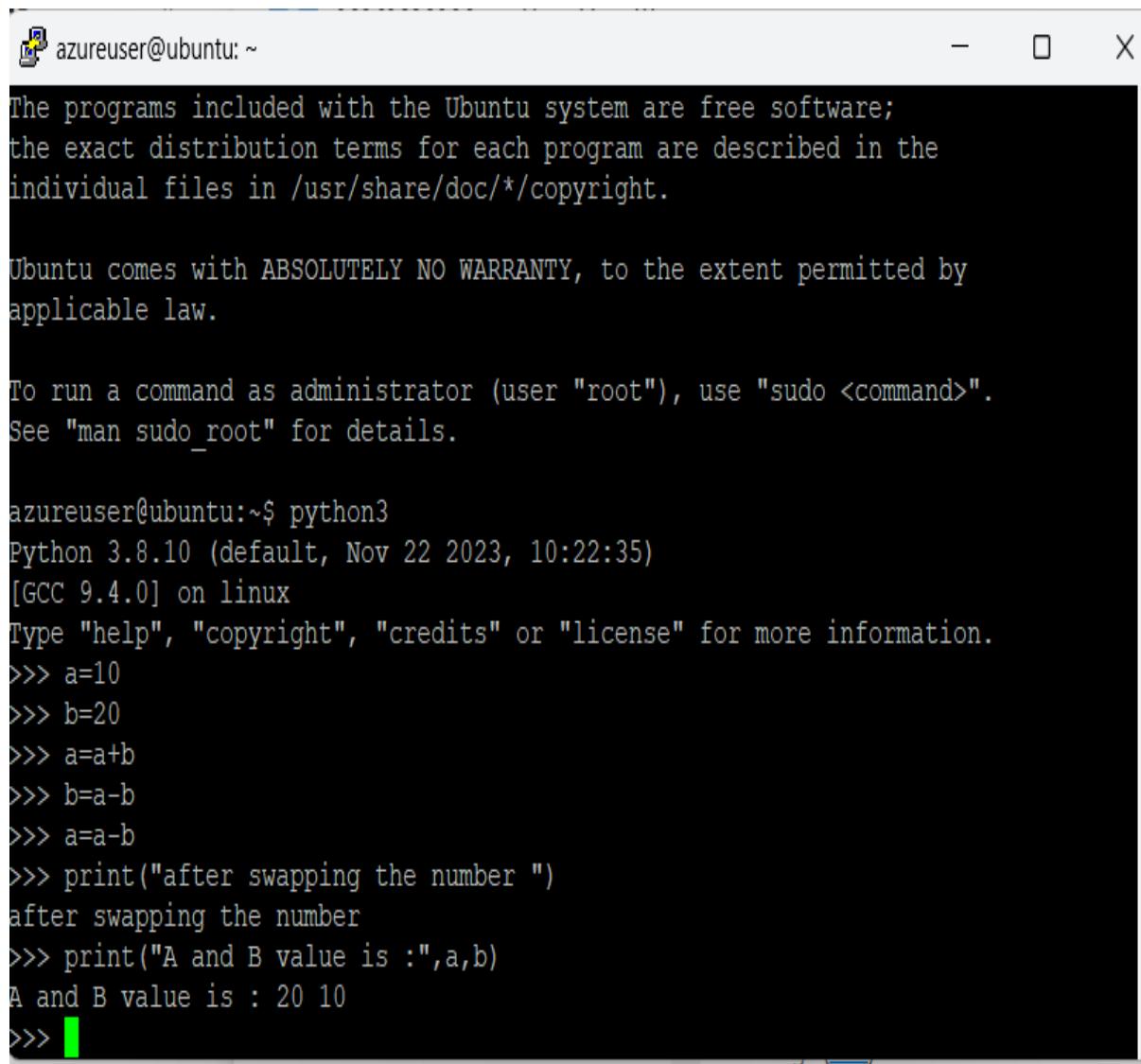
ubuntu | Locks

Lock name	Lock type	Scope	Notes
ssh	Read-only	ubuntu	"There is a lock"

Properties

Page 1 of 1

Step-2: On the left side there will be settings and click on locks, give lock name and select lock type.

A screenshot of a terminal window titled "azureuser@ubuntu: ~". The window contains the standard Ubuntu license text, a warning about no warranty, and instructions for sudo. Below this, a Python session is shown where variables 'a' and 'b' are swapped. The terminal has a dark background with white text and a light gray border.

```
azureuser@ubuntu:~$ python3
Python 3.8.10 (default, Nov 22 2023, 10:22:35)
[GCC 9.4.0] on linux
Type "help", "copyright", "credits" or "license" for more information.

>>> a=10
>>> b=20
>>> a=a+b
>>> b=a-b
>>> a=a-b
>>> print("after swapping the number ")
after swapping the number
>>> print("A and B value is :",a,b)
A and B value is : 20 10
>>> 
```

Q7) Create a Ubuntu VM and transfer files using WinScp.

Step-1: Create a ubuntu virtual machine using SSH as previous experiment and copy public IP address.

Search resources, services, and docs (G+)

azure Virtual machine

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile ...

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Connect Bastion

Networking Network settings Load balancing

Essentials

Resource group (move) AZ55

Status Running

Location Central India (Zone 1)

Subscription (move) Azure for Students

Subscription ID b4e59686-6e71-45af-8ab9-20d96493254e

Availability zone 1

Tags (edit) Add tags

Operating system Linux (ubuntu 20.04)

Size Standard DS1 v2 (1 vcpu, 3.5 GiB memory)

