

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

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

VirtualBox
Download VirtualBox

Here you will find links to VirtualBox binaries and its source code.

VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

If you're looking for the latest VirtualBox 6.0 packages, see VirtualBox 6.0 builds. Please also use version 6.0 if you need to run VMs with software virtualization, as this has been discontinued in 6.1. Version 6.0 will remain supported until July 2020.

If you're looking for the latest VirtualBox 5.2 packages, see VirtualBox 5.2 builds. Please also use version 5.2 if you still need support for 32-bit hosts, as this has been discontinued in 6.0. Version 5.2 will remain supported until July 2020.

VirtualBox 6.1.32 platform packages

- Windows hosts
- OS X hosts
- Linux distributions
- Solaris hosts
- Solaris 11 IPS hosts

The binaries are released under the terms of the GPL version 2.

See the changelog for what has changed.

You might want to compare the checksums to verify the integrity of downloaded packages. The SHA256 checksums should be favored as the MD5 algorithm must be treated as insecure.

- SHA256 checksums, MD5 checksums

Note: After upgrading VirtualBox it is recommended to upgrade the guest additions as well.

[VirtualBox Extension Pack](https://download.virtualbox.org/virtualbox/6.1.32/VirtualBox-6.1.32-149290-Win.exe)

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

Download Ubuntu Desktop

Ubuntu 20.04.4 LTS

Download the latest LTS version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years, until April 2025, of free security and maintenance updates, guaranteed.

Ubuntu 20.04 LTS release notes

Recommended system requirements:

- 2 GHz dual core processor or better
- Internet access is helpful
- 4 GB system memory
- Either a DVD drive or a USB port for the installer media
- 25 GB of free hard drive space

[Download](#)

For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors, and past releases see our [alternative downloads](#).

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

Oracle VM VirtualBox Manager

File Machine Help

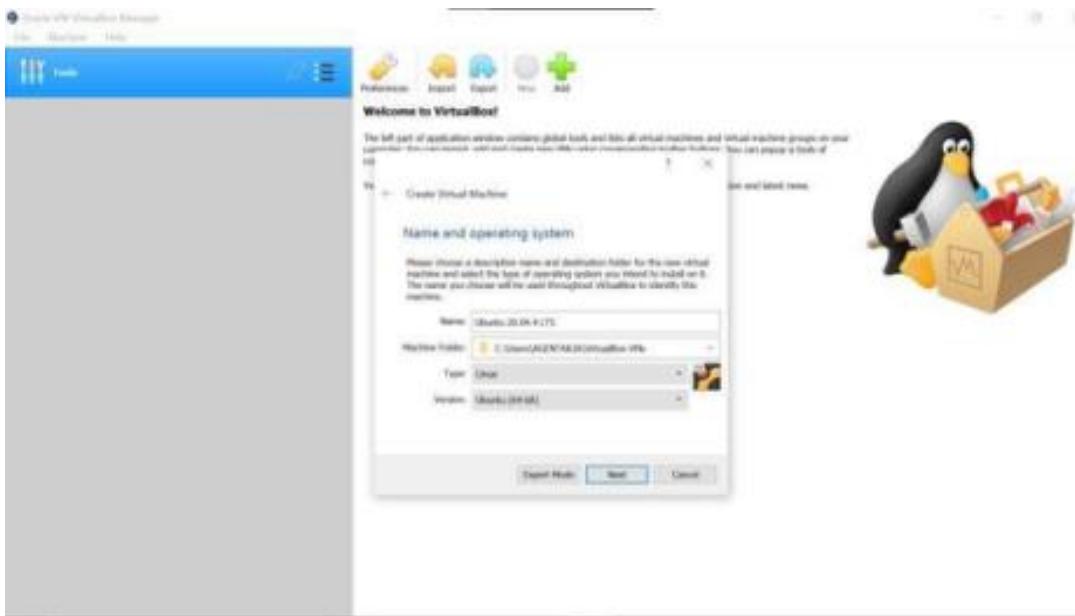
Tools Preferences Import Export New Add

Welcome to VirtualBox!

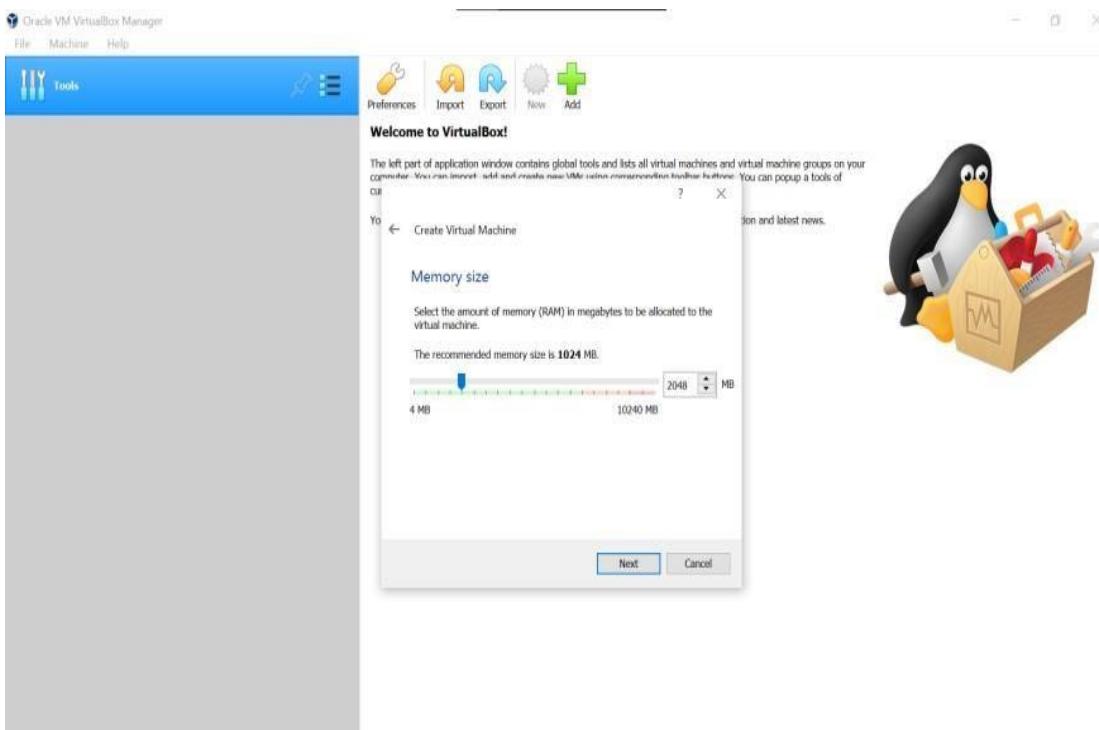
The left part of application window contains global tools and lists all virtual machines and virtual machine groups on your computer. You can import, add and create new VMs using corresponding toolbar buttons. You can pop up a tools for currently selected element using corresponding element button.

You can press the F1 key to get instant help, or visit www.virtualbox.org for more information and latest news.

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

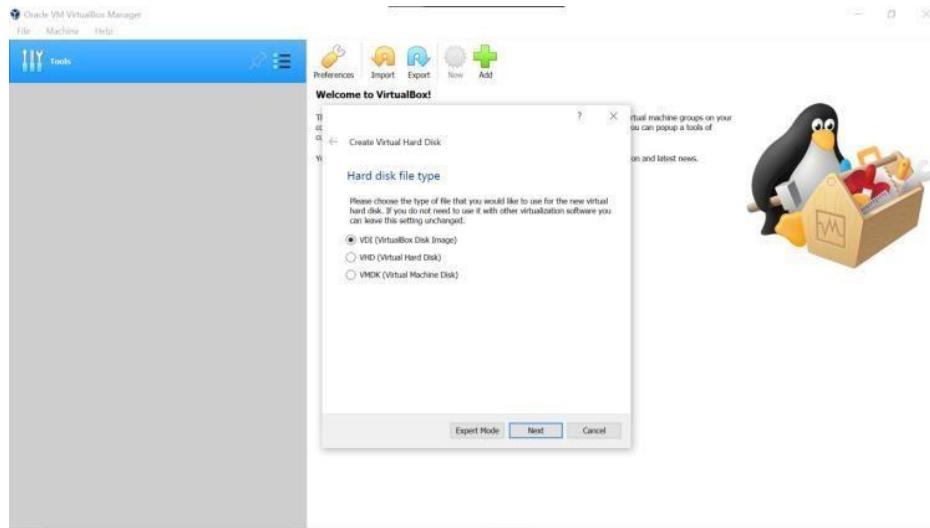


Step-5. Choose how much RAM you want to assign to the virtual machine and select Next. The recommended minimum is 1024 MB.



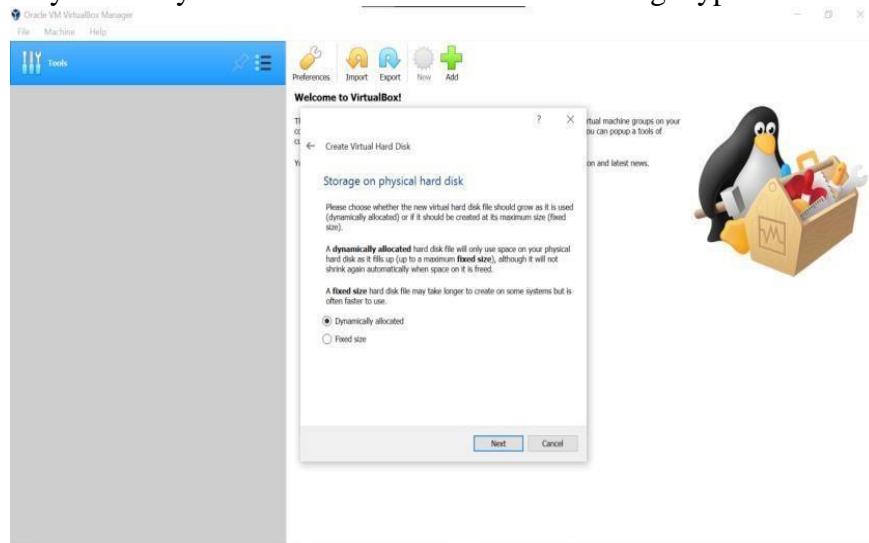
Step-6: Choose Create a virtual hard disk now and select Create.

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

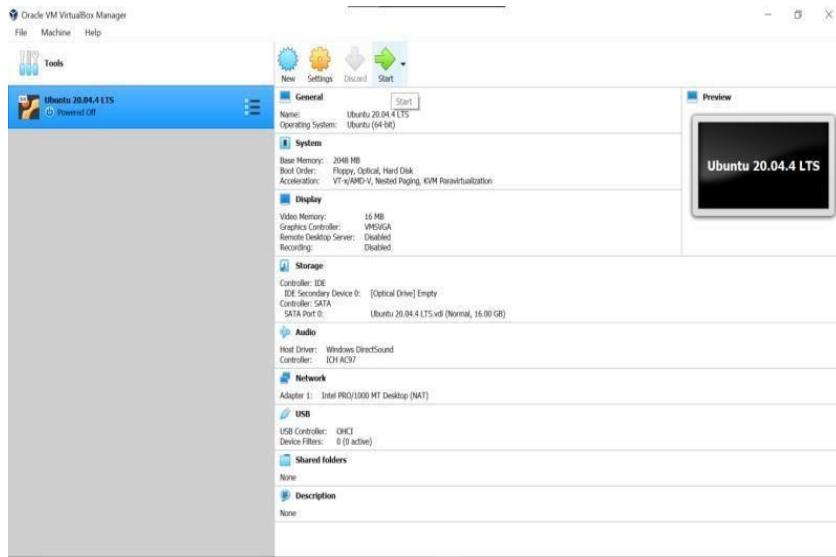


Tip: A fixed size disk performs better because the virtual machine doesn't have to increase the file size as you install software.

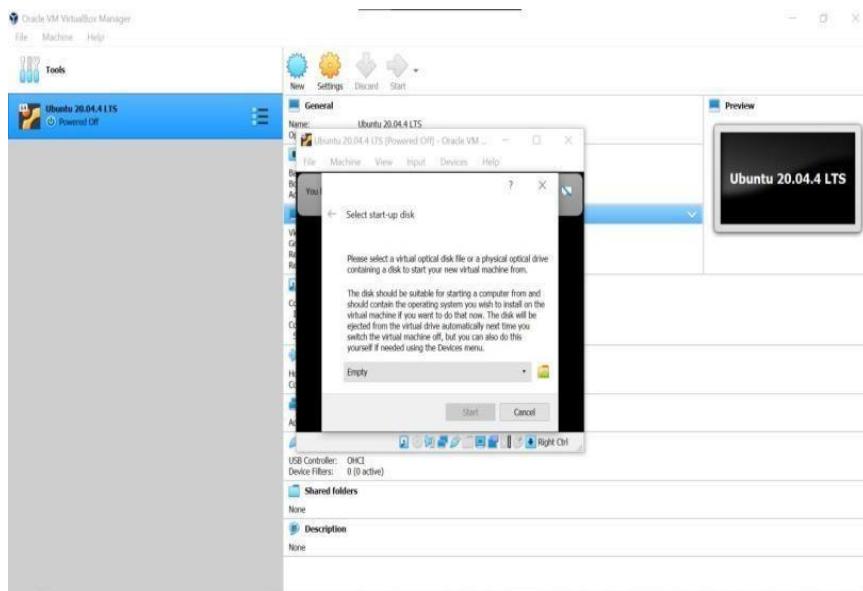
Step-9: Choose how much space you wish to set aside for Ubuntu and select Create.

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.

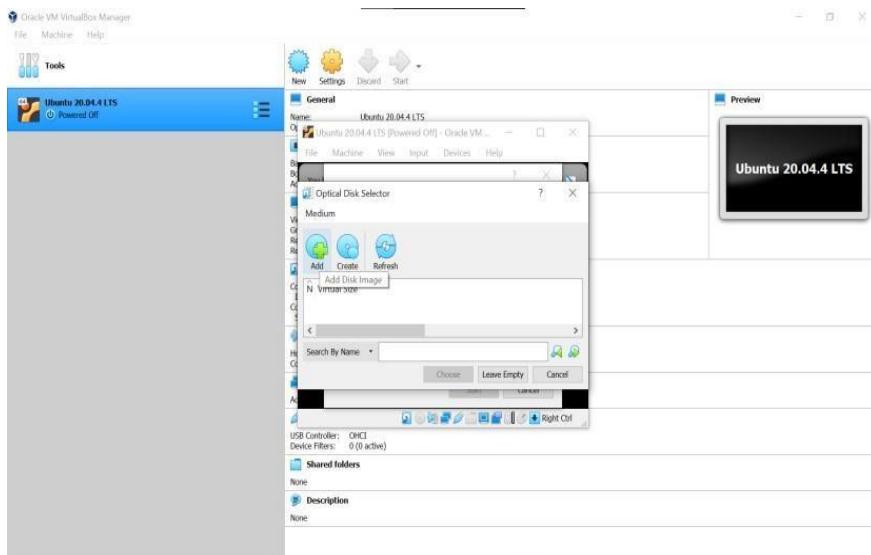
Step-10: The name of your virtual machine will now appear on the left side of the VirtualBox manager. Select Start in the toolbar to launch your VM.



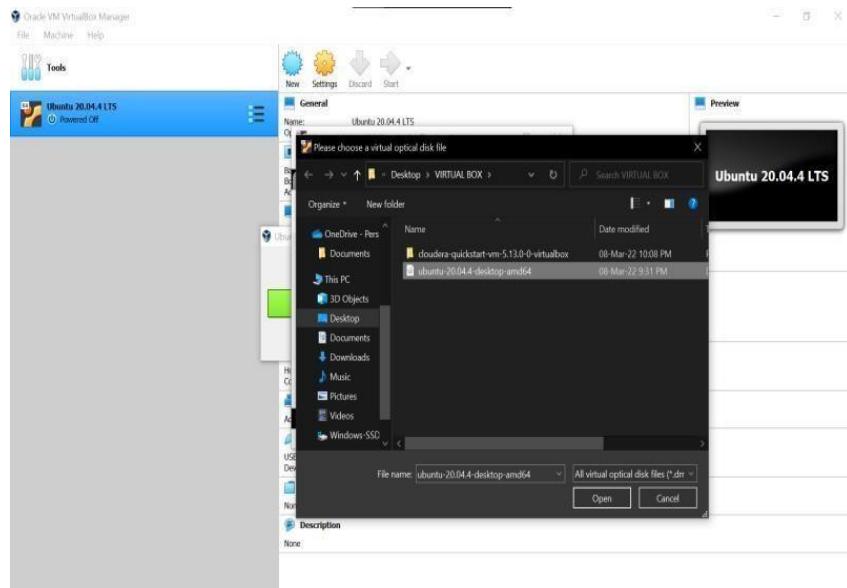
Step-11: This is the point where you need to choose the Ubuntu ISO file you downloaded earlier. If the VM doesn't automatically detect it, select the folder next to the Empty field.



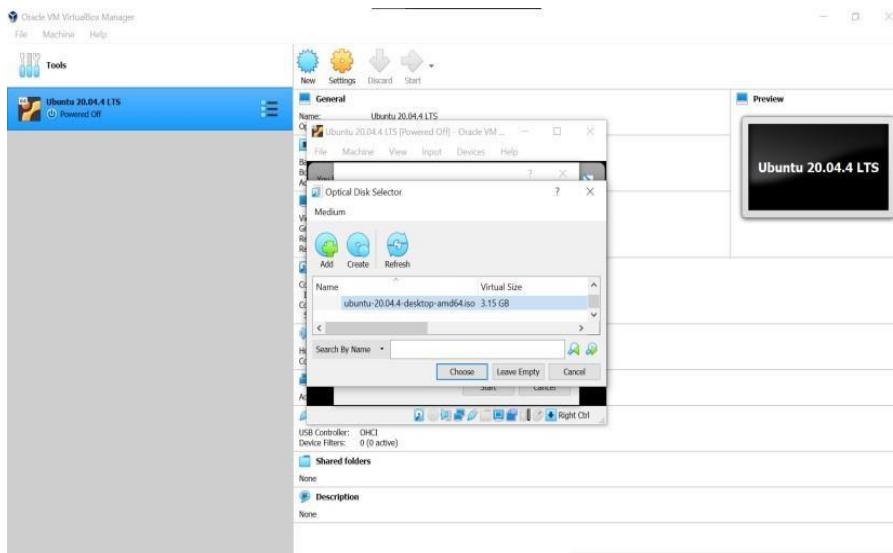
Step-12: Select Add in the window that pops up.



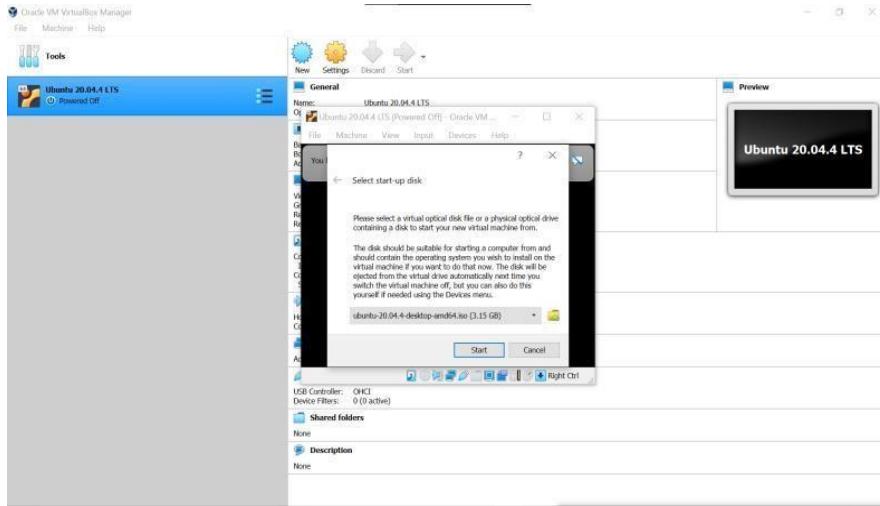
Step-13: Choose your Ubuntu disk image and select Open.