Public IP address 74.225.248.234

Virtual network/subnet azure-vnet/default

DNS name Not configured

Health state

JSON View

Step-2: Login into your ubuntu VM using PUTTY and type ls command as you can see nothing.

```
azureuser@ubuntu: ~
Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

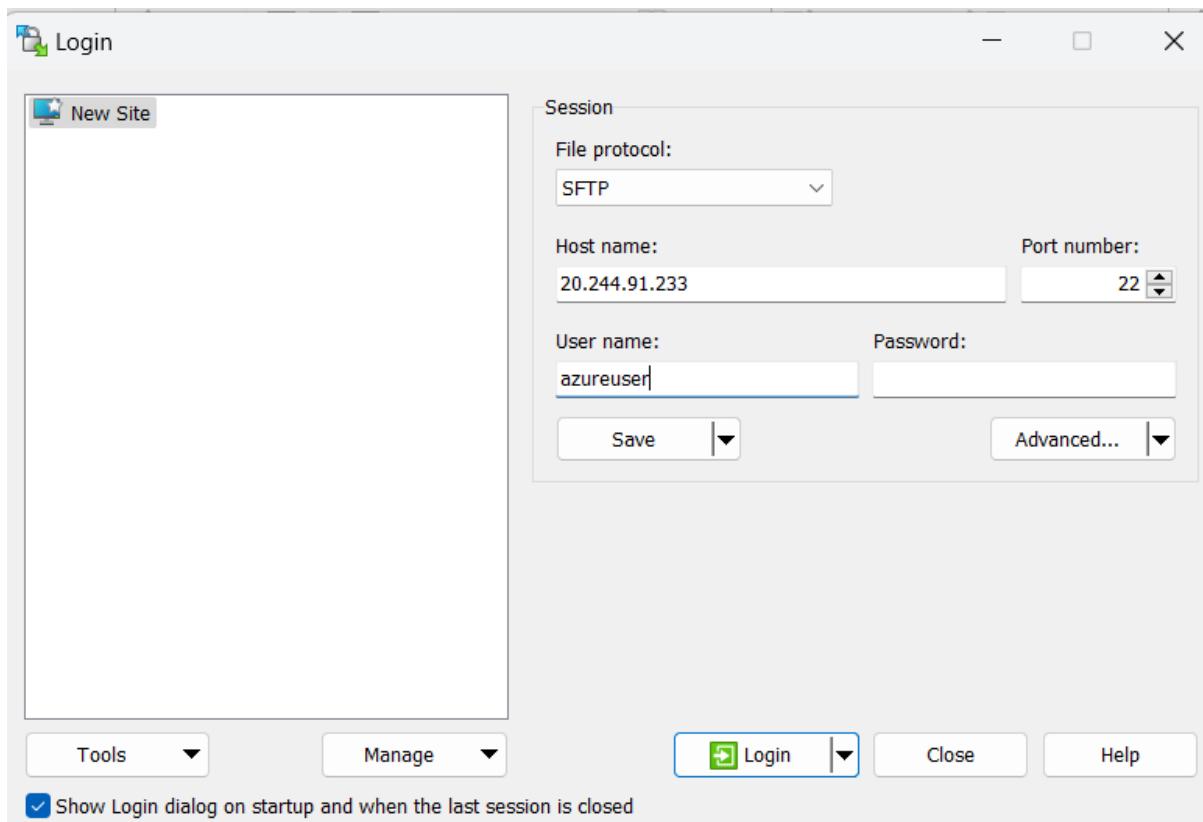
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

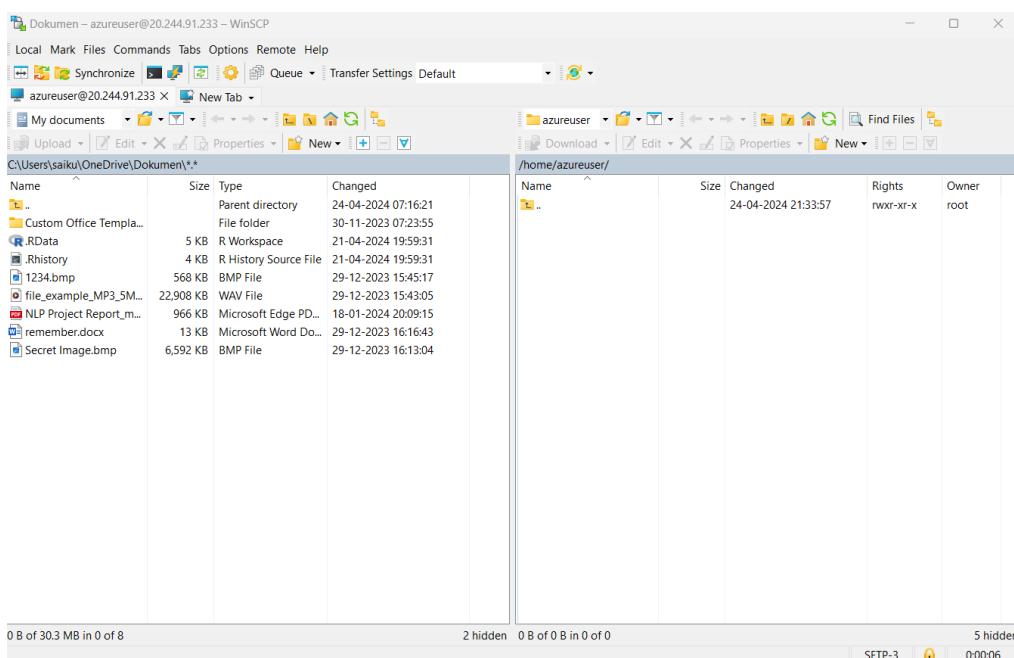
azureuser@ubuntu:~$ ls
azureuser@ubuntu:~$
```