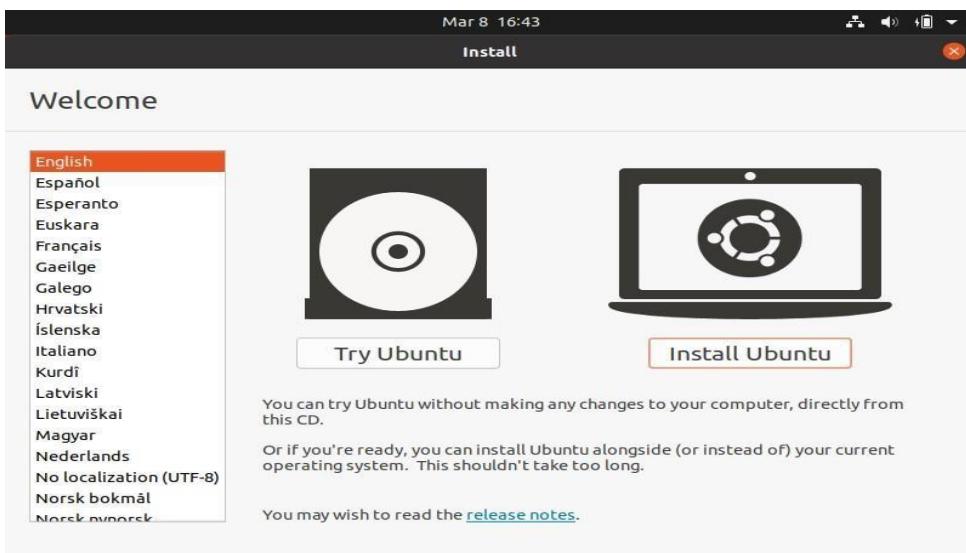
Step-14: - Select Choose



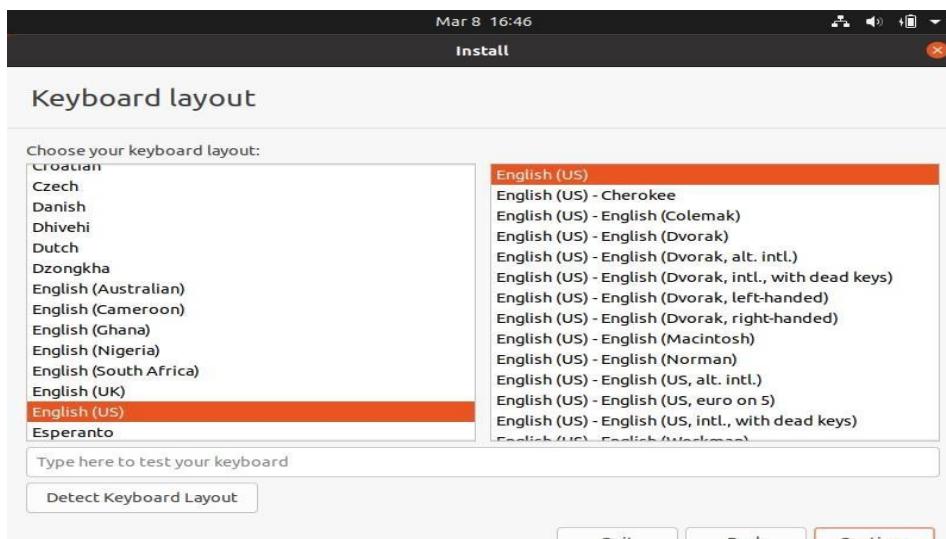
Step-15: Select Start.



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



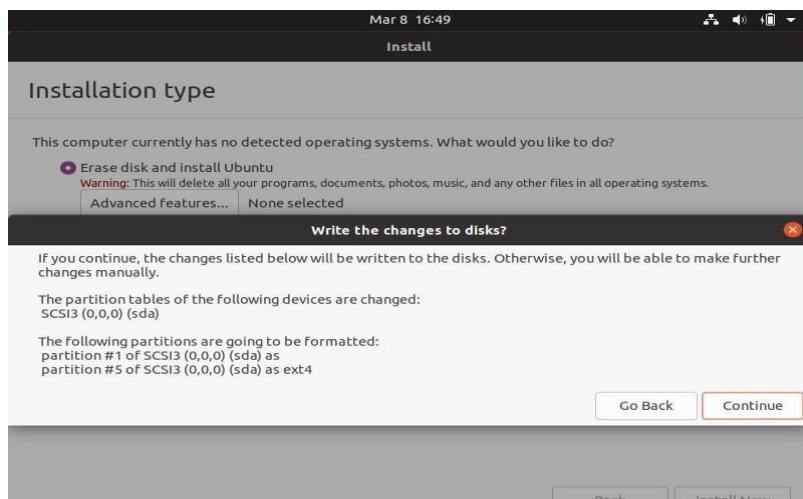
Step-17: Choose your keyboard layout and select Continue.



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

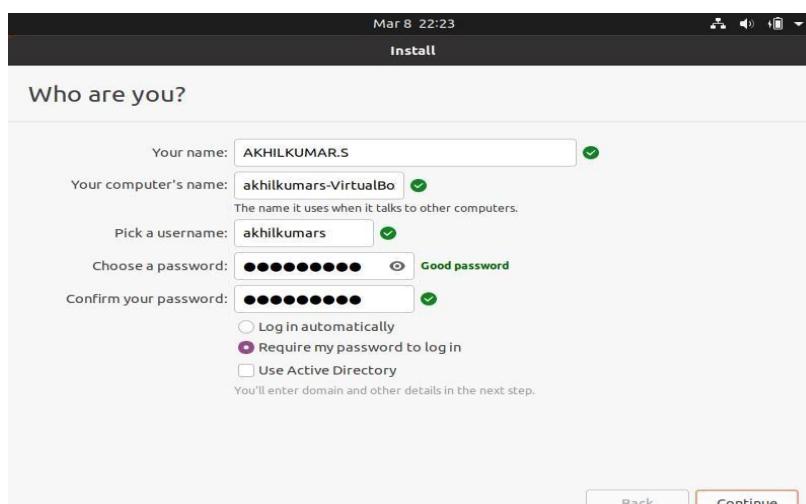
Step-19: Choose Erase disk and install Ubuntu and select Install Now, then select Continue to ignore the warning.

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

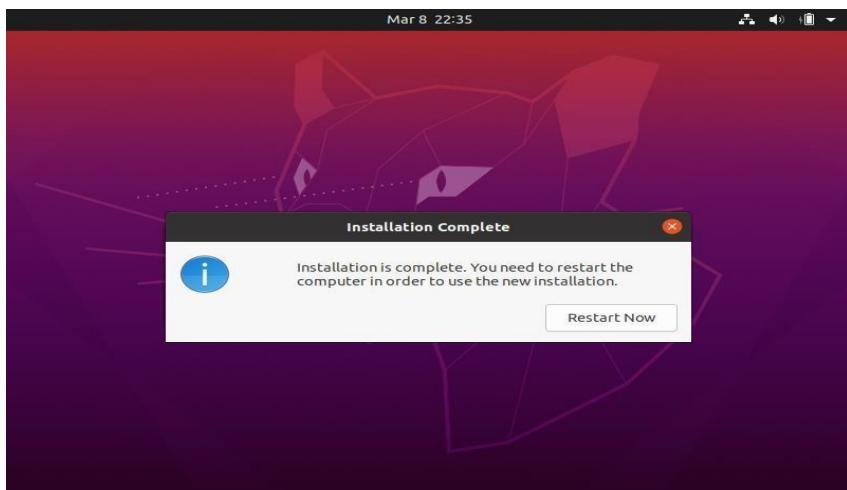


Step-20: - Choose your time zone on the map, then select Continue.

Step-21: - Set up your user account and select Continue.

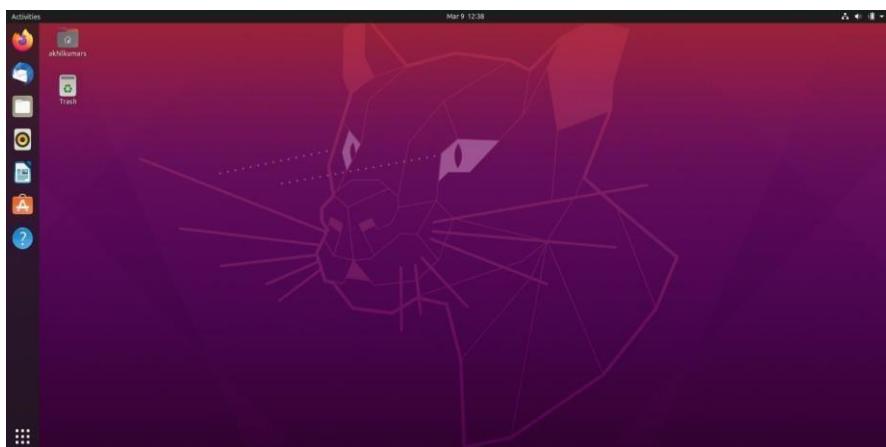


Step-22: - Select Restart Now.



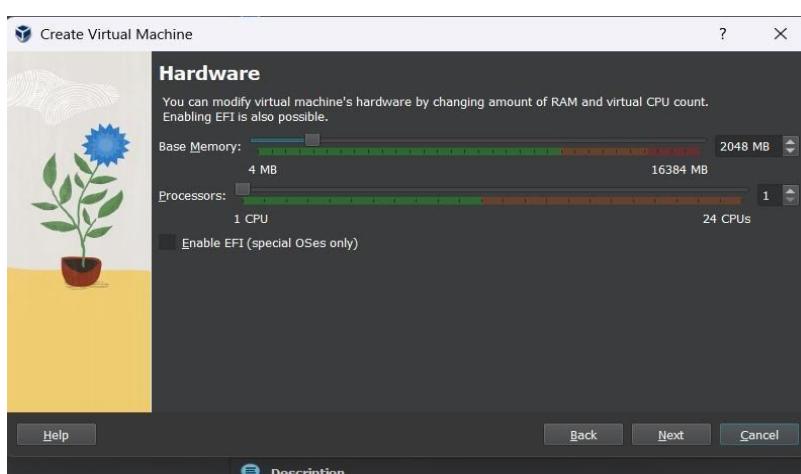
Step-23: - After restarting your VM and booting into Ubuntu, you may notice that the desktop doesn't scale correctly if you choose to view it in full-screen mode. You can fix this problem by selecting the VBox_Gas icon to install VirtualBox Guest Additions.

Output:



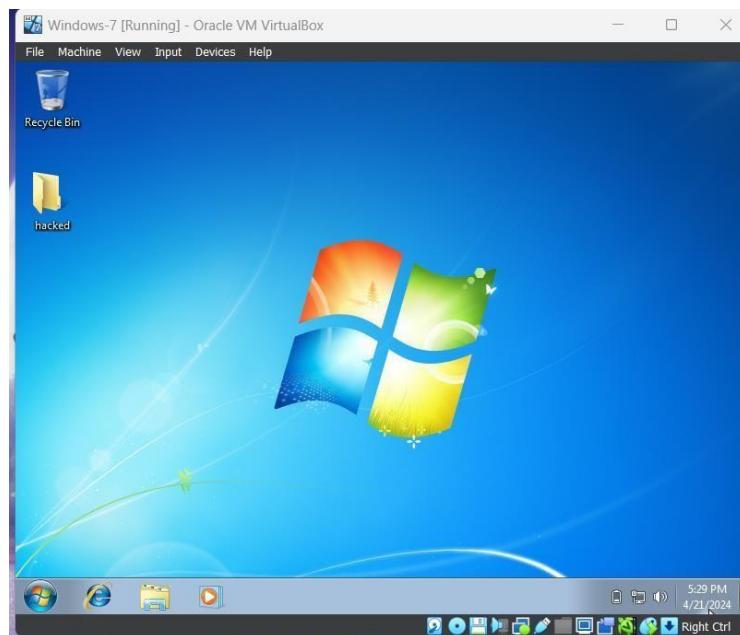
Windows:

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.

The screenshot shows the Microsoft Azure Virtual machines dashboard. At the top, there's a search bar and various navigation links like 'Create', 'Switch to classic', 'Reservations', 'Manage view', 'Refresh', 'Export to CSV', 'Open query', 'Assign tags', 'Start', 'Restart', 'Stop', 'Delete', 'Services', 'Maintenance'. Below the search bar, there are filters for 'Subscription equals all', 'Type equals all', 'Resource group equals all', 'Location equals all', and a 'Add filter' button. A message 'Showing 0 to 0 of 0 records.' is displayed. The main area has columns for 'Name', 'Type', 'Subscription', 'Resource group', 'Location', 'Status', 'Operating system', 'Size', 'Public IP address', and 'Disks'. A tooltip for the 'Create' button is open, showing three options: '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), and 'More VMs and related solutions' (Discover and deploy full workloads and Azure products for your business needs). Below the tooltip, there are links to 'Learn more about Windows virtual machines' and 'Learn more about Linux virtual machines'. At the bottom right, there's a 'Give feedback' link.

Step-3: Fill the details in that window by creating a “Resource Group”, Select Region as: Asia(Central India) and select the appropriate image.
Select the disk storage and so on.

The screenshot shows the 'Create a virtual machine' wizard, step 1: Set instance details. It includes fields for 'Subscription' (selected: 'Azure for Students') and 'Resource group' (selected: '(New) win'). Under 'Instance details', there are fields for 'Virtual machine name' (selected: 'windows'), 'Region' (selected: '(Asia Pacific) Central India'), 'Availability options' (selected: 'Availability zone'), and 'Availability zone' (selected: 'Zone 1'). A note says: 'You can now select multiple zones. Selecting multiple zones will create one VM per zone. Learn more'. There are also fields for 'Security type' (selected: 'Trusted launch virtual machines') and 'Image' (selected: 'Windows Server 2019 Datacenter - x64 Gen2'). Under 'VM architecture', 'x64' is selected. At the bottom, there are buttons for '< Previous', 'Next : Disks >', and 'Review + create'.

Step -4: Give the username and password and select the ports. After that click on “Create + Review”

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Virtual machines > Create a virtual machine

Standard_B1s - 1 vcpu, 1 GiB memory (₹923.13/month) (free services eligible) See all sizes

Enable Hibernation

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 *: poojitha

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 *: Allow selected ports

Select inbound ports *: RDP (3389)

< Previous Next : Disks > Review + create Give feedback

Virtual machine is deployed successfully.

Microsoft Azure

Search resources, services, and docs (G+/)

Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614192358 | Overview

Deployment

Overview

Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe... Start time: 6/14/2024, 7:36:19 PM
Subscription: Azure for Students Correlation ID: 7d1a2dbf-15ce-46b6-a5eb-38b3ecd80524

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

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Step-5: Copy the public IP Address of that created virtual machine.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Microsoft Azure', a search bar, and user information. Below it, the 'Virtual machines' section is active, showing a list of VMs. One VM, named 'windows', is selected and displayed in detail. The 'Overview' tab is selected, showing the following details:

Essentials	
Resource group	(move) : win
Status	: Running
Location	: Central India (Zone 1)
Subscription	(move) : Azure for Students
Subscription ID	: dfa58732-c441-4b58-addc-898a43fe4a93
Availability zone	: 1
Tags (edit)	: Add tags

Below the essentials, there are tabs for Properties, Monitoring, Capabilities (8), Recommendations, and Tutorials. The Properties tab is selected, showing the following details:

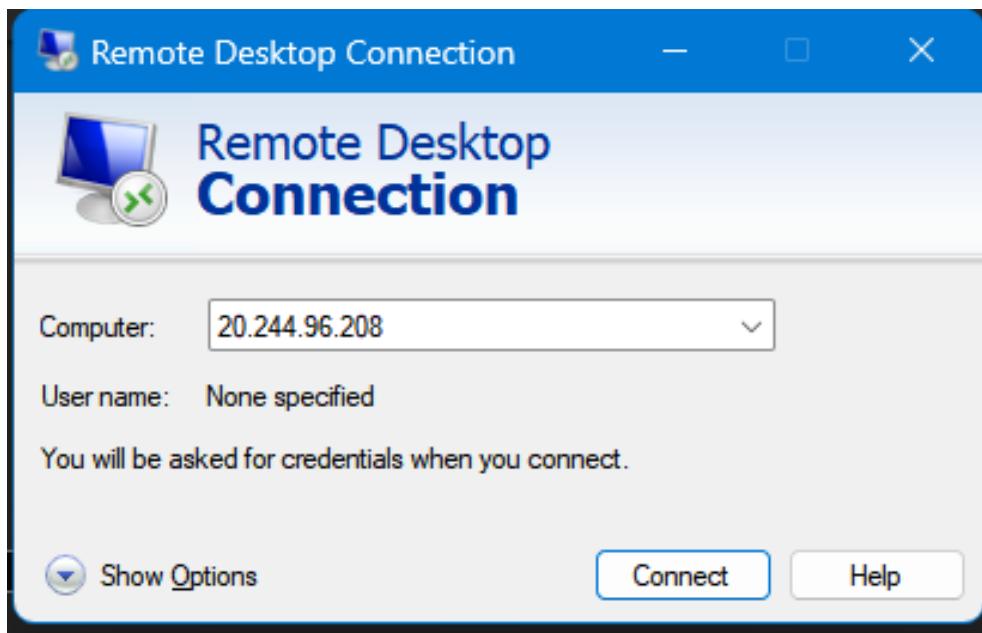
Virtual machine	
Computer name	windows
Operating system	Windows (Windows Server 2019 Datacenter)
VM generation	V2
VM architecture	x64
Agent status	Ready
Agent version	2.7.41491.1121
Hibernation	Disabled
Host group	-

On the right side, there are sections for Networking and Size. The Networking section shows:

- Public IP address: 20.244.96.208 (Network interface windows134_z1)
- Private IP address (IPv6): -
- Private IP address (IPv4): 10.0.0.4
- Virtual network/subnet: windows-vnet/default
- DNS name: Not configured

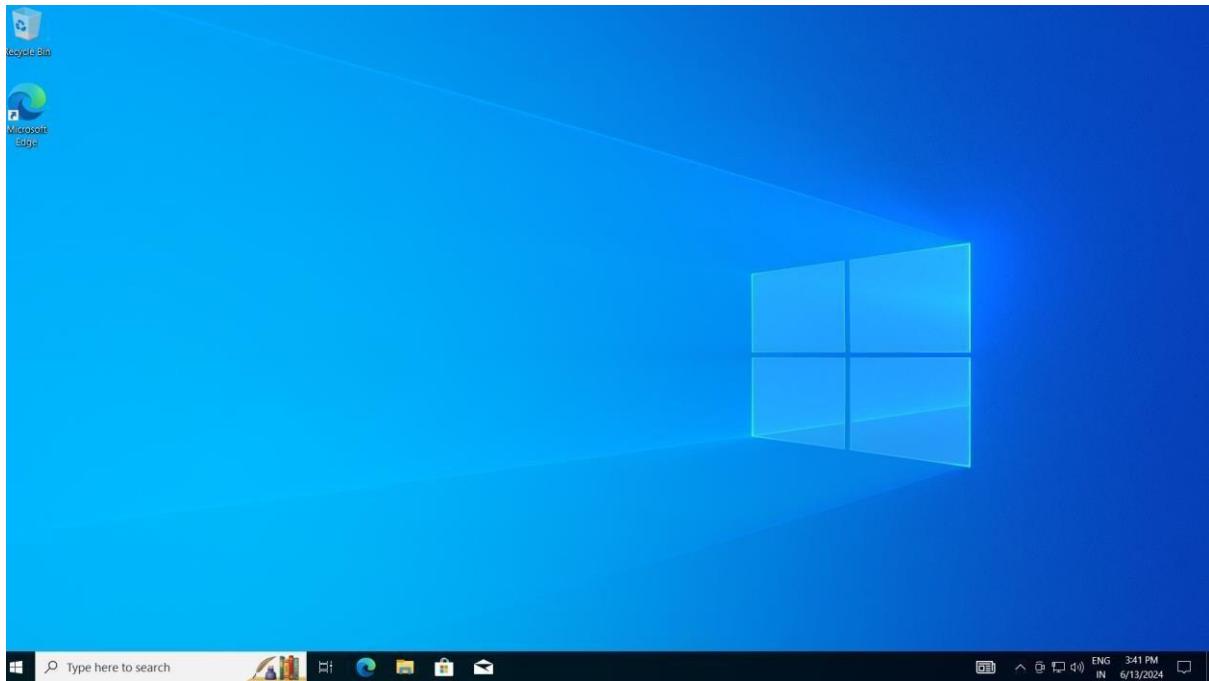
The Size section shows: Standard B1s.

Step-6: Open remote desktop connection(RDP) and enter the copied IP address.



Step-7: By using that copied IP Address open the window virtual machine through remote desktop connection.

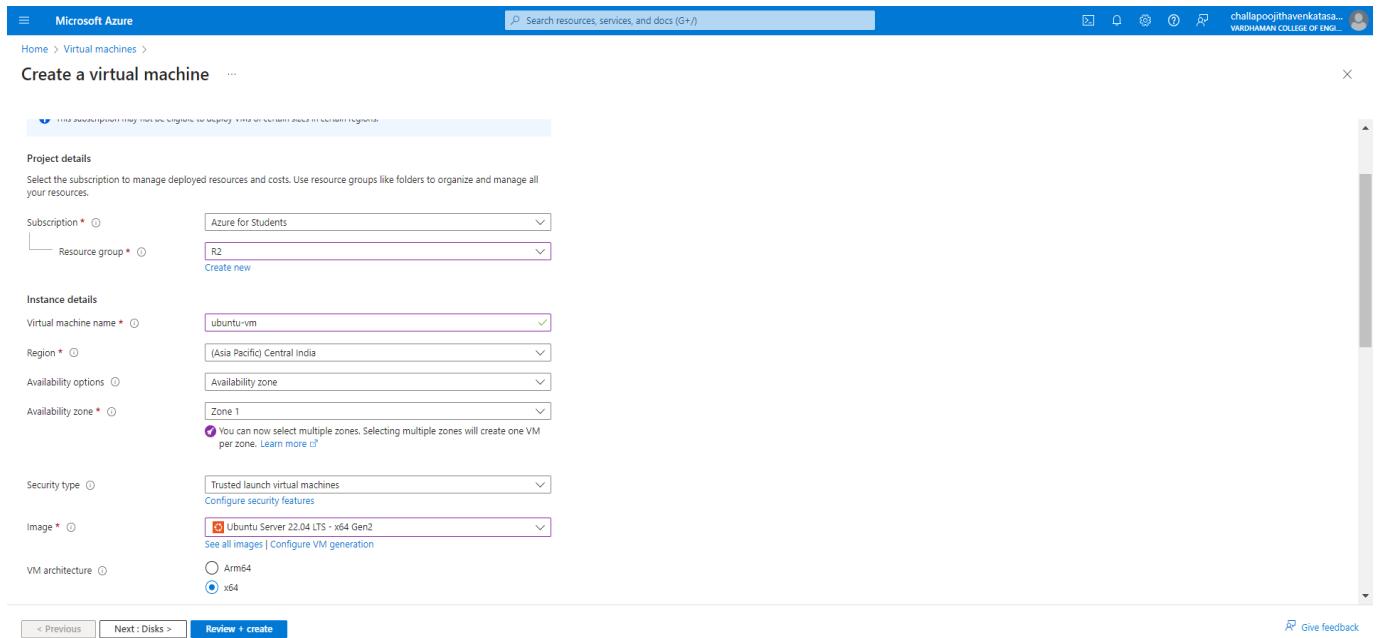
Output:



Q3) Create a Ubuntu Virtual Machine in Microsoft Azure

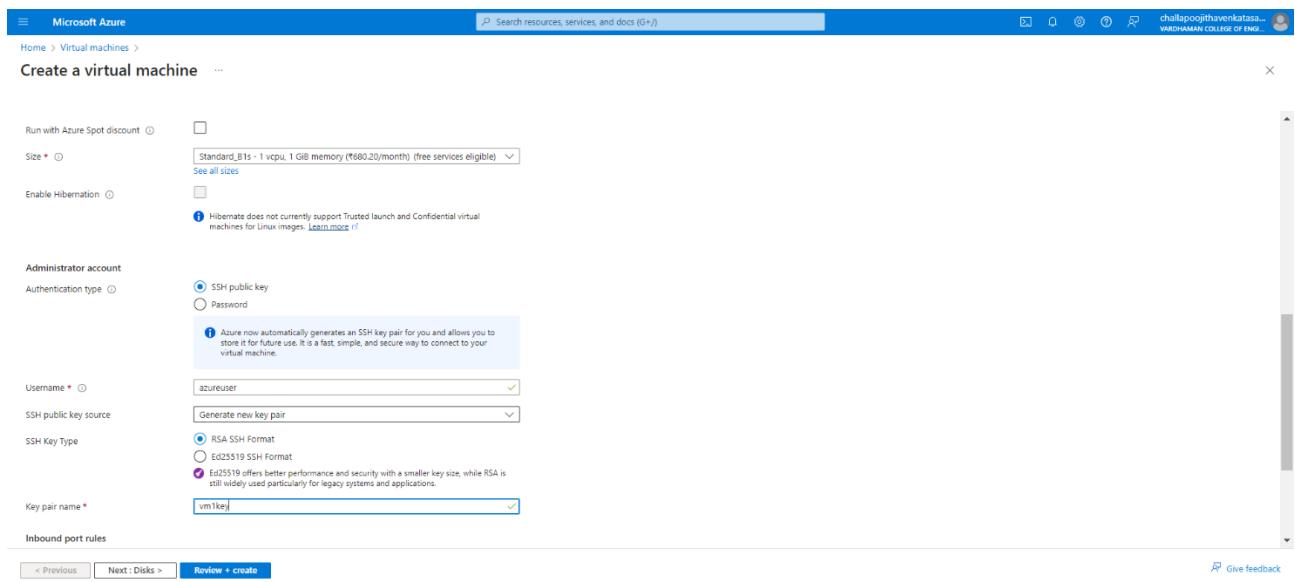
Step-1: Sign in to your Microsoft Azure account.

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 deployment is complete

Deployment name: CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240617135341 | Start time: 6/17/2024, 2:00:18 PM | Subscription: Azure for Students | Resource group: R2

Deployment details: Deployment ID: 84624b9b-f0a0-4221-93b2-b39213735546

Next steps: Setup auto-shutdown (Recommended), Monitor VM health, performance and network dependencies (Recommended), Run a script inside the virtual machine (Recommended)

Give feedback | Tell us about your experience with deployment | Go to resource | Create another VM

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Step-4: Firstly, copy the public IP Address of that created virtual machine

Virtual machines

ubuntu-vm | Virtual machine

Essentials

- Name: ubuntu-vm
- Resource group: R2
- Status: Running
- Location: Central India (Zone 1)
- Subscription: Azure for Students
- Subscription ID: dfa58732-c441-4b58-addc-898a43fe6493
- Availability zone: 1
- Tags: (edit) | Add tags

Properties | Monitoring | Capabilities (7) | Recommendations | Tutorials

Networking

- Public IP address: 98.70.78.94 (Network interface ubuntu-vm_1)
- Private IP address (IPv6): -
- Private IP address (IPv4): 10.1.0.4
- Virtual network/subnet: ubuntu-vm-vnet/default
- DNS name: Not configured
- Health state: -
- Time created: 6/17/2024, 8:30 AM UTC

Virtual machine

- Computer name: ubuntu-vm
- Operating system: Linux (Ubuntu 22.04)
- VM generation: V2
- Agent status: Ready
- Agent version: 2.11.1.4
- Hibernation: Disabled
- Host group: -
- Host: -
- Proximity placement group: -
- Colocation status: N/A
- Capacity reservation group: -

Size

- Size: Standard B1s

Source image details

- Source image publisher: canonical

Step-5: After Deployment is over, Go to the remote desktop connection

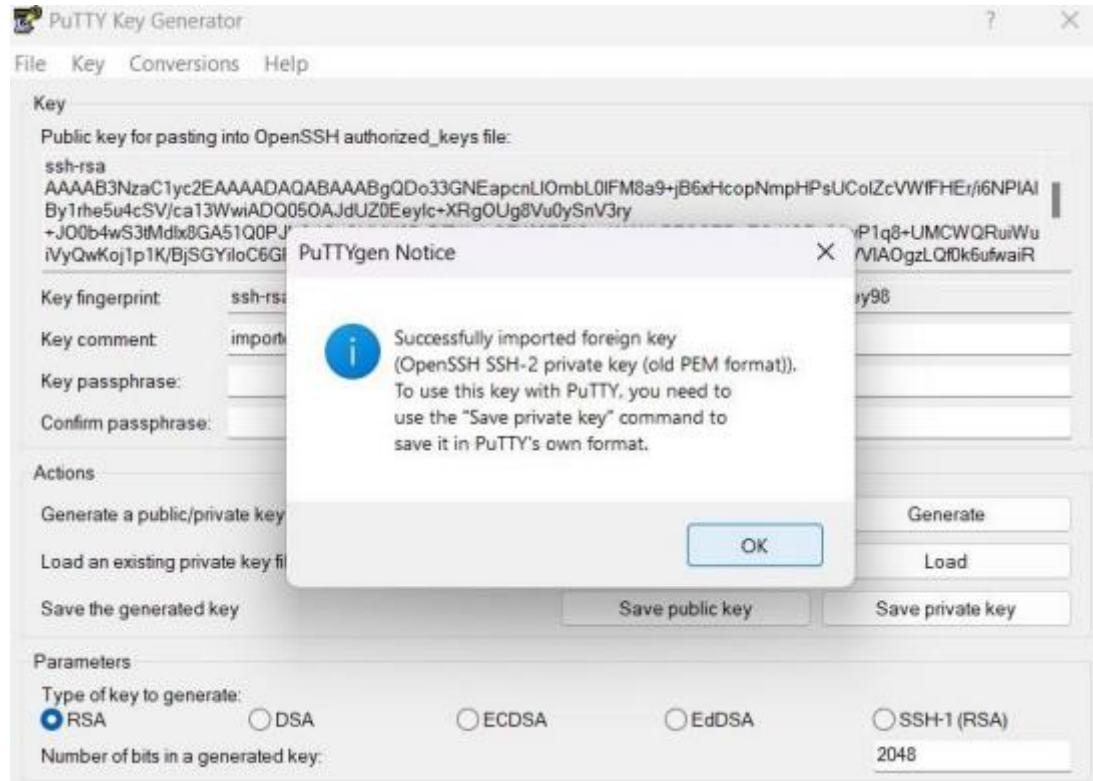
Generate new key pair

An SSH key pair contains both a public key and a private key. **Azure doesn't store the private key**. After the SSH key resource is created, you won't be able to download the private key again. [Learn more](#)

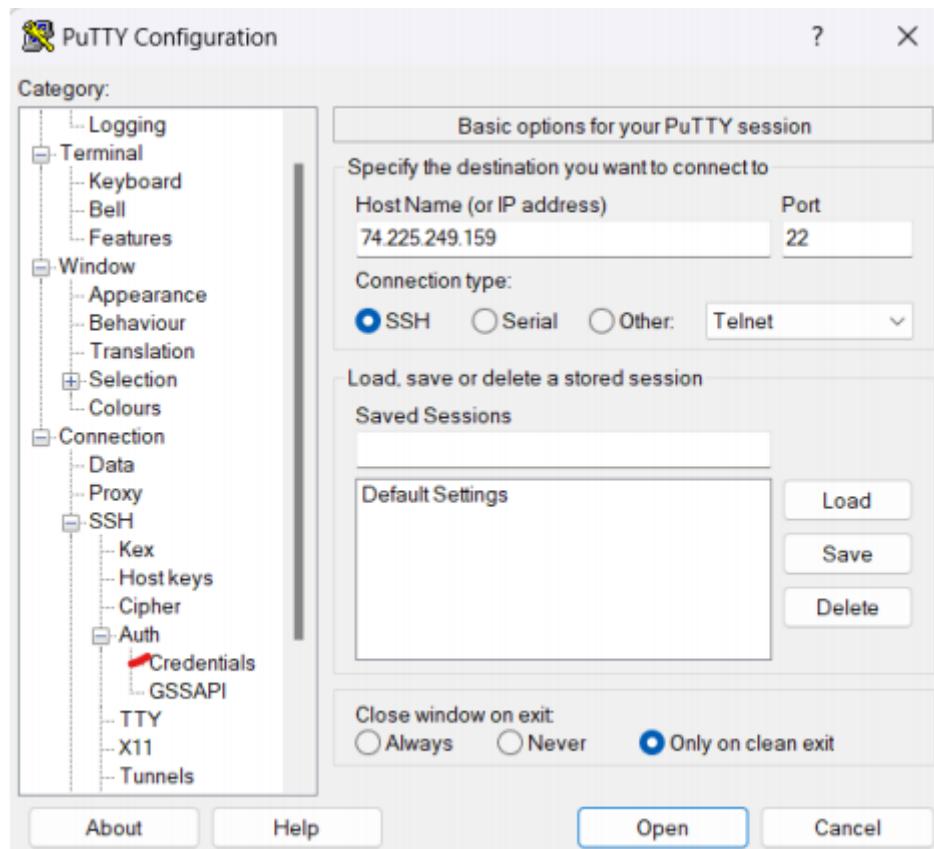
Download private key and create resource

Return to create a virtual machine

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 the 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:

```
[✓] login as: azureuser
[✓] Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1064-azure x86_64)

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

System information as of Fri Jun 14 06:01:35 UTC 2024

System load: 0.0      Processes:          126
Usage of /: 5.1% of 28.89GB  Users logged in: 0
Memory usage: 4%
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.
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@vm1:~$
```

4Q) Create a Virtual machine and do scale up in Azure.

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

The screenshot shows the Microsoft Azure Deployment Overview page for a deployment named "CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614192358". The status is "Your deployment is complete". Deployment details include a start time of 6/14/2024, 7:36:19 PM, a correlation ID of 7d1a2dbf-15ce-46b6-a5eb-38b3ecd80524, and a resource group of "win". Next steps recommended include "Setup auto-shutdown", "Monitor VM health, performance and network dependencies", and "Run a script inside the virtual machine". Buttons for "Go to resource" and "Create another VM" are visible. A sidebar on the right provides links to Cost Management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

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

The screenshot shows the Microsoft Azure Virtual Machines page for a VM named "windows". A modal dialog titled "Stop this virtual machine" asks if the user wants to stop the VM. It includes a note about deallocation times and buttons for "Yes" and "No". The main page displays the VM's properties, including its operating system (Windows Server 2019 Datacenter), size (B1s (1 vcpu, 1 GiB memory)), networking details (Public IP address 20.244.96.206, Private IP address 10.0.0.4), and size (Standard_B1s). The VM is currently in a "Ready" state.

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

Disk name	Storage type	Size (GiB)	Max IOPS	Encryption	Host caching
windows_OsDisk_1_aa97...	Premium SSD LRS	127	500	SSE with PMK	Read/write

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

Size	Disk tier	Provisioned IOPS	Provisioned throughput	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	-	-
32767 GiB	P80	20000	900	10	-	-

Step-5: Go back to the VM that is created and click on overview we can see the disk size is updated.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Microsoft Azure', a search bar, and user information ('challapoojithavenkatas... VARDHAMAN COLLEGE OF ENGL...'). The main title is 'Virtual machines' under 'Windows' (Resource group: 'win'). The left sidebar lists options like 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Connect', 'Networking', 'Settings' (selected), 'Disks', 'Extensions + applications', 'Operating system', 'Configuration', 'Advisor recommendations', 'Properties', 'Locks', 'Availability + scale', 'Size' (selected), and 'Logs'. The main content area displays the 'Essentials' and 'Properties' tabs. Under 'Properties', the 'Virtual machine' section shows the computer name as 'windows', operating system as 'Windows', VM generation as 'V2', VM architecture as 'x64', and current size as 'Standard_B2ms'. The 'Networking' section shows public and private IP addresses, and the 'Size' section indicates the successful resize to 'Standard_B2ms'.

Step-6: Click on the left side there will be select + performance and click on size.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Microsoft Azure', a search bar, and user information ('challapoojithavenkatas... VARDHAMAN COLLEGE OF ENGL...'). The main title is 'Virtual machines' under 'windows'. The left sidebar lists options like 'Networking', 'Settings' (selected), 'Disks', 'Extensions + applications', 'Operating system', 'Configuration', 'Advisor recommendations', 'Properties', 'Locks', 'Availability + scale', 'Size' (selected), 'Availability + scaling', 'Security', 'Backup + disaster recovery', 'Operations', 'Monitoring', 'Automation', and 'Help'. The main content area shows a table of VM sizes. A success message at the top right says 'Successfully resized virtual machine 'windows' to size 'Standard_B2ms''. The table headers are 'VM Size ↑', 'Type ↑', 'vCPUs ↑', 'RAM (GiB) ↑', 'Data disks ↑', 'Max IOPS ↑', and 'Local'. The table shows various sizes grouped by 'Most used by Azure users', 'D-Series v4', and 'B-Series'. A note at the bottom states: 'Prices presented are estimates in INR that include only Azure Infrastructure costs and any discounts for the subscription and location. The prices don't include any applicable software costs. Final charges will appear in your local currency in cost analysis and billing views.' and 'View Azure pricing calculator.'

Step-7: Click on disk name and select your preferred ram size, save it.

The screenshot shows the Microsoft Azure portal's 'Virtual machines' blade. The left sidebar has 'Virtual machines' selected. The main area is titled 'windows | Size' and shows a list of VM sizes. A success message at the top right says 'Resized virtual machine Successfully resized virtual machine 'windows' to size 'Standard_B2ms''. The 'Size' filter is highlighted in blue in the sidebar.

VM Size	Type	vCPUs	RAM (GiB)	Data disks	Max IOPS	Local
DS1_v2	General purpose	1	3.5	4	3200	7
D2s_v3	General purpose	2	8	4	3200	16
B2s	General purpose	2	4	4	1280	8
B1s	(free services eligible)	1	1	2	320	4
B2ms	General purpose	2	8	4	1920	16
DS2_v2	General purpose	2	7	8	6400	14
B4ms	General purpose	4	16	8	2880	32
D4s_v3	General purpose	4	16	8	6400	32
DS3_v2	General purpose	4	14	16	12800	28

Step-8: We can see that the scaling is done successfully.