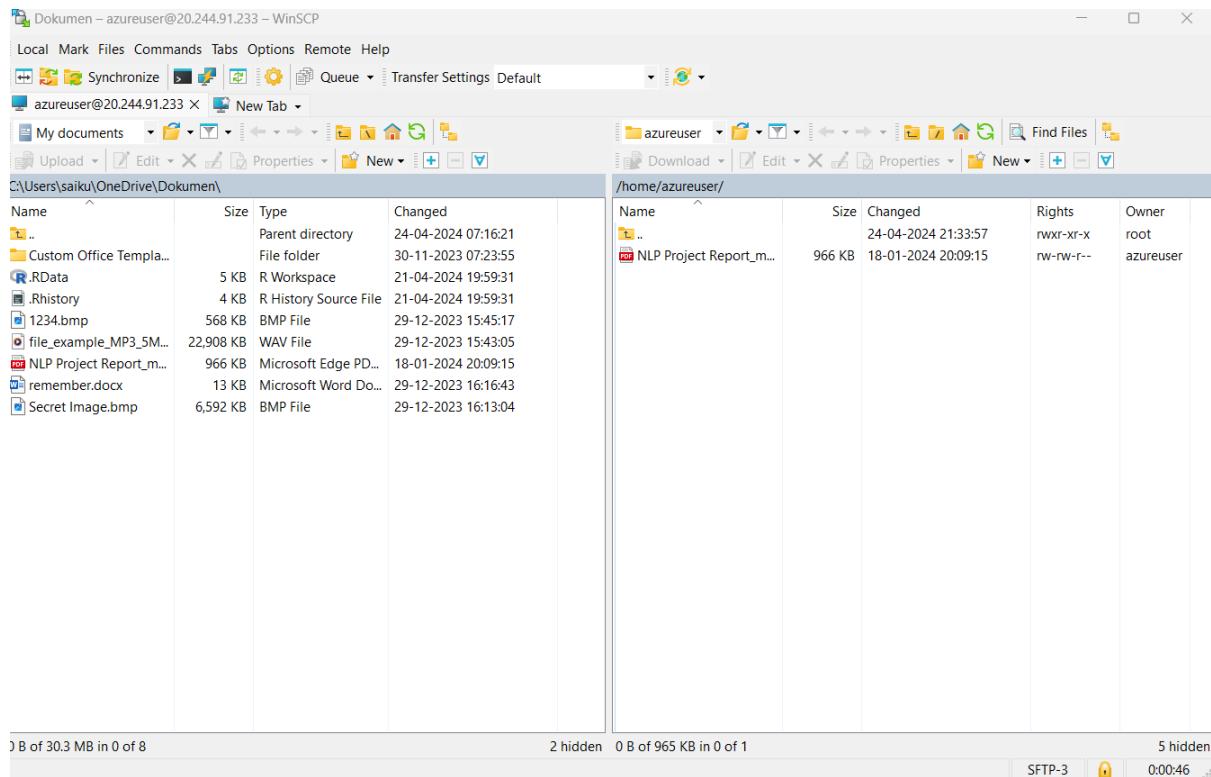
Step-3: Open WinScp at right bottom you can see Advanced option->SSH->Authentication->In that drag private key file and click on ok.

At last Login into your account using public IP address and username in WinSep.



Now, you can drag your files from your desktop to ubuntu VM in WinSep.





Step-4: Now again type ls command as you can see file inside ubuntu VM.

```
azureuser@ubuntu:~$ 
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@ubuntu:~$ ls
azureuser@ubuntu:~$ ls
'NLP Project Report_main.pdf'
azureuser@ubuntu:~$
```

Q8) How to make Linux server as web server in AZURE.

Step-1: Create a ubuntu virtual machine using SSH as previous experiment and copy public IP address.

Search resources, services, and docs (G+)

azure Virtual machine

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile ...

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Connect Connect Bastion

Networking Network settings Load balancing

Resource group (move) AZ55

Operating system Linux (Ubuntu 20.04)

Status Running

Location Central India (Zone 1)

Subscription (move) Azure for Students

Subscription ID b4e59686-6e71-45af-8ab9-20d96493254e

Availability zone 1

Tags (edit) Add tags

JSON View

Step-2: Login into your Ubuntu VM using your username and type the following commands.

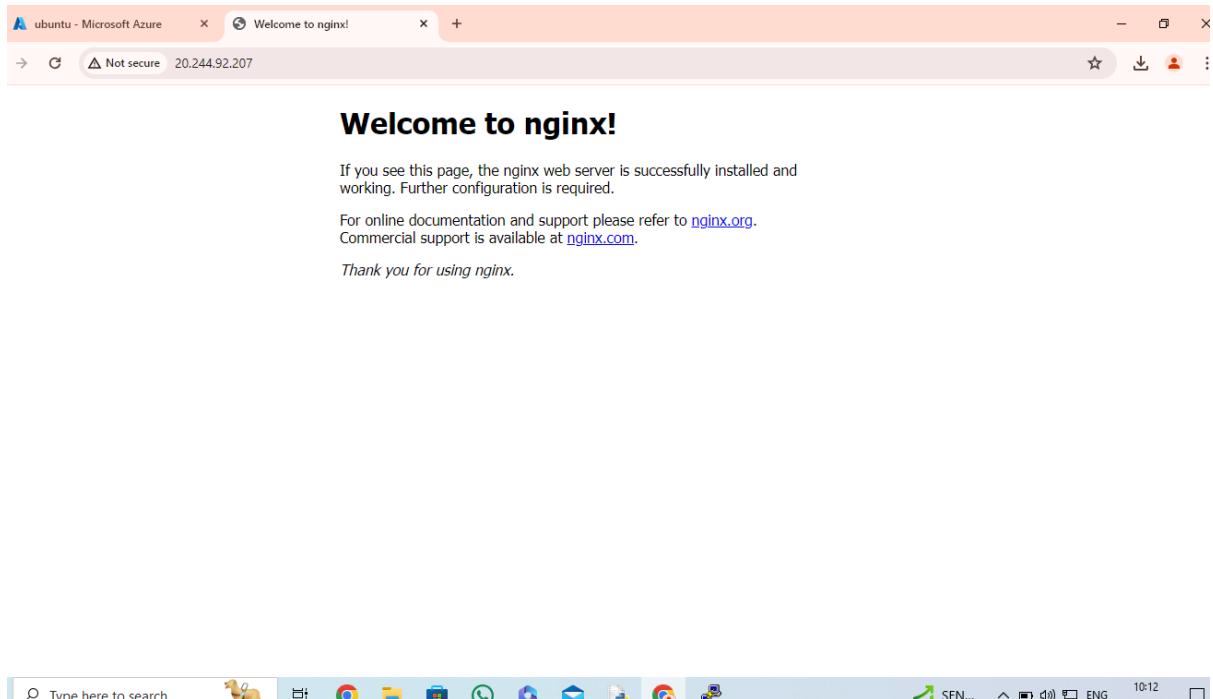
\$sudo su

\$sudo apt-get update

After typing the two command, now install web server using the below command

\$sudo apt-get install nginx

After installing in VM, paste the public ip address in desktop browser and you can see.