This screenshot is identical to the one above, showing the Microsoft Azure portal's 'Virtual machines' blade. The 'Size' filter is selected in the sidebar. A success message at the top right says 'Resized virtual machine Successfully resized virtual machine 'windows' to size 'Standard_B2ms''. The table below shows the VM sizes again, with B2ms being the selected option.

VM Size	Type	vCPUs	RAM (GiB)	Data disks	Max IOPS	Local
DS1_v2	General purpose	1	3.5	4	3200	7
D2s_v3	General purpose	2	8	4	3200	16
B2s	General purpose	2	4	4	1280	8
B1s	(free services eligible)	1	1	2	320	4
B2ms	General purpose	2	8	4	1920	16
DS2_v2	General purpose	2	7	8	6400	14
B4ms	General purpose	4	16	8	2880	32
D4s_v3	General purpose	4	16	8	6400	32
DS3_v2	General purpose	4	14	16	12800	28

Q5) Create a Virtual machine and do lock for VM in AZURE.

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

The screenshot shows the Microsoft Azure Deployment Overview page for a resource named "CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614192358". The status is "Your deployment is complete". Deployment details include a start time of 6/14/2024, 7:36:19 PM, and a correlation ID of 7d1a2dbf-15ce-46b6-a5eb-38b3ecd80524. The page lists recommended steps: "Setup auto-shutdown" (Recommended), "Monitor VM health, performance and network dependencies" (Recommended), and "Run a script inside the virtual machine" (Recommended). Buttons for "Go to resource" and "Create another VM" are visible. On the right, there are promotional cards for "Cost Management", "Microsoft Defender for Cloud", "Free Microsoft tutorials", and "Work with an expert".

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

The screenshot shows the Microsoft Azure Virtual machines page for a VM named "windows". In the left sidebar, under "Settings", the "Locks" option is selected. A modal window titled "Add lock" is open, prompting for "Lock name" (with a red box highlighting the input field) and "Lock type" (set to "Read-only"). Notes and OK/Cancel buttons are also visible. The main page shows basic VM details like "Access control (IAM)", "Tags", and "Diagnose and solve problems".

Step-3: click on ok. Lock is applied for VM.

The screenshot shows the Microsoft Azure portal interface for managing virtual machines. The left sidebar shows 'Virtual machines' with a search bar and a filter for 'windows'. The main panel shows a 'Locks' section for a virtual machine named 'windows'. A single lock entry is listed: 'lock1' (Read-only, Scope: windows). There are 'Edit' and 'Delete' buttons for this lock.

Lock name	Lock type	Scope	Notes
lock1	Read-only	windows	

Step-4: Similarly lock is applied for resource group named “win”.

The screenshot shows the Microsoft Azure portal interface for managing resource groups. The left sidebar shows 'Resource group' with a search bar and a filter for 'win'. The main panel shows a 'Locks' section for a resource group named 'win'. A single lock entry is listed: 'lock1' (Read-only, Scope: windows). There are 'Edit' and 'Delete' buttons for this lock.

Lock name	Lock type	Scope	Notes
lock1	Read-only	windows	

Step-5: Similarly lock is applied for subscription.

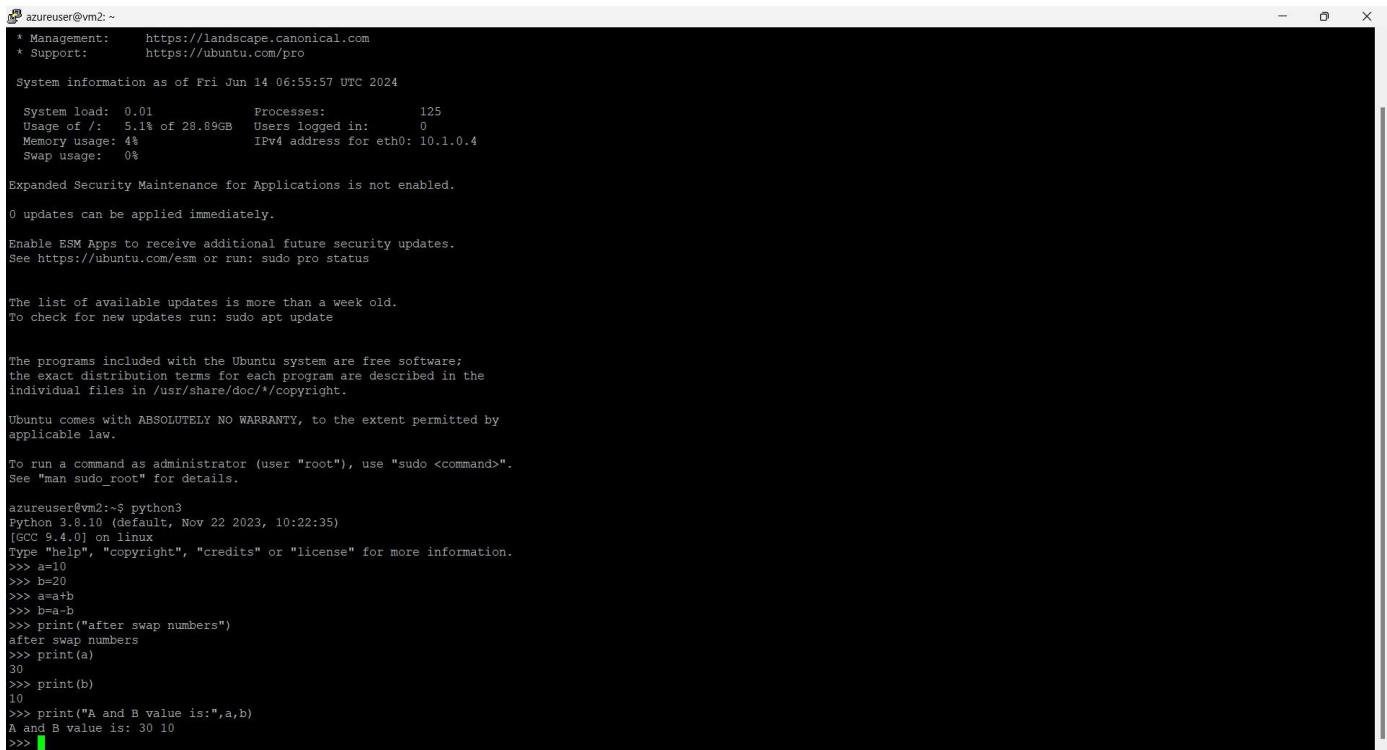
The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and various icons. Below the navigation bar, the URL path is visible: Home > Virtual machines > windows | Locks > win. The main title is "Azure for Students" with a "Subscription" dropdown. Below the title, there are buttons for "+ Add", "Refresh", and "Feedback". The main content area displays a table with one row of data. The columns are "Lock name", "Lock type", "Scope", and "Notes". The data row shows "lock1" in the Lock name column, "Read-only" in the Lock type column, and "windows" in the Scope column. There are "Edit" and "Delete" buttons at the bottom right of the table row. The background of the page is white.

Lock name	Lock type	Scope	Notes
lock1	Read-only	windows	

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.



```

azuser@vm2: ~
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/pro

System information as of Fri Jun 14 06:55:57 UTC 2024

System load: 0.01      Processes:          125
Usage of /: 5.1% of 28.89GB  Users logged in: 0
Memory usage: 4%          IPv4 address for eth0: 10.1.0.4
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.
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.

azuser@vm2:~$ 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
>>> print("after swap numbers")
after swap numbers
>>> print(a)
30
>>> print(b)
10
>>> print("A and B value is:",a,b)
A and B value is: 30 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.

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with 'Virtual machines' selected. In the main area, a card for 'ubuntu-vm' is displayed. The 'Overview' tab is active. Key details shown include:

- Resource group:** R2
- Status:** Running
- Location:** Central India (Zone 1)
- Subscription:** Azure for Students
- Subscription ID:** dfa58732-c441-4b58-addc-898a43fe4a93
- Availability zone:** 1
- Tags:** Add tags
- Properties:** Computer name: ubuntu-vm, Operating system: Linux (Ubuntu 22.04), VM generation: V2, Agent status: Ready, Agent version: 2.11.1.4, Hibernation: Disabled, Host group: -, Host: -, Proximity placement group: -, Colocation status: N/A, Capacity reservation group: -, Disk controller type: SCSI.
- Networking:** Public IP address: 98.70.78.94 (Network interface ubuntu-vm01_1), Private IP address (IPv6): -, Private IP address (IPv6): 10.1.0.4, Virtual network/subnet: ubuntu-vm-vnet/default, DNS name: Not configured.
- Size:** Standard B1s.
- Source image details:** Source image publisher: canonical.

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

```

azuser@Ubuntu: ~
azuser@Ubuntu: ~$ login as: azuser
azuser@Ubuntu: ~$ Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1064-azure x86_64)

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

System information as of Thu Jun 13 16:53:37 UTC 2024

System load: 0.0      Processes:           116
Usage of /: 5.0% of 28.89GB   Users logged in:      0
Memory usage: 9%          IPv4 address for eth0: 10.0.0.4
Swap usage: 0%          

Expanded Security Maintenance for Applications is not enabled.

2 updates can be applied immediately.
2 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

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

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

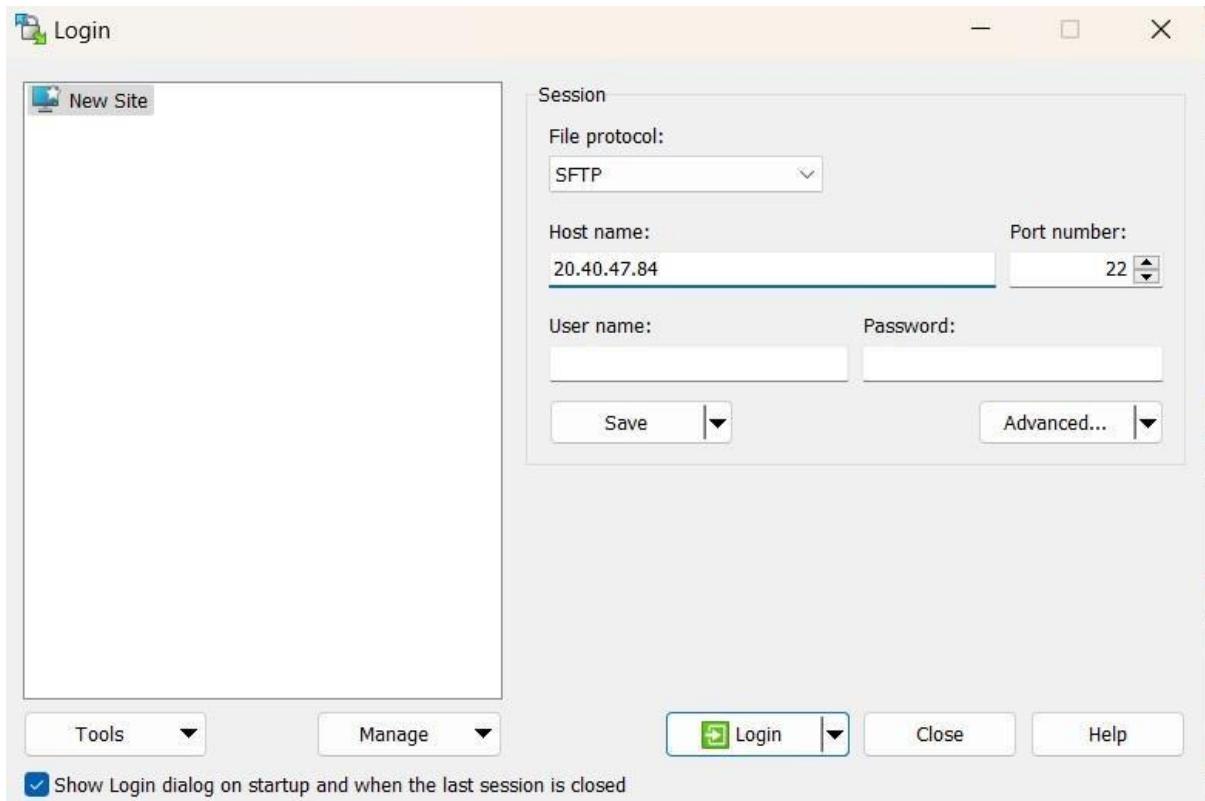
Last login: Thu Jun 13 16:27:10 2024 from 152.58.197.228
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azuser@Ubuntu:~$ ls
azuser@Ubuntu:~$ 

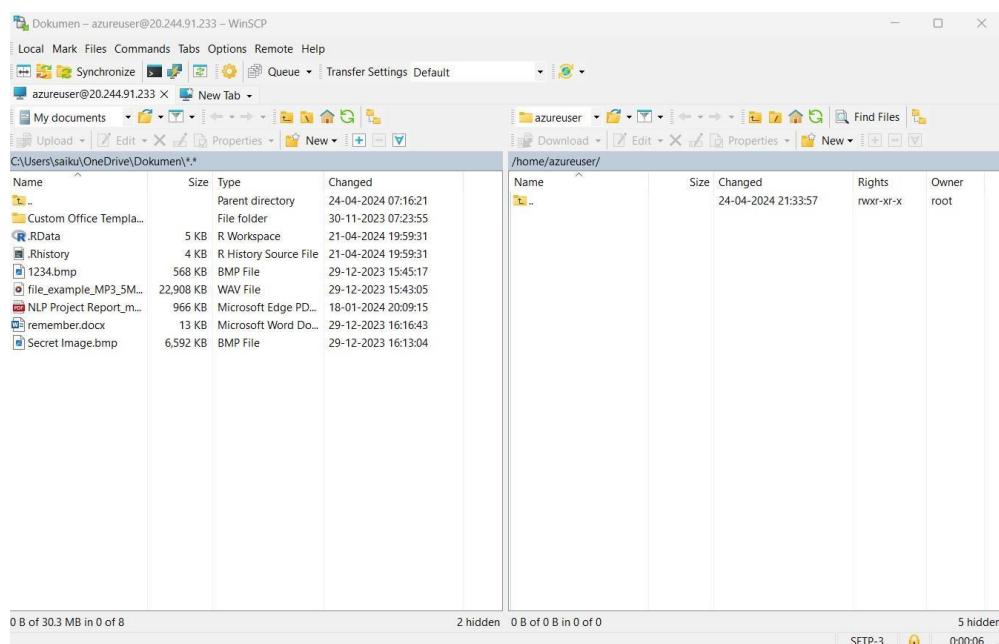
```

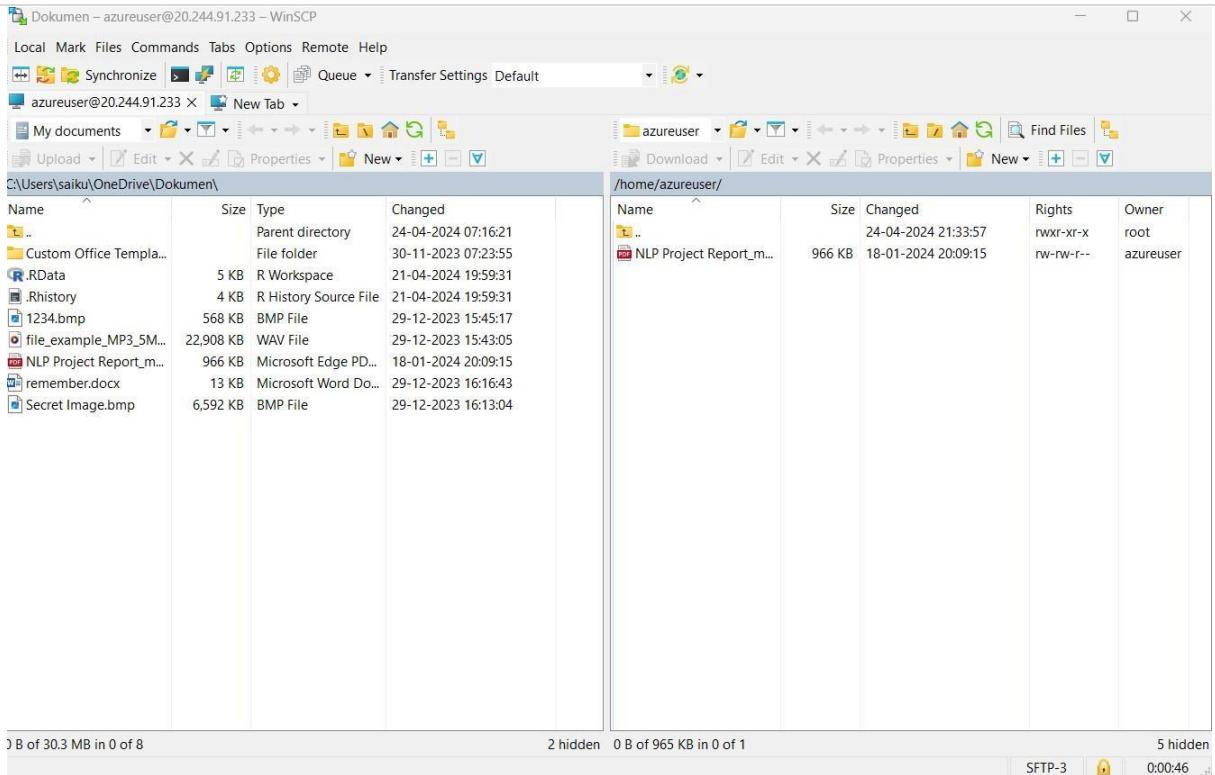
Step-3: Open WinScp at right bottom you can see Advanced option->SSH>Authentication->In that drag private key file and click on ok.

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



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





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.

The screenshot shows the Microsoft Azure portal's 'Virtual machines' section. A specific VM named 'ubuntu-vm' is selected. The 'Essentials' tab is active, displaying details such as Resource group (R2), Status (Running), Location (Central India (Zone 1)), Subscription (Azure for Students), and Public IP address (98.70.78.94). The 'Networking' tab shows the VM has a public IP of 98.70.78.94 and is connected to a virtual network subnet. The 'Properties' tab provides more technical details like Computer name, Operating system, and Agent status. The 'Source image details' tab indicates the VM was created from a canonical image.

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

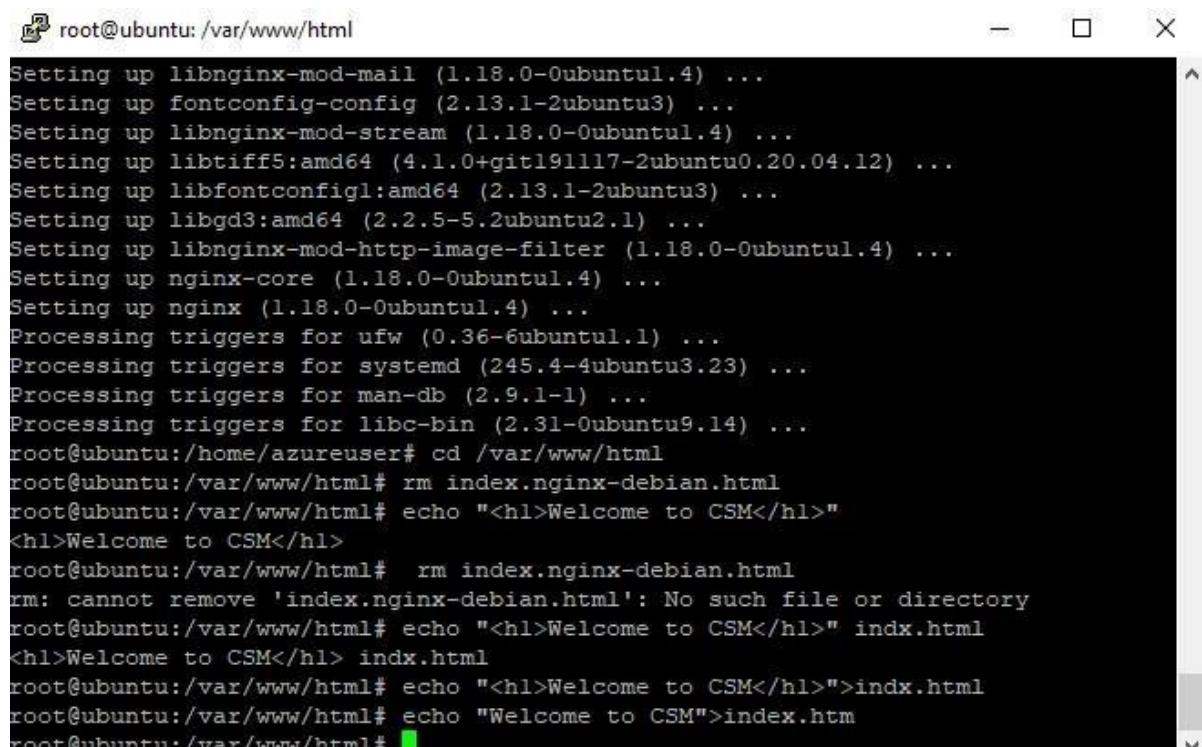
\$sudo apt-get install nginx

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

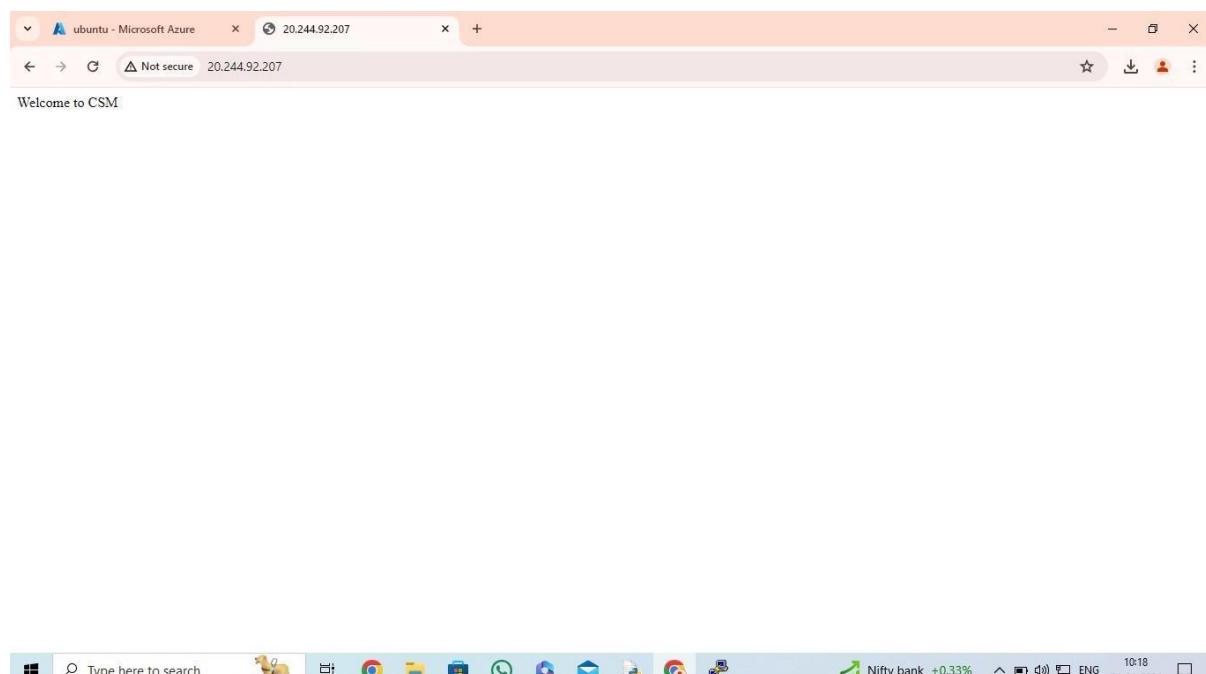
The screenshot shows a web browser window titled 'ubuntu - Microsoft Azure'. The address bar displays '20.244.92.207'. The main content of the page is the standard 'Welcome to nginx!' message, indicating the successful installation of the web server.

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>" > index.html
<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>" > index.html
<h1>Welcome to CSM</h1>
root@ubuntu:/var/www/html# echo "<h1>Welcome to CSM</h1>" > index.html
root@ubuntu:/var/www/html# echo "Welcome to CSM" > index.html
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.

The screenshot shows the Microsoft Azure Virtual Machines dashboard. On the left, there's a list of virtual machines: 'ubuntu' and 'vm33'. The 'vm33' card is selected and expanded. The main pane displays the 'Essentials' section for 'vm33', which includes the following details:

- Resource group (move) : R33
- Status : Running
- Location : Central India (Zone 1)
- Subscription (move) : Azure for Students
- Subscription ID : dfa58732-c441-4b58-addc-898a43fe4a93
- Availability zone : 1
- Operating system : Windows (Windows Server 2019 Datacenter)
- Size : Standard B1s (1 vcpu, 1 GiB memory)
- Public IP address : 4.240.104.67
- Virtual network/subnet : vm33-vnet/default
- DNS name : Not configured
- Health state : -
- Time created : 6/17/2024, 8:19 AM UTC

Below the essentials, there are tabs for Properties, Monitoring, Capabilities (8), Recommendations, and Tutorials. The 'Properties' tab is selected. To the right, there are sections for Networking and Size. The Networking section shows:

- Public IP address : 4.240.104.67 (Network interface vm33483_z1)
- Public IP address (IPv6) : -
- Private IP address : 10.0.0.4
- Private IP address (IPv6) : -
- Virtual network/subnet : vm33-vnet/default
- DNS name : Configure

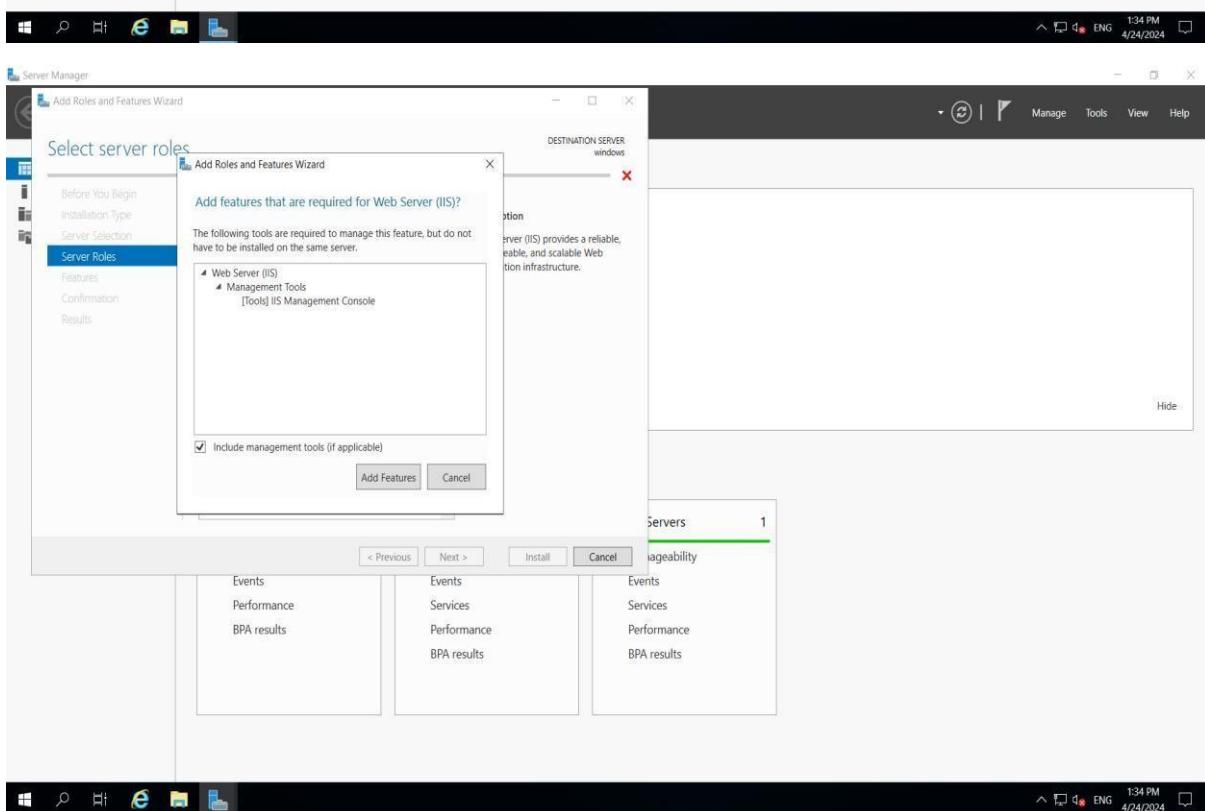
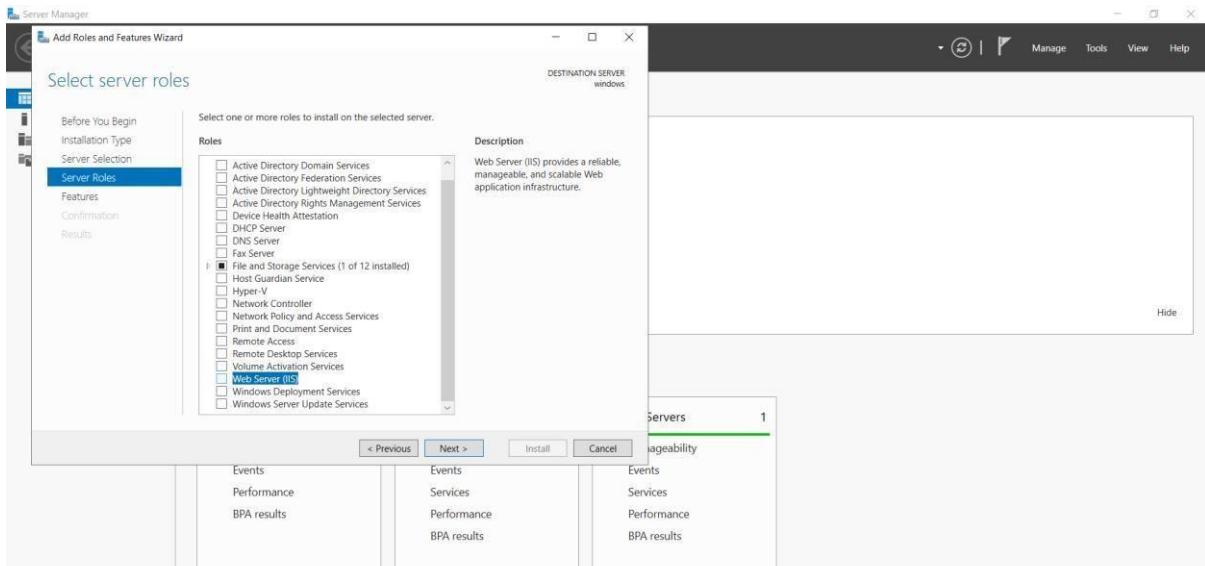
The Size section indicates the VM is Standard B1s.

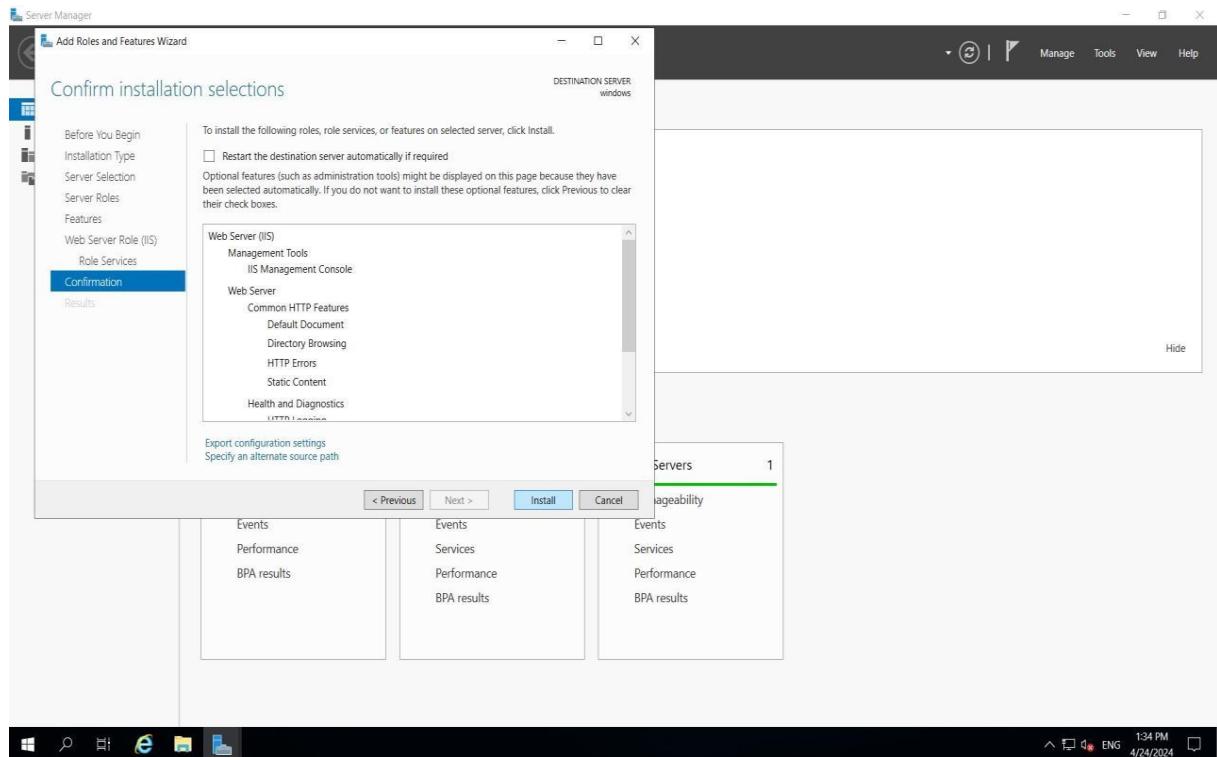
Step-2: When remote desktop will start(windows vm) you can see there will be Server Manager will be opened and in that you can see Configure this local server , Click on “Add roles and features”.

The screenshot shows the Server Manager Dashboard. On the left, there's a navigation bar with 'Dashboard', 'Local Server', 'All Servers', and 'File and Storage Services'. The main area is titled 'WELCOME TO SERVER MANAGER' and displays the following information:

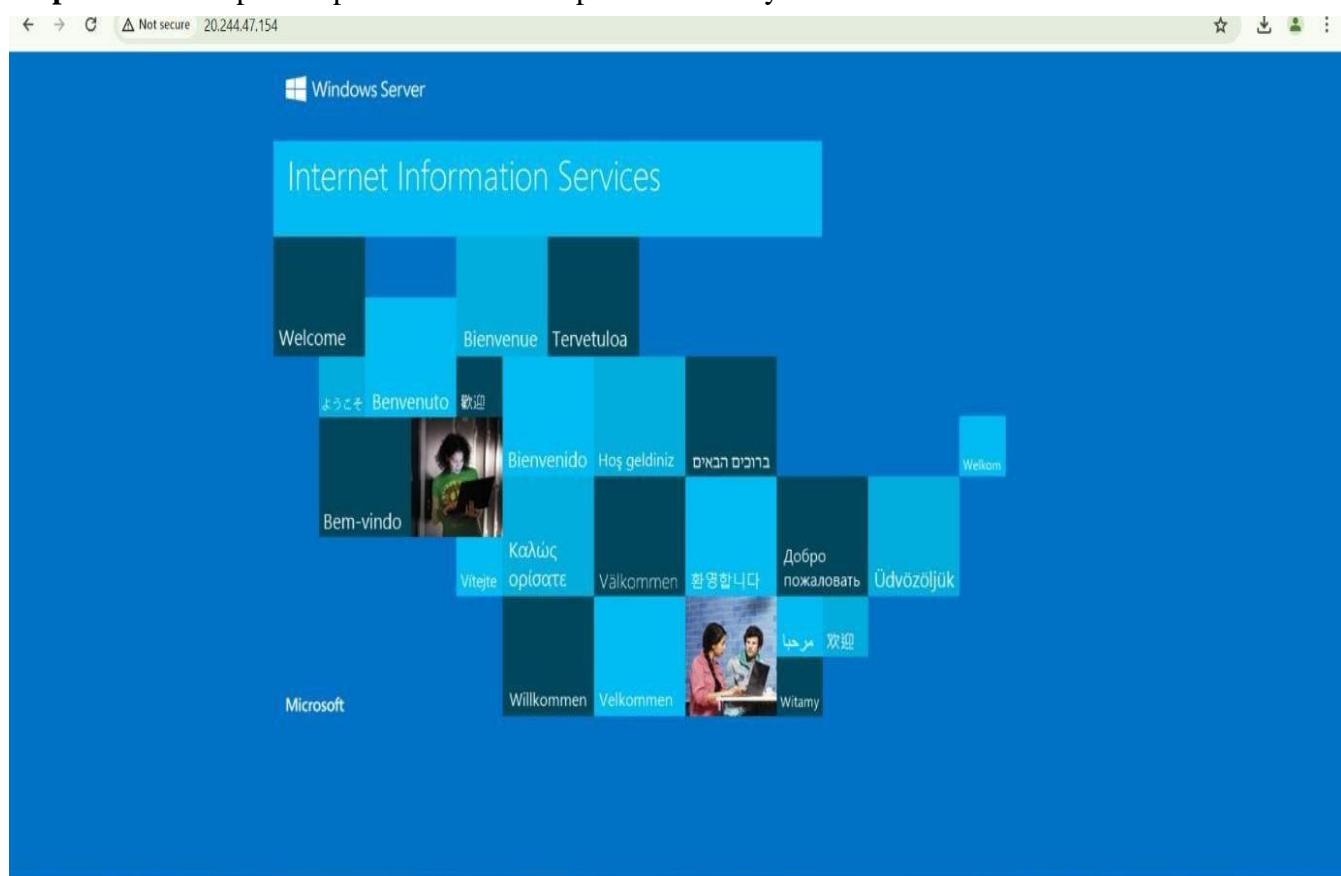
- QUICK START**: Step 1: Configure this local server; Step 2: Add roles and features.
- WHAT'S NEW**
- LEARN MORE**
- ROLES AND SERVER GROUPS**: Roles: 1 | Server groups: 1 | Servers total: 1
 - File and Storage Services**: 1 Manageability, Events, Performance, BPA results
 - Local Server**: 1 Manageability, Events, Services, Performance, BPA results
 - All Servers**: 1 Manageability, Events, Services, Performance, BPA results

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 .



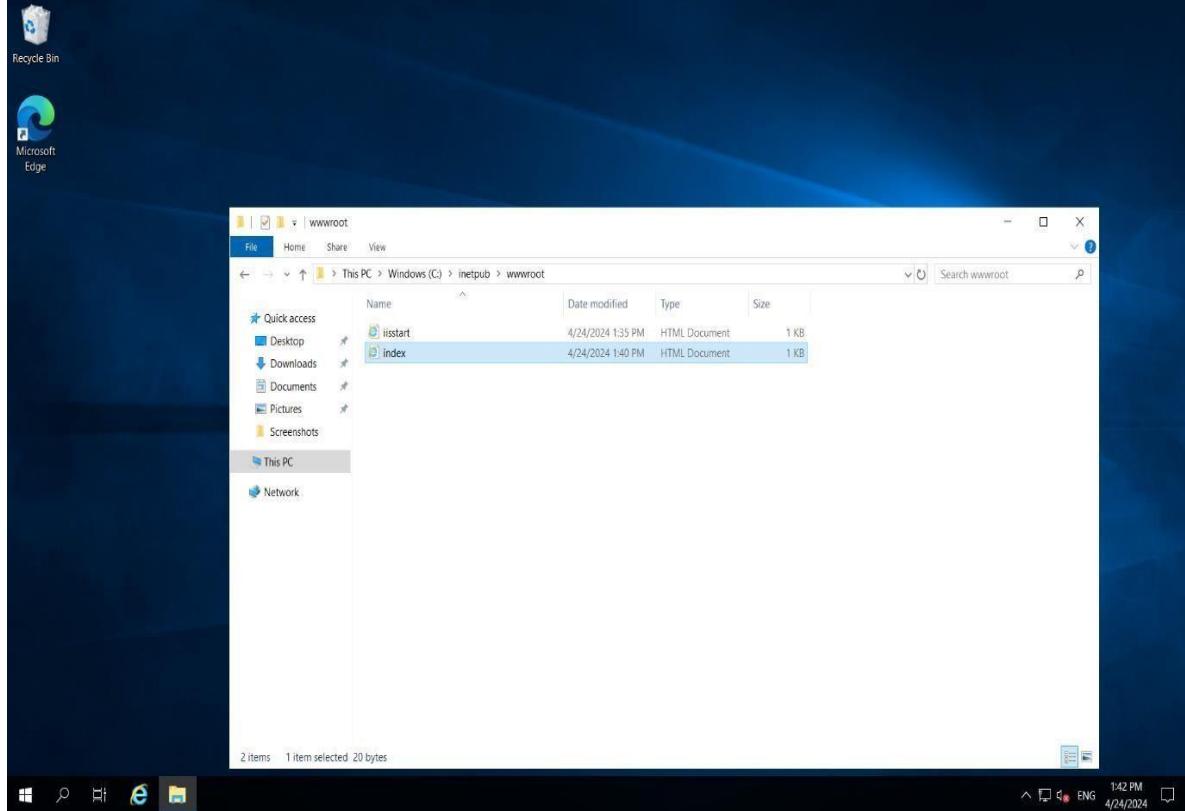


Step-4: Paste the public ip address in desktop browser and you can see.

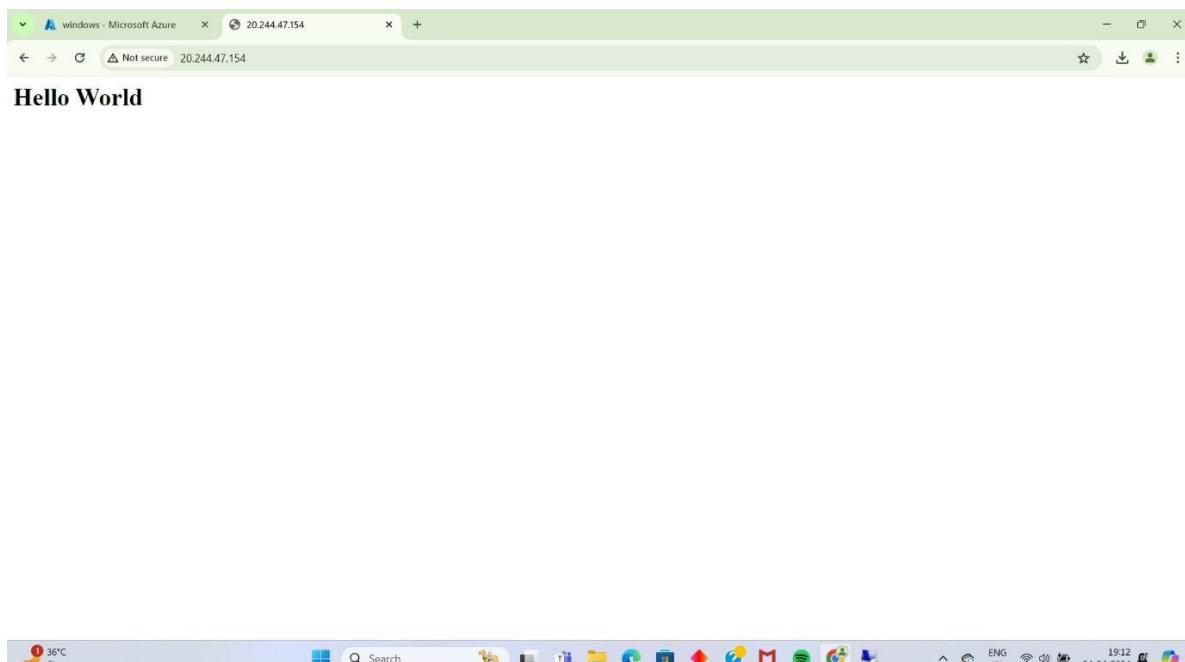


Step-5: Now to remove this all information first of all create index.html in desktop and that should paste in the specified location of remote desktop VM that is ThisPC-

>windows(c)->inetup->wwwroot and remove iistart.png.



Step-6: 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 poojitha To
```