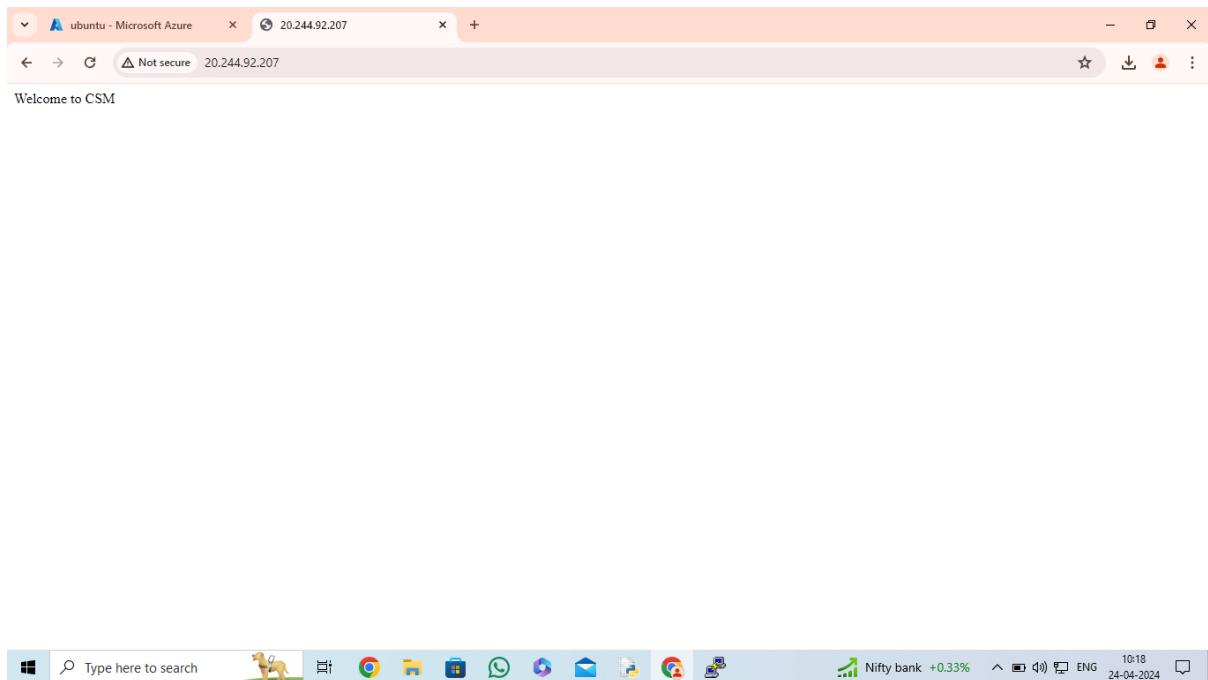
Step-3: To remove following information and keep new information in that page type the following command and refresh the browser page.

\$cd /var/www/html

\$rm index.nginx-debian.html

\$echo “Welcome to CSM”>index.html

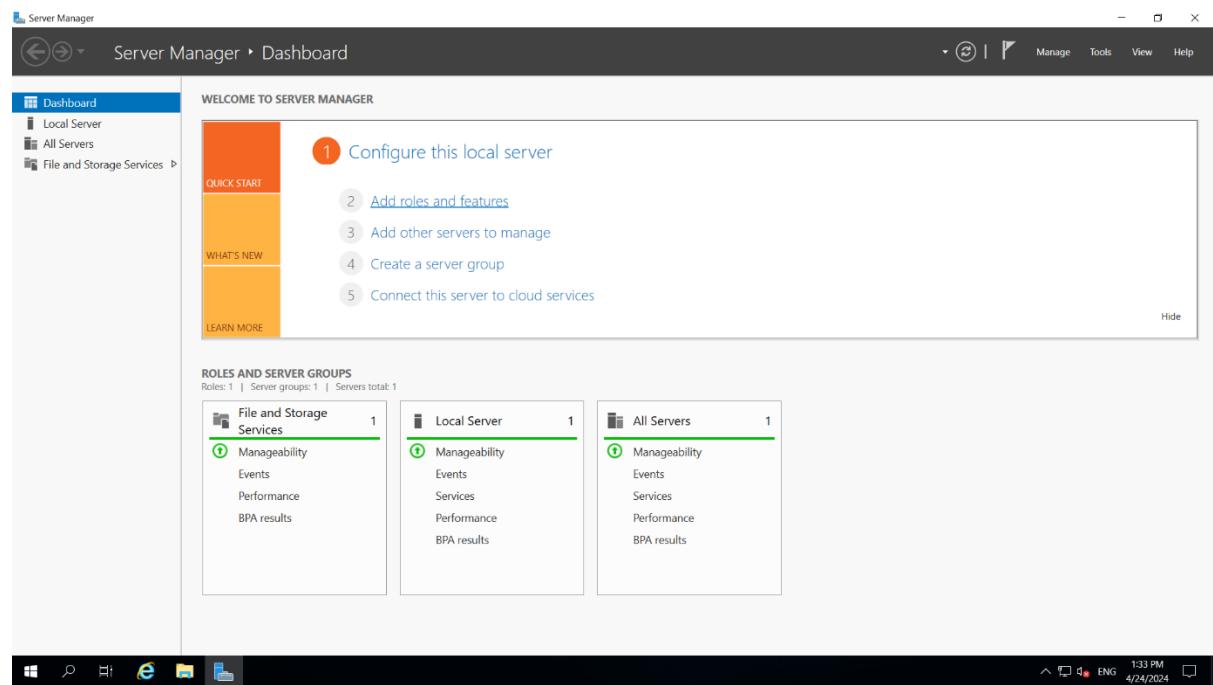
```
root@ubuntu: /var/www/html
Setting up libnginx-mod-mail (1.18.0-0ubuntu1.4) ...
Setting up fontconfig-config (2.13.1-2ubuntu3) ...
Setting up libnginx-mod-stream (1.18.0-0ubuntu1.4) ...
Setting up libtiff5:amd64 (4.1.0+git191117-2ubuntu0.20.04.12) ...
Setting up libfontconfig1:amd64 (2.13.1-2ubuntu3) ...
Setting up libgd3:amd64 (2.2.5-5.2ubuntu2.1) ...
Setting up libnginx-mod-http-image-filter (1.18.0-0ubuntu1.4) ...
Setting up nginx-core (1.18.0-0ubuntu1.4) ...
Setting up nginx (1.18.0-0ubuntu1.4) ...
Processing triggers for ufw (0.36-6ubuntu1.1) ...
Processing triggers for systemd (245.4-4ubuntu3.23) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.14) ...
root@ubuntu:/home/azureuser# cd /var/www/html
root@ubuntu:/var/www/html# rm index.nginx-debian.html
root@ubuntu:/var/www/html# echo "<h1>Welcome to CSM</h1>"
<h1>Welcome to CSM</h1>
root@ubuntu:/var/www/html# rm index.nginx-debian.html
rm: cannot remove 'index.nginx-debian.html': No such file or directory
root@ubuntu:/var/www/html# echo "<h1>Welcome to CSM</h1>" indx.html
<h1>Welcome to CSM</h1> indx.html
root@ubuntu:/var/www/html# echo "<h1>Welcome to CSM</h1>">indx.html
root@ubuntu:/var/www/html# echo "Welcome to CSM">index.htm
root@ubuntu:/var/www/html#
```