set new password:

\$sudo password poojitha

Enter new password and Retype password.

To modify login credentials: \$sudo usermod

-aG sudo poojitha To

switch the user:

```
$sudo su poojitha
```

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

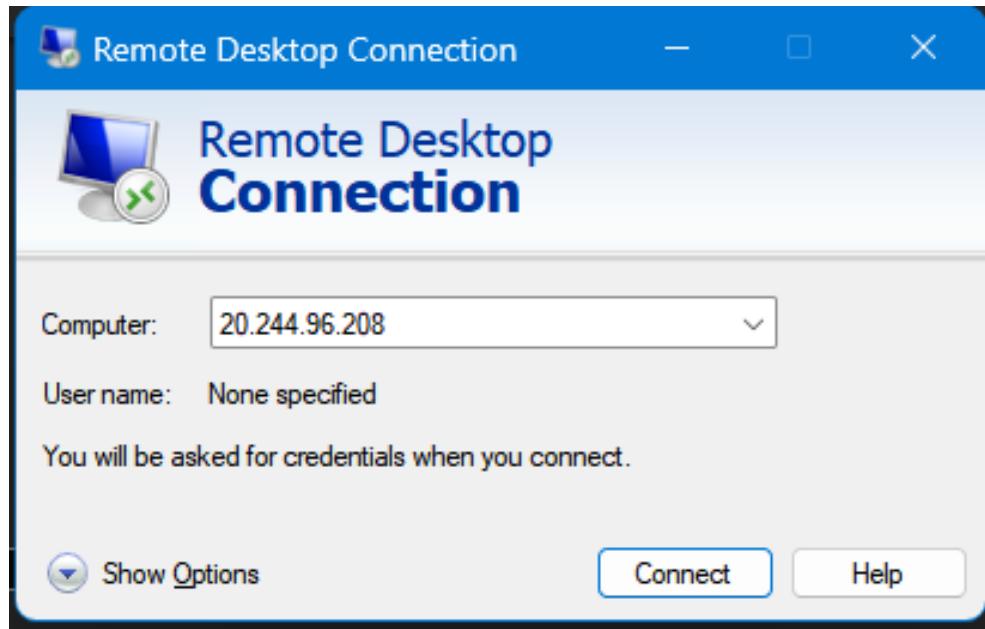
Step-1: Create Windows VM same as previous experiments and copy public IP Address.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Microsoft Azure', a search bar, and user account information ('challapoojithavenkatasa... VARDHAMAN COLLEGE OF ENGL...'). Below the navigation is the 'Virtual machines' section. A search bar at the top of the list shows 'windows'. The main list displays one item: 'windows' (Virtual machine). To the right of the list is a detailed view panel. The 'Overview' tab is selected, showing the following details for the VM 'windows':

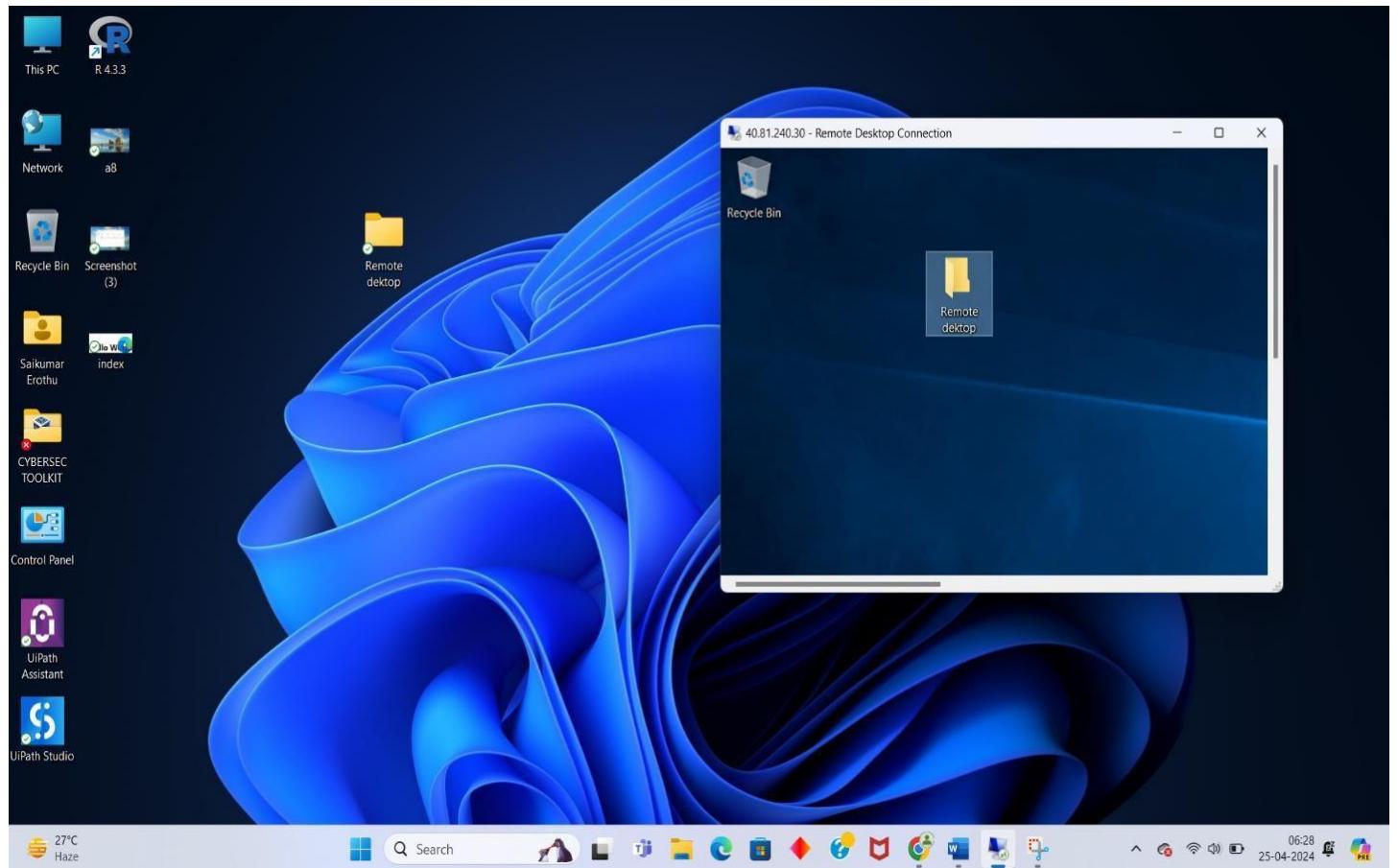
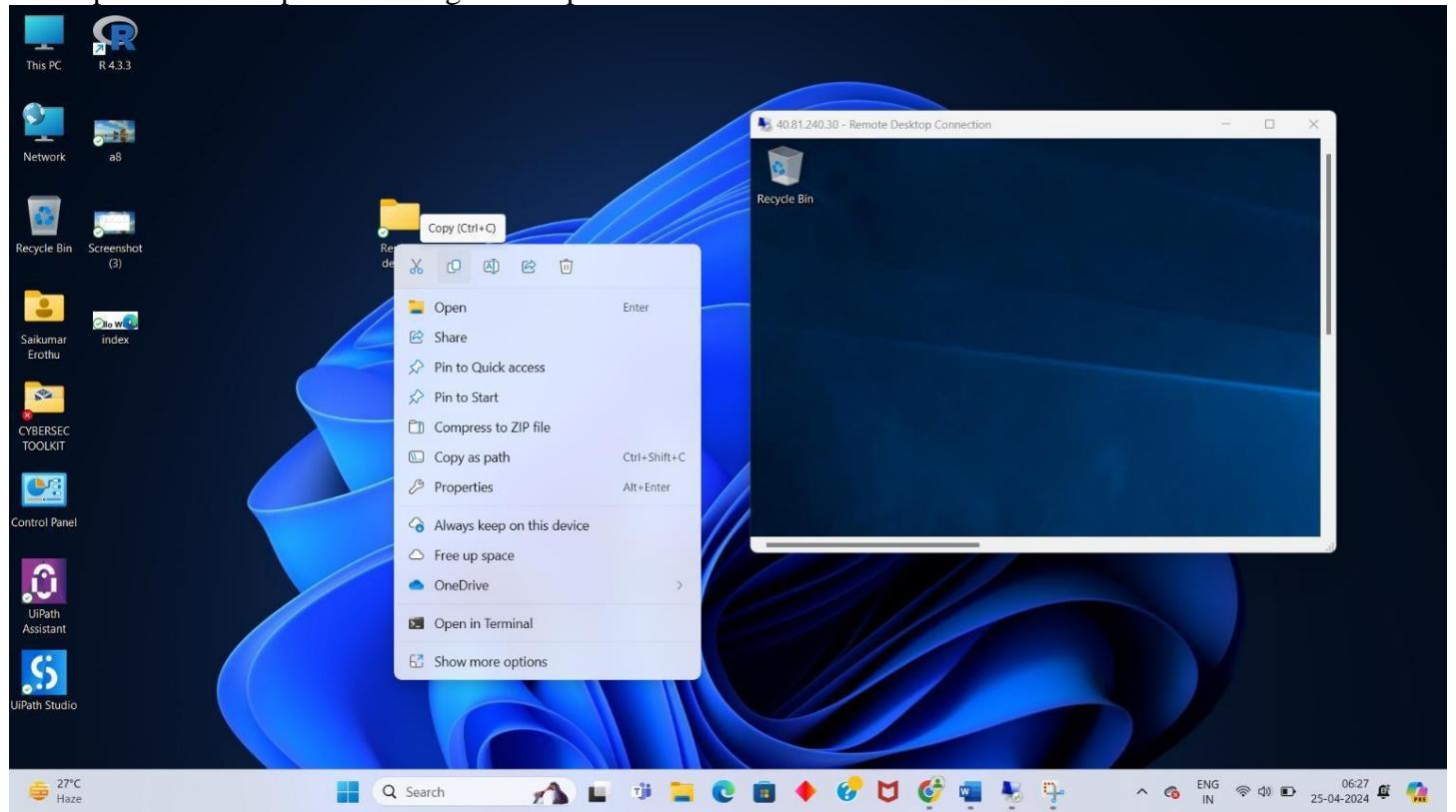
Essentials	
Resource group (move)	: win
Status	: Running
Location	: Central India (Zone 1)
Subscription (move)	: Azure for Students
Subscription ID	: dfa58732-c441-4b58-addc-898a43fe4a93
Availability zone	: 1
Tags (edit)	: Add tags
Operating system	: Windows (Windows Server 2019 Datacenter)
Size	: Standard B1s (1 vcpu, 1 GiB memory)
Public IP address	: 20.244.96.208
Virtual network/subnet	: windows-vnet/default
DNS name	: Not configured
Health state	: -
Time created	: 6/14/2024, 2:06 PM UTC

The 'Properties' tab is also visible, showing the VM's configuration details. The 'Networking' section indicates a public IP address of 20.244.96.208 and a private IP address of 10.0.0.4. The 'Size' section shows the VM is running on a Standard B1s instance.

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. Or drag and drop into Window server.



Q12) How to attach and detach data disks for windows

Step:1. Create a Virtual Machine and select image as Window server, set up Username and password

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure. The current step is 'Set image, size, and administrator account'. Key settings include:

- Image:** Windows Server 2019 Datacenter - x64 Gen2
- VM architecture:** x64 (selected)
- Run with Azure Spot discount:** Unchecked
- Size:** Standard_B1s - 1 vcpu, 1 GiB memory (₹923.13/month) (free services eligible)
- Enable Hibernation:** Unchecked
- Administrator account:**
 - Username: poojitha
 - Password: (redacted)
 - Confirm password: (redacted)

At the bottom, there are buttons for '< Previous', 'Next : Disks >', 'Review + create', and 'Give feedback'.

Step:2. Go to disks and click on “Create and attach new disks”.

The screenshot shows the 'Create a virtual machine' wizard in Microsoft Azure. The current step is 'Configure OS disk and data disks'. Key settings include:

- Encryption at host:** Unchecked (with a note: 'Encryption at host is not registered for the selected subscription. Learn more about enabling this feature')
- OS disk:**
 - OS disk size: Image default
 - OS disk type: Premium SSD (locally-redundant storage)
 - Delete with VM: Checked
 - Key management: Platform-managed key
 - Enable Ultra Disk compatibility: Unchecked
- Data disks for windows:** A note states: 'You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.' Below this are buttons for 'Create and attach a new disk' and 'Attach an existing disk'.

At the bottom, there are buttons for '< Previous', 'Next : Networking >', 'Review + create', and 'Give feedback'.

Step:3 Select the disk size of your preference and check the option “delete disk with vm” and click on “OK”.

Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. [Learn more](#)

Name * windows_DataDisk_0

Source type * None (empty disk)

Size * 2048 GB
Premium SSD LRS
[Change size](#)

Key management Platform-managed key

Enable shared disk Yes No

Delete disk with VM

OK [Give feedback](#)

Step:4. We can see the selected disk in our vm page. Click on review+create.

Encryption at host is not registered for the selected subscription. [Learn more about enabling this feature](#)

OS disk

OS disk size Image default

OS disk type Premium SSD (locally-redundant storage)

Delete with VM

Key management Platform-managed key

Enable Ultra Disk compatibility

Data disks for windows

You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.

LUN	Name	Size (GiB)	Disk type	Host caching	Delete with VM
0	windows_DataDisk_0	2048	Premium SSD LRS	None	<input checked="" type="checkbox"/>

Create and attach a new disk Attach an existing disk

< Previous Next : Networking > Review + create [Give feedback](#)

Step:5. Go to the virtual machine that you have created and go to settings and click on “DISKS”. You can see that a disk is attached to your VM named “Windows”.

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MiB/s)	Encryption	Host caching
windows_disk1_d0d0704fe2574ee7b2763d9300	Premium SSD LRS	127	500	100	SSE with PMK	Read/write

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MiB/s)	Encryption	Host caching
0	windows_DataDisk_0	Premium SSD LRS	2048	7500	250	SSE with PMK	None

Step:6. To detach a disk click on the detach symbol that is present at the right side and click on apply.

Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MiB/s)	Encryption	Host caching
windows_disk1_d0d0704fe2574ee7b2763d9300	Premium SSD LRS	127	500	100	SSE with PMK	Read/write

Q13) How to add data disks to Linux server in azure data attach and detach

Step:1. Create a resource group and launch a Azure Linux server using VM.

Microsoft Azure

Search resources, services, and docs (G+)

Home > Virtual machines >

Create a virtual machine ...

Image * ⓘ Ubuntu Server 22.04 LTS - x64 Gen2

VM architecture ⓘ

- Arm64
- x64

Run with Azure Spot discount ⓘ

Size * ⓘ Standard_B1s - 1 vcpu, 1 GiB memory (₹680.20/month) (free services eligible)

Enable Hibernation ⓘ

Hibernate does not currently support Trusted launch and Confidential virtual machines for Linux images. [Learn more](#)

Administrator account

Authentication type ⓘ

- SSH public key
- Password

Username * ⓘ pojitha

Password *

Confirm password *

< Previous Next : Disks > Review + create Give feedback

Step:2. Click on create a new disk and change the disk size to your preferable size and enable “delete disk with vm” and click on OK.

Microsoft Azure

Search resources, services, and docs (G+)

Home > Virtual machines > Create a virtual machine >

Create a new disk ...

Create a new disk to store applications and data on your VM. Disk pricing varies based on factors including disk size, storage type, and number of transactions. [Learn more](#)

Name * ⓘ ubuntu_DataDisk_0

Source type * ⓘ None (empty disk)

Size * ⓘ 1024 GiB
Premium SSD LRS
[Change size](#)

Key management ⓘ Platform-managed key

Enable shared disk

- Yes
- No

Delete disk with VM

OK Give feedback

Step:3. Open putty and launch linux server,\$clear

\$df-h(used to display hard disk storage not shown it)

\$lsblk(to see hidden drives)

\$ sudo file -s/dev/sdc(information about the device)

create file system on the data disk->\$sudo mkfsc -t extH/dev/sdc

```

azureuser@linux-vm:~$ clear
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@linux-vm:~$ df -hT
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/root      ext4   29G  1.6G   28G  6% /
devtmpfs       devtmpfs 1.7G    0  1.7G  0% /dev
tmpfs          tmpfs   1.7G    0  1.7G  0% /dev/shm
tmpfs          tmpfs   336M  988K  335M  1% /run
tmpfs          tmpfs   5.0M    0  5.0M  0% /run/lock
tmpfs          tmpfs   1.7G    0  1.7G  0% /sys/fs/cgroup
/dev/loop0     squashfs 64M   64M    0 100% /snap/core20/2318
/dev/loop1     squashfs 92M   92M    0 100% /snap/ldxd/24061
/dev/loop2     squashfs 39M   39M    0 100% /snap/snapd/21759
/dev/sda15     vfat    105M  6.1M   99M  6% /boot/efi
/dev/sdb1      ext4    6.8G  28K   6.5G  1% /mnt
tmpfs          tmpfs   336M    0  336M  0% /run/user/1000
azureuser@linux-vm:~$ lsblk
NAME  MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
loop0  7:0    0  64M  1 loop /snap/core20/2318
loop1  7:1    0 91.9M  1 loop /snap/ldxd/24061
loop2  7:2    0 38.8M  1 loop /snap/snapd/21759
sda   8:0    0   30G  0 disk 
├─sda1  8:1    0 29.9G  0 part /
└─sda14 8:14   0   4M  0 part 
└─sda15 8:15   0 106M  0 part /boot/efi
sdb   8:16   0   7G  0 disk 
└─sdb1  8:17   0   7G  0 part /mnt
sdc   8:32   0   10G 0 disk 
sr0   11:0   1 628K  0 rom
azureuser@linux-vm:~$ 
```

Step:4. Create directory->\$mkdir test

\$sudo mount/dev/sdc test->\$sudo touch files

\$ls->\$df -hT(after mounting it shows 5GB disk

\$sudo Umount test

```

azureuser@linux-vm:~$ clear
tmpfs          tmpfs   336M  988K  335M  1% /run
tmpfs          tmpfs   5.0M    0  5.0M  0% /run/lock
tmpfs          tmpfs   1.7G    0  1.7G  0% /sys/fs/cgroup
/dev/loop0     squashfs 64M   64M    0 100% /snap/core20/2318
/dev/loop1     squashfs 92M   92M    0 100% /snap/ldxd/24061
/dev/loop2     squashfs 39M   39M    0 100% /snap/snapd/21759
/dev/sda15     vfat    105M  6.1M   99M  6% /boot/efi
/dev/sdb1      ext4    6.8G  28K   6.5G  1% /mnt
tmpfs          tmpfs   336M    0  336M  0% /run/user/1000
azureuser@linux-vm:~$ lsblk
NAME  MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
loop0  7:0    0  64M  1 loop /snap/core20/2318
loop1  7:1    0 91.9M  1 loop /snap/ldxd/24061
loop2  7:2    0 38.8M  1 loop /snap/snapd/21759
sda   8:0    0   30G  0 disk 
├─sda1  8:1    0 29.9G  0 part /
└─sda14 8:14   0   4M  0 part 
└─sda15 8:15   0 106M  0 part /boot/efi
sdb   8:16   0   7G  0 disk 
└─sdb1  8:17   0   7G  0 part /mnt
sdc   8:32   0   10G 0 disk 
sr0   11:0   1 628K  0 rom
azureuser@linux-vm:~$ sudo file -s/dev/sdc
file: invalid option -- '/'
Usage: file [-bcCdEhikLlNnprssVvzz0] [--apple] [--extension] [--mime-encoding]
          [--mime-type] [-e <testname>] [-F <separator>] [-f <namefile>]
          [-m <magicfiles>] [-P <parameter=value>] <file> ...
  file -C [-m <magicfiles>]
  file [--help]
azureuser@linux-vm:~$ sudo file -s /dev/sdc
/dev/sdc: data
azureuser@linux-vm:~$ 
```

Step:5.To detach open disk in VM and detach it,Click on apply

The desired performance might not be reached due to the maximum virtual machine disk performance cap. The current virtual machine size supports up to 23 MBps. The total for disks attached to 'ubuntu' is 125 MBps. [Learn more](#)

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
0	ubuntu_disk1_95fd376cf35742ac825061e013df73	Premium SSD LRS	30	120	25	SSE with PMK	Read/write

LUN	Disk name	Storage type	Size (GiB)	Max IOPS	Max throughput (MBps)	Encryption	Host caching
0	ubuntu_DataDisk_0	Premium SSD LRS	100	500	100	SSE with PMK	None

OS disk

Data disks

Disks

Apply **Discard changes**

Q14) Move Ubuntu server files from one resource to another resource

Steps:-

- 1) Open Resource groups in Microsoft Azure account and click on create
- 2) Give a name and create two resource groups

Project details

- Subscription *: Azure for Students
- Resource group *: R1

Resource details

- Region *: (Asia Pacific) Central India

Review + create < Previous Next : Tags >

Resource groups

Showing 1 to 5 of 5 records.

Name	Subscription	Location
NetworkWatcherRG	Azure for Students	Central India
R1	Azure for Students	Central India
r17	Azure for Students	Central India
static-app	Azure for Students	Central US
win	Azure for Students	Central India

< Previous Page 1 of 1 Next > Give feedback

Project details

Subscription * Resource group *

Resource details

Region *

Review + create < Previous Next: Tags >

Name	Subscription	Location
NetworkWatcherRG	Azure for Students	Central India
R1	Azure for Students	Central India
r17	Azure for Students	Central India
static-app	Azure for Students	Central US
win	Azure for Students	Central India

< Previous Page 1 of 1 Next > Give feedback

3) Select Virtual machine and click on create

The screenshot shows the Microsoft Azure portal interface for managing virtual machines. The top navigation bar includes 'Home', 'Virtual machines', and a user profile for 'challapoojithavenkatas... VARDHMAN COLLEGE OF ENGG'. Below the navigation is a toolbar with various actions like 'Create', 'Switch to classic', 'Reservations', 'Manage view', 'Refresh', 'Export to CSV', 'Open query', 'Assign tags', 'Start', 'Restart', 'Stop', 'Delete', 'Services', and 'Maintenance'. A search bar at the top says 'Search resources, services, and docs (S+I)'. Below the toolbar, there are filters: 'Filter for any field...', 'Subscription equals all', 'Type equals all', 'Resource group equals all', 'Location equals all', and 'Add filter'. There are also grouping and view options: 'No grouping' and 'List view'. The main content area displays a message: 'No virtual machines to display' with a small icon of a computer monitor. Below it, a note says: 'Create a virtual machine that runs Linux or Windows. Select an image from the marketplace or use your own customized image.' A large blue 'Create' button is centered. At the bottom, there are links to 'Learn more about Windows virtual machines' and 'Learn more about Linux virtual machines'. A 'Give feedback' link is in the bottom right.

4) Create a VM with username and password & click on "Review+ create"

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The current step is 'Set instance details'. The configuration includes:

- Run with Azure Spot discount:** Unchecked.
- Size:** Standard_B1s - 1 vcpu, 1 GB memory (₹923.13/month) (free services eligible). A link 'See all sizes' is available.
- Enable Hibernation:** Unchecked. A note says: '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:** poojitha
 - Password:** [REDACTED]
 - Confirm password:** [REDACTED]
- 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:** Set to 'Allow selected ports'.
 - Select inbound ports:** SSH (22)
 - A note: 'All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.'

At the bottom, there are navigation buttons: '< Previous', 'Next: Disks >', and a blue 'Review + create' button. A 'Give feedback' link is in the bottom right.

5) Click on create

The screenshot shows the Microsoft Azure Deployment Overview page for a deployment named "CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614234609". The status bar at the top indicates "Deployment in progress...". The main content area shows deployment details: Deployment name: CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614234609; Start time: 6/14/2024, 11:47:55 PM; Subscription: Azure for students; Correlation ID: 410b283c-20e8-4021-9abd-5dc1daae107; Resource group: R33. Below this, there's a table titled "Deployment details" with columns: Resource, Type, Status, and Operation details. A note says "No results." Under "Deployment details", there are links to "Give feedback" and "Tell us about your experience with deployment". On the right side, there are promotional cards for Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

6) click on "Go to resource"

The screenshot shows the Microsoft Azure Deployment Overview page for the same deployment. The status bar at the top indicates "Deployment completed". The main content area shows deployment details: Deployment name: CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240614234609; Start time: 6/14/2024, 11:47:55 PM; Subscription: Azure for Students; Correlation ID: 410b283c-20e8-4021-9abd-5dc1daae107; Resource group: R33. Below this, there's a table titled "Deployment details" with columns: Resource, Type, Status, and Operation details. A note says "No results." Under "Deployment details", there are links to "Setup auto-shutdown Recommended", "Monitor VM health, performance and network dependencies Recommended", and "Run a script inside the virtual machine Recommended". At the bottom, there are two buttons: "Go to resource" (highlighted in blue) and "Create another VM". On the right side, there are promotional cards for Cost Management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

7) Select all resources & click on "move" on the top

The screenshot shows the Microsoft Azure Resource Group Overview page for a resource group named 'R33'. The 'Overview' tab is selected. In the 'Resources' section, several resources are listed, each with a checkbox checked. The resources include VM33, VM33-ip, VM33-nsg, VM33-vnet, vm33464_z1, and VM33_disk1_2a446e789974618a3405bb9c200eed. The 'Move' button is visible at the top right of the page.

8) Click on move to another resource group

The screenshot shows the Microsoft Azure Resource Group Overview page for a resource group named 'R33'. The 'Move' button is highlighted, and a context menu has appeared, listing three options: 'Move to another resource group', 'Move to another subscription', and 'Move to another region'. The 'Resources' section below shows the same list of selected resources as in the previous screenshot.

9) Give the target Resource group i.e., RG2 & click on next

Move resources

Source

Subscription: Azure for Students
Resource group: R33

Target

Subscription: Azure for Students
Resource group: R1

Move resources

Resources to move

Name	Type	Resource type	Validation status	Action
VM33	Virtual machine	microsoft.compute/virtualmachines	Succeeded	Remove
VM33-ip	Public IP address	microsoft.network/publicipaddresses	Succeeded	Remove
VM33-nsg	Network security group	microsoft.network/networksecuritygroups	Succeeded	Remove
VM33-rneta	Virtual network	microsoft.network/virtualnetworks	Succeeded	Remove
VM33_disk1_f2e446e709974618a3405bb0c200ee9d	Disk	microsoft.compute/disks	Succeeded	Remove
vm334a4_21	Network interface	microsoft.network/networkinterfaces	Succeeded	Remove

Previous Next

10) After all validation status "Succeeded" click on next

Move resources

Selection summary

Source subscription	Azure for Students
Source resource group	R33
Target subscription	Azure for Students
Target resource group	R1
Number of resources to move	6

I understand that tools and scripts associated with moved resources will not work until I update them to use new resource IDs

Previous Move

11) Click on "move" then all the resources from the RG1 moves to RG2

Selection summary

Source subscription	Azure for Students
Source resource group	R33
Target subscription	Azure for Students
Target resource group	R1
Number of resources to move	6

I understand that tools and scripts associated with moved resources will not work until I update them to use new resource IDs

Previous Move

12) To check if the resources are moved to RG2, open RG2, All the resources can be seen

Moving Resources

Subscription (moved) : Azure for Students
Subscription ID : df58732-c441-4b58-addc-898a49fe493
Tags (edit) : Add tags

Resources

Name	Type	Location
VM33	Virtual machine	Central India
VM33-ip	Public IP address	Central India
VM33-msg	Network security group	Central India
VM33-vnet	Virtual network	Central India
vm33464_1	Network interface	Central India
VM33_disk1_1	Disk	Central India

Q15) How to create Storage Account, container and upload/delete objects?

Steps:-

- 1) Open Microsoft Azure portal and click on storage accounts

The screenshot shows the Microsoft Azure Storage accounts page. At the top, there are navigation links for Home, Create, Restore, Manage view, Refresh, Export to CSV, Open query, Assign tags, and Delete. Below these are filter options for Subscription, Resource group, Location, and Kind. A message at the top says "Showing 0 to 0 of 0 records." The main area displays a large gray placeholder icon and the text "No storage accounts to display". Below this, there is descriptive text about creating a storage account and a prominent blue "Create storage account" button.

- 2) Click on create, select LRS/GRS in redundancy

The screenshot shows the "Create a storage account" wizard on the "Basics" step. It includes sections for "Project details" (Subscription: Azure for Students, Resource group: (New) r17), "Instance details" (Storage account name: r117, Region: (Asia Pacific) Central India, Performance: Standard, Redundancy: Locally-redundant storage (LRS)), and navigation buttons for "Review", "< Previous", "Next : Advanced >", and "Give feedback".

3) Click on next, Tick "Allow enabling anonymous access on individual containers"

Security

Configure security settings that impact your storage account.

- Require secure transfer for REST API operations
- Allow enabling anonymous access on individual containers
- Enable storage account key access
- Default to Microsoft Entra authorization in the Azure portal
- Minimum TLS version
- Permitted scope for copy operations (preview)

Hierarchical Namespace

Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs). [Learn more](#)

Enable hierarchical namespace

Review < Previous Next : Networking > Give feedback

4) Click on Review+create and click on create

Review

Basics	
Subscription	Azure for Students
Resource Group	r17
Location	centralindia
Storage account name	r117
Deployment model	Resource manager
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced	
Enable hierarchical namespace	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Hot
Enable SFTP	Disabled
Large file shares	Enabled

Networking	
Network connectivity	Public endpoint (all networks)
Default routing tier	Microsoft network routing

Create < Previous Next > Download a template for automation Give feedback

5) Open Storage Account which you have created

Storage account

Overview

Essentials

Resource group (move)	: r117	Performance	: Standard
Location	: centralindia	Replication	: Locally-redundant storage (LRS)
Subscription (move)	: Azure for Students	Account kind	: StorageV2 (general purpose v2)
Subscription ID	: dfa58732-c441-4b58-addc-898a43fe4a93	Provisioning state	: Succeeded
Disk state	: Available	Created	: 6/14/2024, 8:35:48 PM
Tags (edit)	: Add tags		

Properties **Monitoring** **Capabilities (7)** **Recommendations (0)** **Tutorials** **Tools + SDKs**

Blob service

Hierarchical namespace	Disabled	Security	
Default access tier	Hot	Require secure transfer for REST API operations	Enabled
Blob anonymous access	Enabled	Storage account key access	Enabled
Blob soft delete	Enabled (7 days)	Minimum TLS version	Version 1.2
Container soft delete	Enabled (7 days)	Infrastructure encryption	Disabled
Versioning	Disabled		
Change feed	Disabled		
NFS v3	Disabled		
Allow cross-tenant replication	Disabled		
Storage tasks assignments	None		

File service

Large file share	Enabled	Networking	
Identity-based access	Not configured	Allow access from	All networks
		Number of private endpoint connections	0
		Network routing	Microsoft network routing
		Access for trusted Microsoft services	Yes
		Endpoint type	Standard

6) Click containers under Data Storage on the left side and click on "+ Container"

Containers

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Storage Mover

Data storage

Containers

File shares

Queues

Tables

Containers

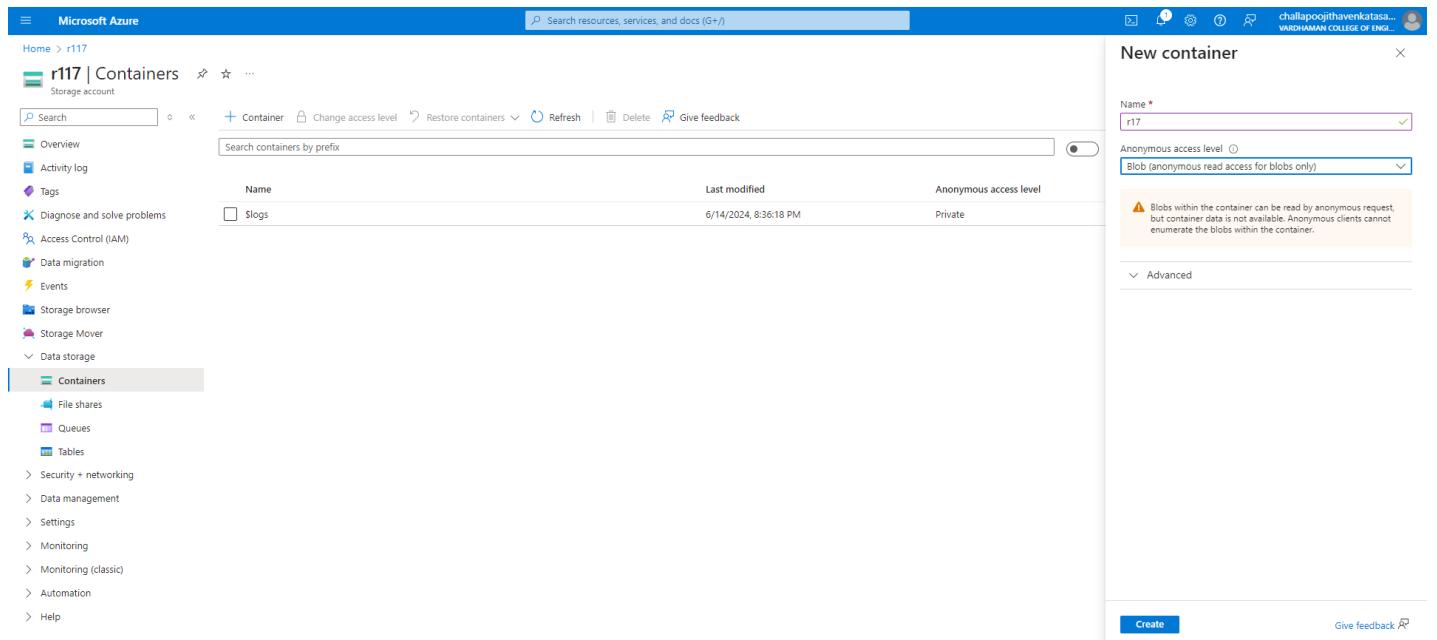
+ Container

Search containers by prefix

Name	Last modified	Anonymous access level	Lease state
slogs	6/14/2024, 8:36:18 PM	Private	Available