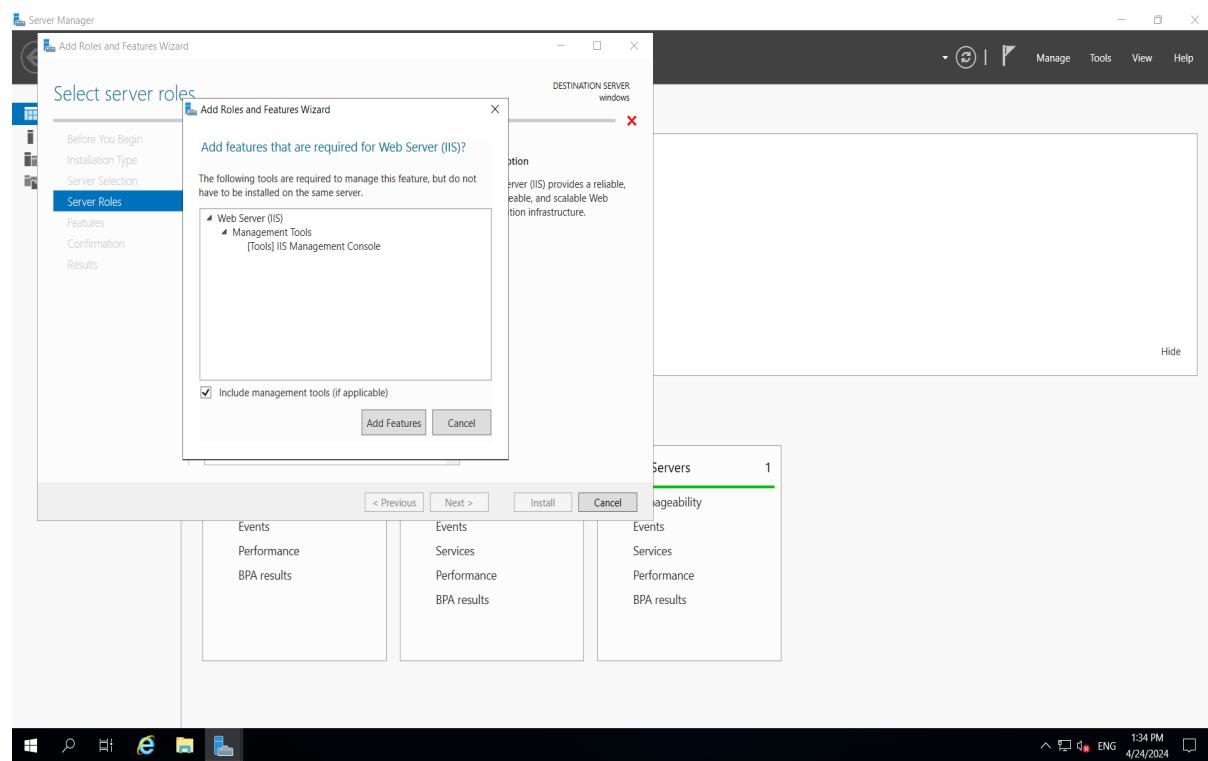
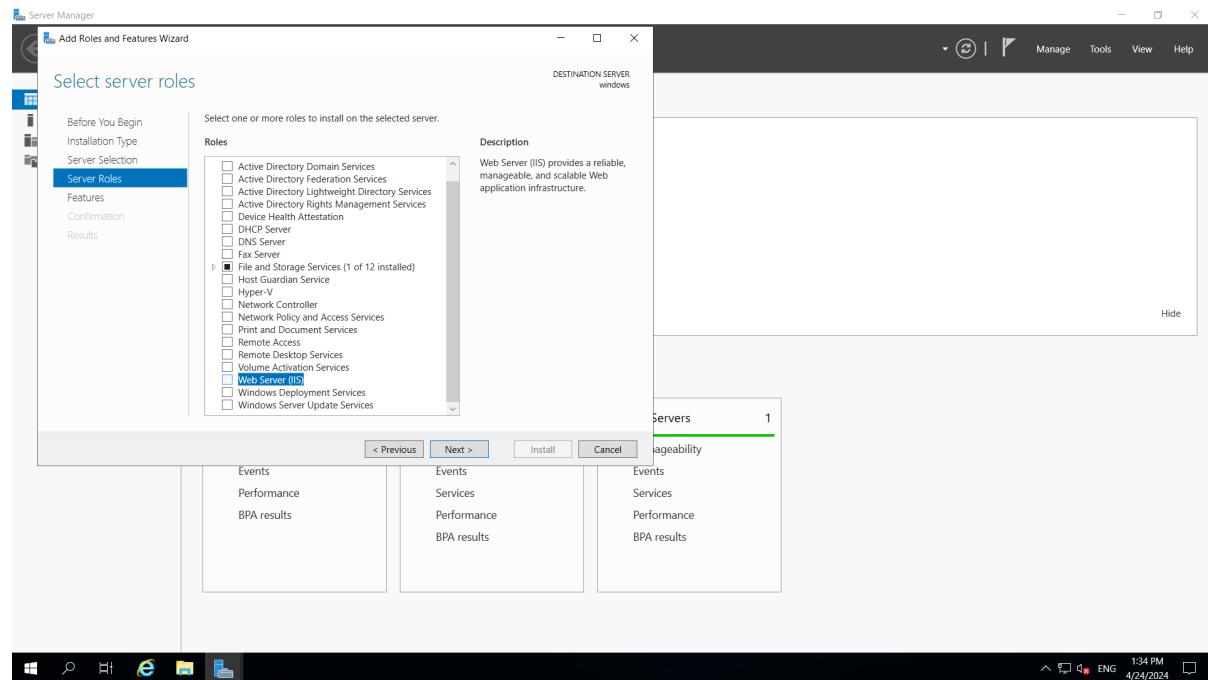
Q9) Setup and configure AZURE web server for windows server(IIS).

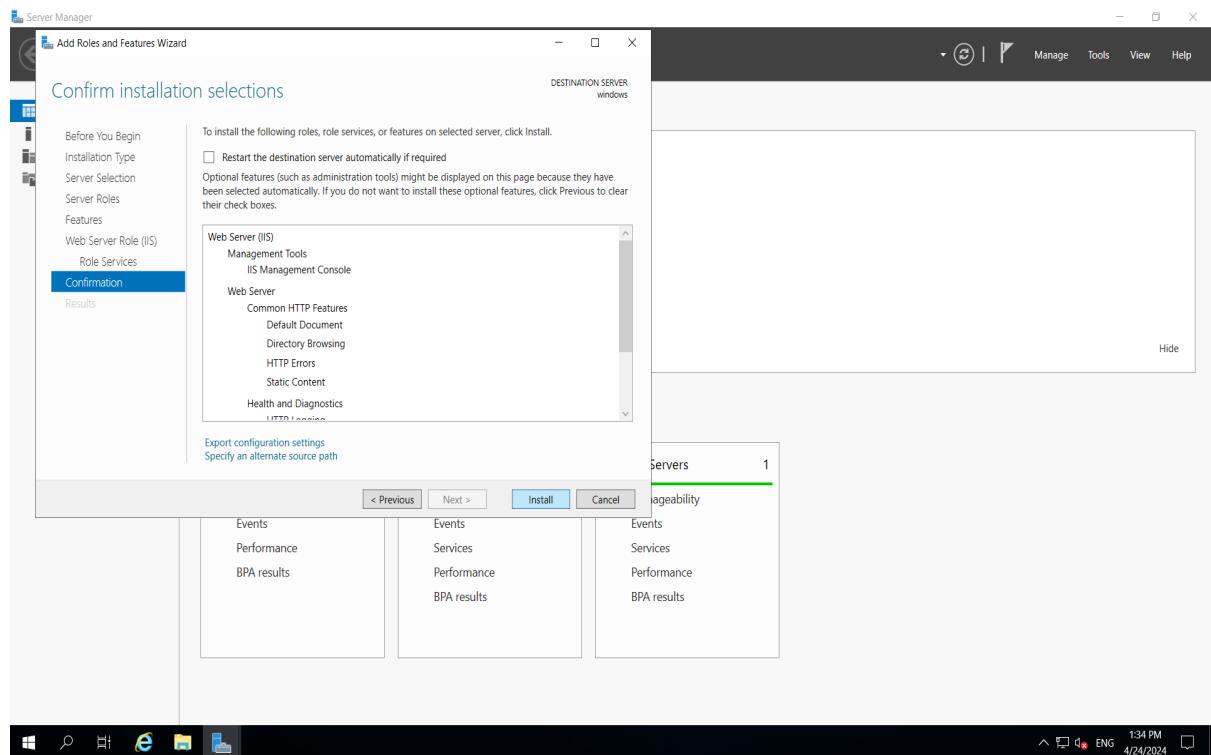
Step-1: Create and login windows VM same as previous experiment and copy public IP address.

Step-2: When remote desktop will start(windows vm) you can see there will be Server Manager will be opened and in that you can see Configure this local server , Click on “Add roles and features”.

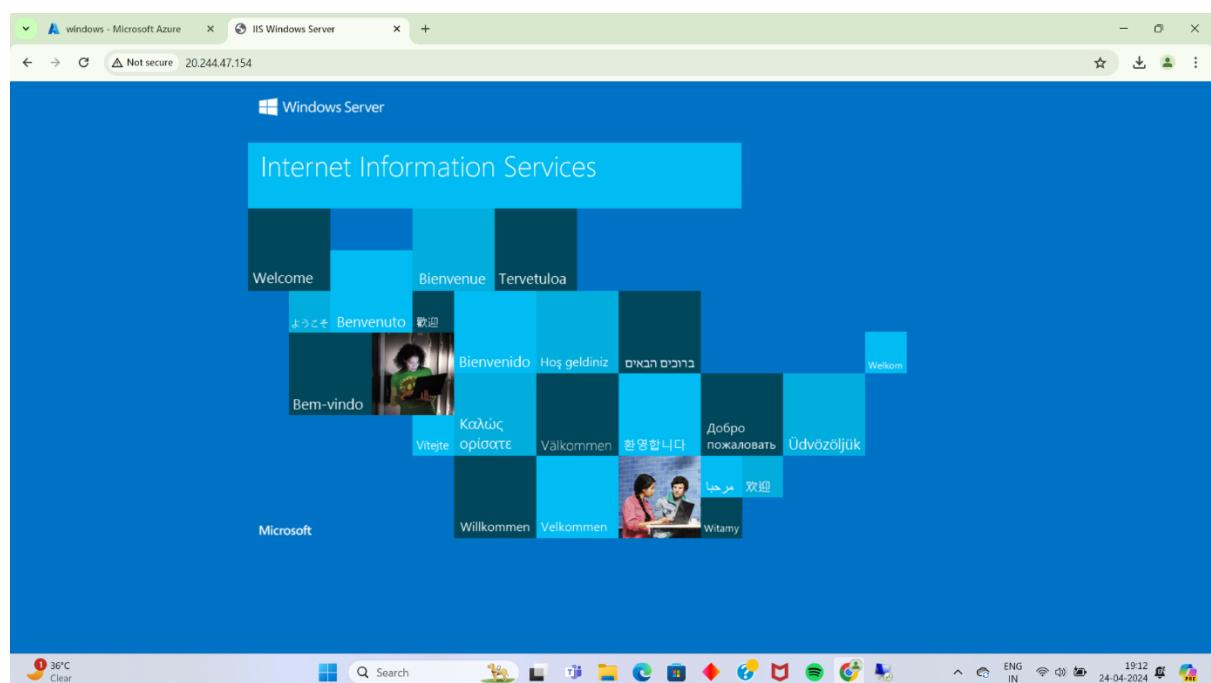


Step-3: Click on next, next and in Server Roles select Web Server(IIS) click on add feature ,click on next, next till you can get install button and click on install .

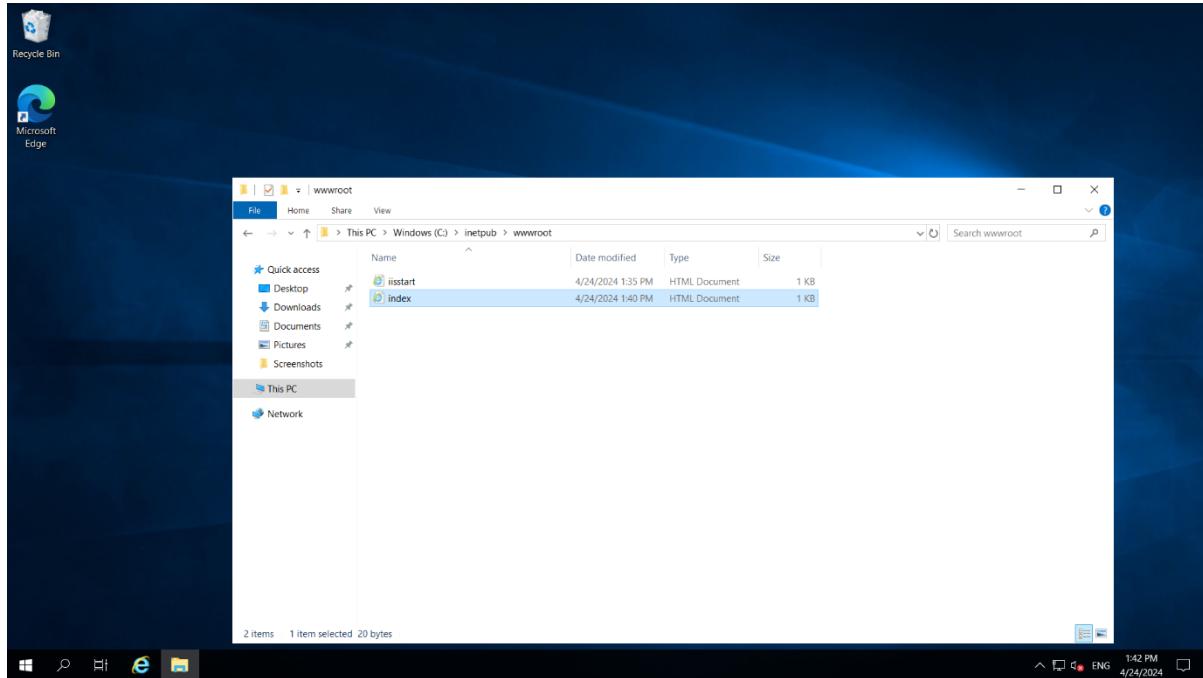




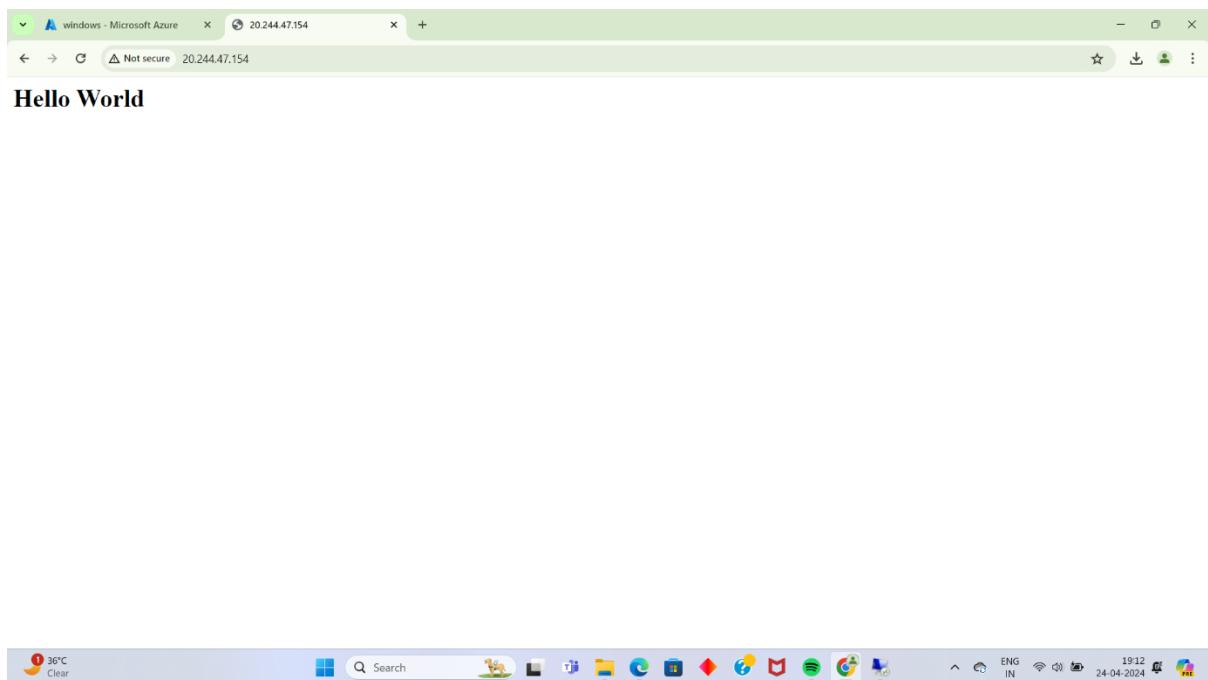
Step-4: paste the public ip address in desktop browser and you can see.



Now to remove this all information first of all create index.html in desktop and that should paste in the specified location of remote desktop VM that is ThisPC->windows(c)->inetup->wwwroot and remove iistart.png.



Step-5: Refresh the browser page.



Q10) How we are adding new users, login credentials, changing owner, create authorized key files.

Step-1: Create a ubuntu virtual machine using SSH as previous experiment.

Step-2: Login into your Ubuntu VM using your username and type the following commands.

To add new user in Linux server:

\$sudo useradd -m Prahala

To set new password:

\$sudo password Prahala

Enter new password and Retype password.

To modify login credentials:

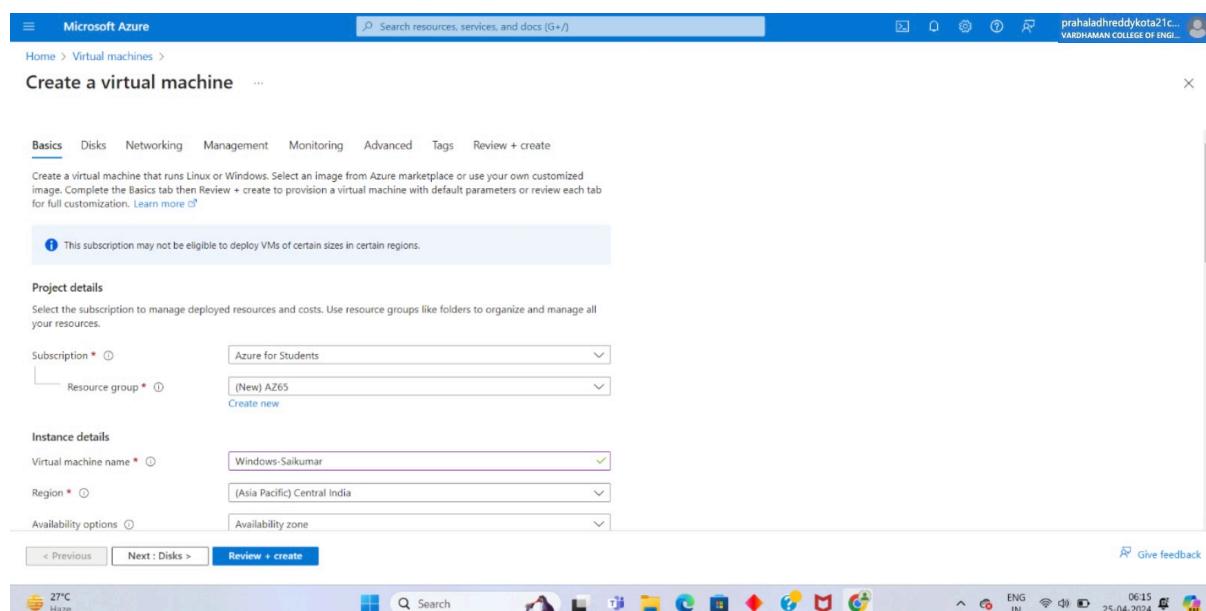
\$sudo usermod -aG sudo Prahala

To switch the user:

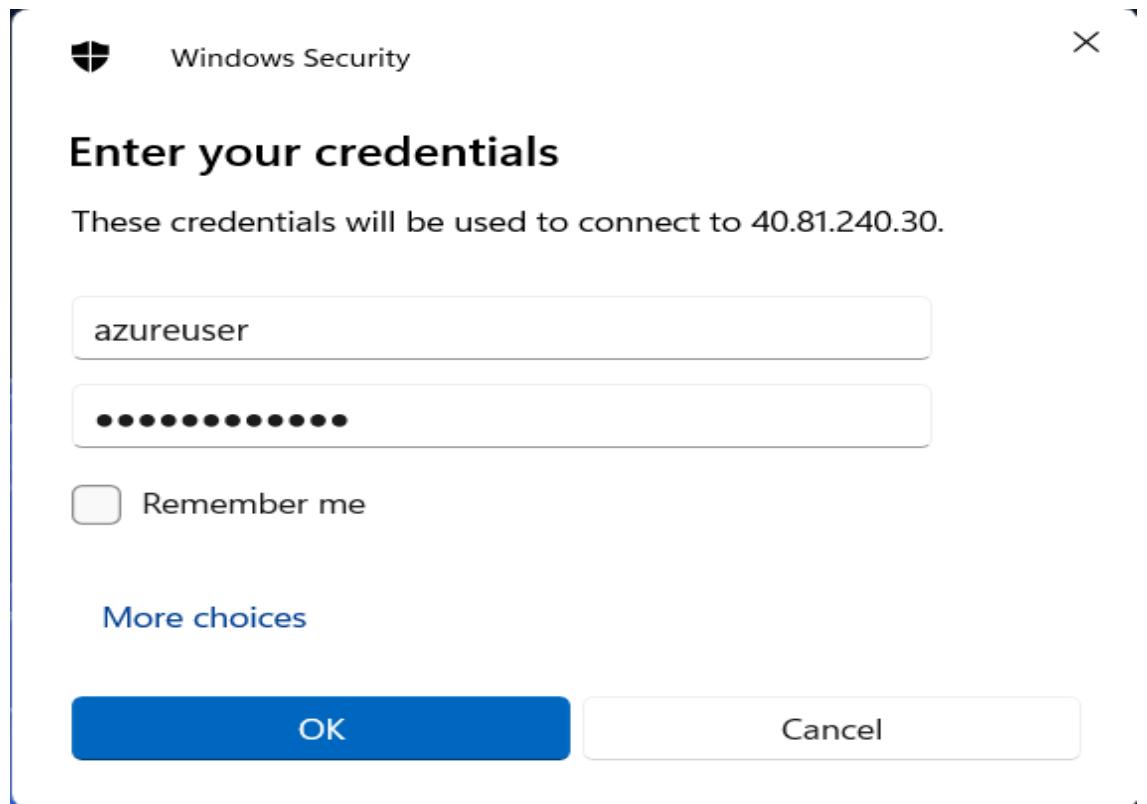
\$sudo su Prahala

Q11) Create a Windows VM and transfer files from desktop to remote desktopVM.

Step-1: Create Windows VM same as previous experiments and copy public IP Address.



Step-2: Login into your account using username and password using remote desktop.



Step-3: Minimize the Remote desktop and copy file from desktop.

Right click in remote desktop and click on paste.