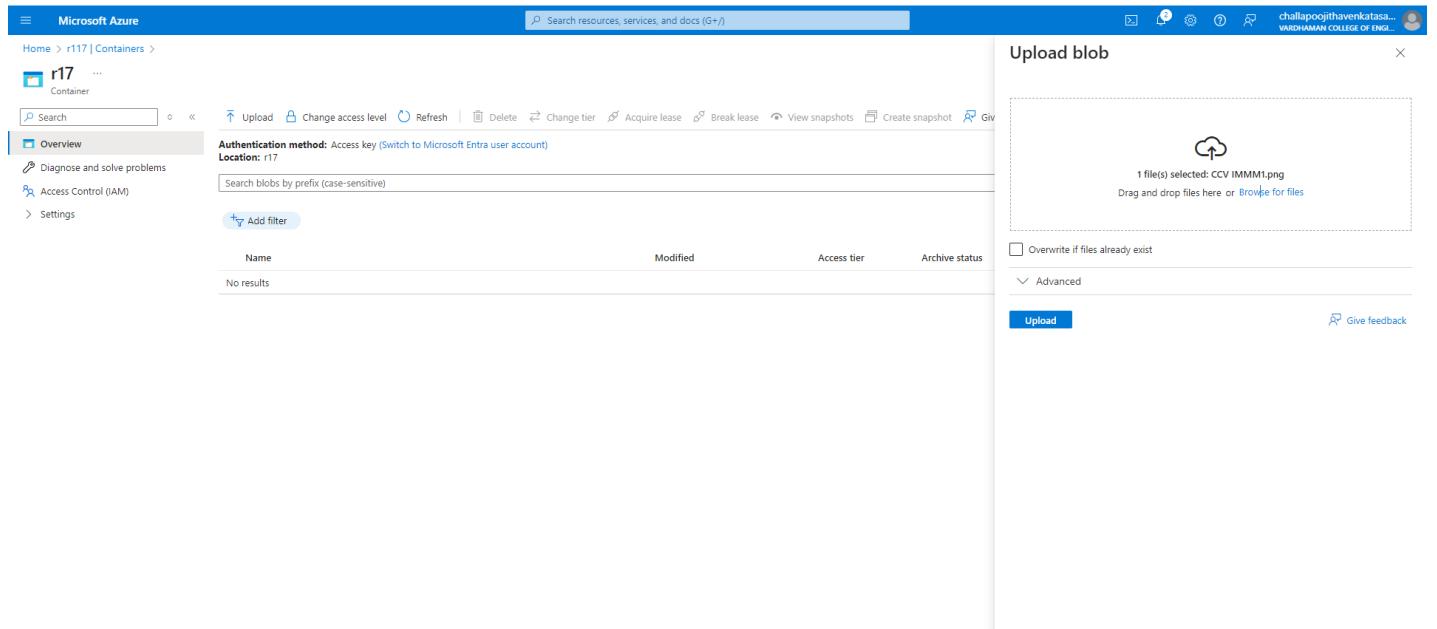
Show deleted containers

7) Give a name & select "blob" in Anonymous access level and click on create



The screenshot shows the Microsoft Azure Storage Container creation dialog. On the left, the navigation pane is visible with 'Containers' selected under 'Data storage'. The main area shows a table with one row: 'Name' (slogs), 'Last modified' (6/14/2024, 8:36:18 PM), and 'Anonymous access level' (Private). To the right, a 'New container' form is open. It has a 'Name' field containing 'r17' and a dropdown for 'Anonymous access level' set to 'Blob (anonymous read access for blobs only)'. A warning message states: 'Blobs within the container can be read by anonymous request, but container data is not available. Anonymous clients cannot enumerate the blobs within the container.' Below the form are 'Advanced' settings and 'Create' and 'Give feedback' buttons.

8) Click on upload and browse for files



The screenshot shows the Microsoft Azure Storage Container upload dialog. On the left, the navigation pane is visible with 'Overview' selected under 'Containers'. The main area shows a table with no results. To the right, a 'Upload blob' form is open. It features a large dashed box for file selection with the text '1 file(s) selected: CCV IMMM1.png' and 'Drag and drop files here or Browse for files'. Below the box are checkboxes for 'Overwrite if files already exist' and 'Advanced' settings. At the bottom are 'Upload' and 'Give feedback' buttons.

9)Upload any file/image/audio/video/pdf

The screenshot shows the Microsoft Azure Storage Explorer interface. In the top right corner, there is a message box indicating "Successfully uploaded blob(s)" and "Successfully uploaded 1 blob(s)". The main table displays a single file entry:

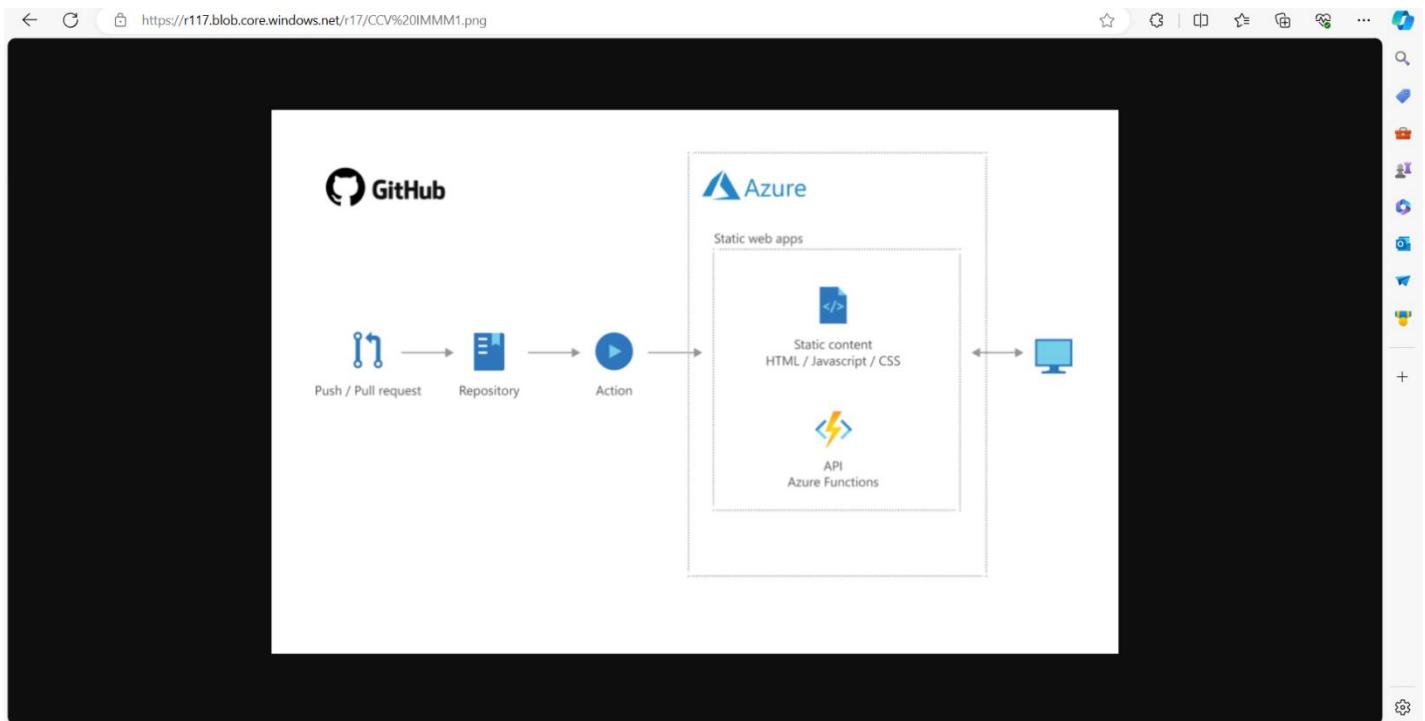
Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
CCV IMMM1.png	6/14/2024, 8:40:47 PM	Hot (inferred)		Block blob	58.47 KB	Available

10)Click on the file which you have uploaded and copy url

The screenshot shows the Microsoft Azure Storage Explorer interface, specifically the properties view for the file 'CCV IMMM1.png'. The URL of the file is displayed in the 'Properties' section under the 'URL' field, and a tooltip indicates it has been copied. The properties table includes the following information:

LAST MODIFIED	6/14/2024, 8:40:47 PM
CREATION TIME	6/14/2024, 8:40:47 PM
VERSION ID	-
TYPE	Block blob
SIZE	58.47 KB
ACCESS TIER	Hot (inferred)
ACCESS TIER LAST MODIFIED	N/A
ARCHIVE STATUS	-
REHYDRATE PRIORITY	-
SERVER ENCRYPTED	true
ETAG	0x8DC8C842B9B9E80
VERSION-LEVEL IMMUTABILITY POLICY	Disabled
CACHE-CONTROL	
CONTENT-TYPE	image/png
CONTENT-MD5	84b8MlqVo+aYT0raj5PiA==
CONTENT-ENCODING	
CONTENT-LANGUAGE	
CONTENT-DISPOSITION	
LEASE STATUS	Unlocked
LEASE STATE	Available
LEASE DURATION	-

11) Paste the URL in any browser



12) To change the access level, click on Change access level

Access tier	Archive status	Blob type	Size	Lease state
Hot (inferred)	Not yet archived	Block blob	58.47 KiB	Available

13)Select any Anonymous access level and click on OK

The screenshot shows the Microsoft Azure Storage Explorer interface. A modal dialog box is open in the center, titled "Change access level". Inside the dialog, there is a dropdown menu labeled "Anonymous access level" which has "Private (no anonymous access)" selected. Below the dropdown are two buttons: "OK" and "Cancel". In the background, the main pane displays a list of blobs in a container named "r17". One blob is visible, named "CCV IMMM1.png", with details: Access tier (Hot (Inferred)), Archive status (Not yet archived), Blob type (Block blob), Size (58.47 KB), and Lease state (Available). The top navigation bar includes options like "Upload", "Change access level", "Refresh", "Delete", "Change tier", "Acquire lease", "Break lease", "View snapshots", "Create snapshot", and "Give feedback". The left sidebar shows navigation links such as "Home", "r17", "Container", "Search", "Overview", "Diagnose and solve problems", "Access Control (IAM)", and "Settings". The top right corner shows the user's name "challapoojithavenkatas..." and the college name "VARDHAMAN COLLEGE OF ENGG".

14)Again copy the URL of the file which you have uploaded previuosly and paste it any browser

The screenshot shows a web browser window with the URL <https://r17.blob.core.windows.net/r17/CCV%20IMMM1.png> in the address bar. The page content is an XML error response:

```

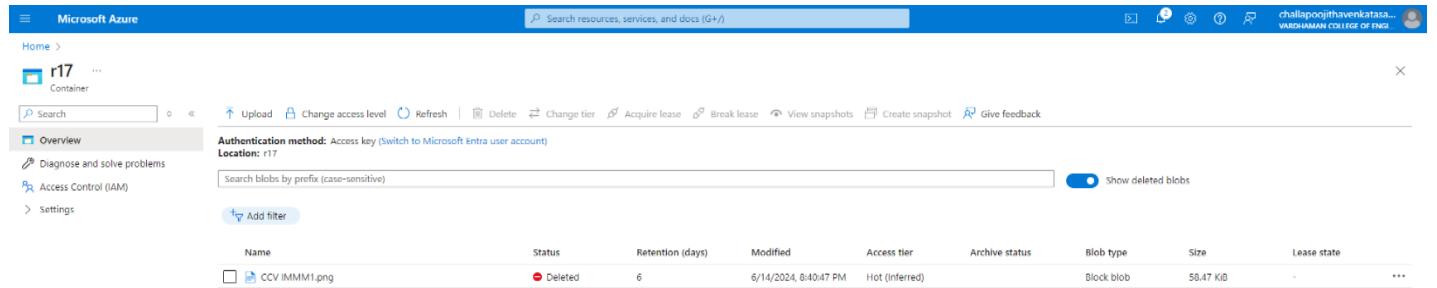
<Error>
  <Code>ResourceNotFound</Code>
  <Message>The specified resource does not exist. RequestId:067b994f-e01e-0073-146d-bec2ec000000 Time:2024-06-14T15:16:01.0872151Z</Message>
</Error>

```

The browser interface includes standard navigation buttons (back, forward, search, etc.) and a toolbar with various icons.

15) To delete a blob, select the blob and click on delete

16) To view the deleted blobs, click on "show deleted blobs"

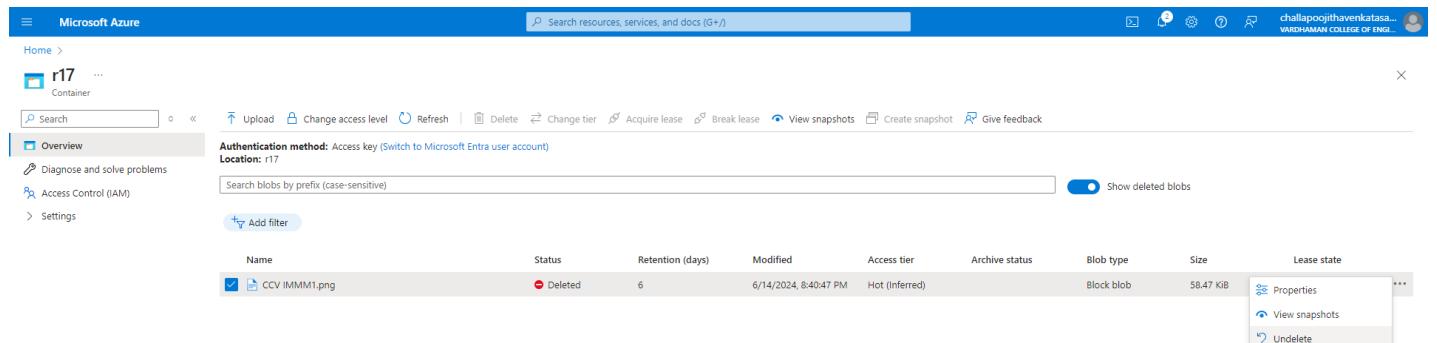


The screenshot shows the Microsoft Azure Storage Explorer interface for a container named 'r17'. The left sidebar includes options like Home, Overview, Diagnose and solve problems, Access Control (IAM), and Settings. The main area displays a table of blobs. One blob, 'CCV IMMM1.png', is listed with a status of 'Deleted'. A 'Show deleted blobs' toggle switch is visible at the top right of the table. The table columns are Name, Status, Retention (days), Modified, Access tier, Archive status, Blob type, Size, and Lease state.

Name	Status	Retention (days)	Modified	Access tier	Archive status	Blob type	Size	Lease state
CCV IMMM1.png	Deleted	6	6/14/2024, 8:40:47 PM	Hot (Inferred)		Block blob	58.47 KiB	-

17) To undo deleted blob:

select the blob, click on more and click on undelete



This screenshot is similar to the previous one, showing the Azure Storage Explorer for container 'r17'. The blob 'CCV IMMM1.png' is again listed as 'Deleted'. A context menu is open over this blob, with the 'Undelete' option highlighted. The menu also includes 'Properties' and 'View snapshots'.

Q16) Find the procedure to implement static web hosting.

1. Create 2 websites named First.html and Second.html

The screenshot shows a Microsoft Edge browser window with the address bar set to 'File C:/Users/91939/Desktop/First.html'. The page content displays 'Welcome to CCV' and 'Links for Google and Facebook' with two links: '1. Google' and '2. Facebook'.

2. Create a resource group named "r1".

The screenshot shows the Microsoft Azure portal with the 'r1' resource group selected. The left sidebar shows navigation options like Home, Overview, Activity log, Access control (IAM), Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help. The main area displays the 'Overview' tab for the 'r1' resource group, showing details such as Subscription (move) to Azure for Students, Subscription ID dfa58732-c441-4b58-addc-898a43fe4a93, Tags (edit) to Add tags, Deployments 3 Succeeded, and Location Central India. Below this, the 'Resources' section lists 9 records, including storage accounts, virtual machines, network security groups, network interfaces, disks, and a data disk, all located in Central India.

3.Create a storage account .

s011 Storage account

Overview

Essentials

- Resource group (...): [rg1](#)
- Location: centralindia
- Primary/Secondary L...: Primary: Loading..., Secondary: Loading...
- Subscription (move): [Azure for Students](#)
- Subscription ID: dfa58732-c441-4b58-addc-898a43fe4a93
- Disk state: Primary: Available, Secondary: Available
- Tags ([edit](#)): Add tags

Properties **Monitoring** **Capabilities (0)** **Recommendations (0)** **Tutorials** **Tools + SDKs**

Blob service

Hierarchical namespace	Disabled
Default access tier	Hot
Blob anonymous access	Disabled
Blob soft delete	Enabled (7 days)
Container soft delete	Enabled (7 days)
Versioning	Enabled
Change feed	Enabled
NFS v3	Disabled
Storage tasks assignments	None

Security

Require secure transfer for REST API operations	Enabled
Storage account key access	Enabled
Minimum TLS version	Version 1.2
Infrastructure encryption	Disabled

Networking

Allow access from	All networks
Number of private endpoint connections	0
Network routing	Microsoft network routing

Page 1 of 1

4.Click on storage account under data management click on static website and enable static website.

s011 | Static website

Static website [Disabled](#) [Enabled](#)

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with files at the primary endpoint. [Learn more](#)

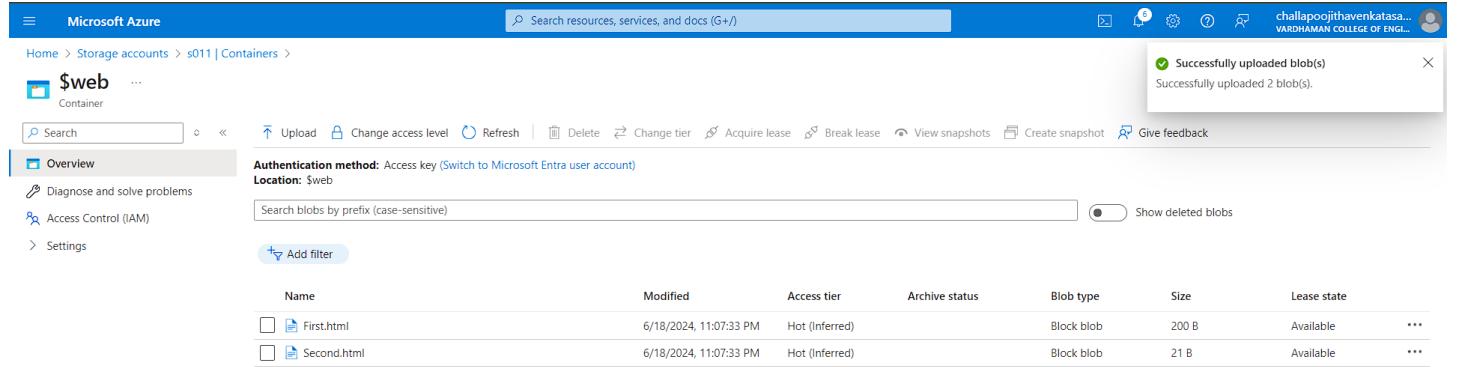
Index document name: First.html

Error document path: Second.html

Page 1 of 1

Index document name-First.html
Error document name-Second.html

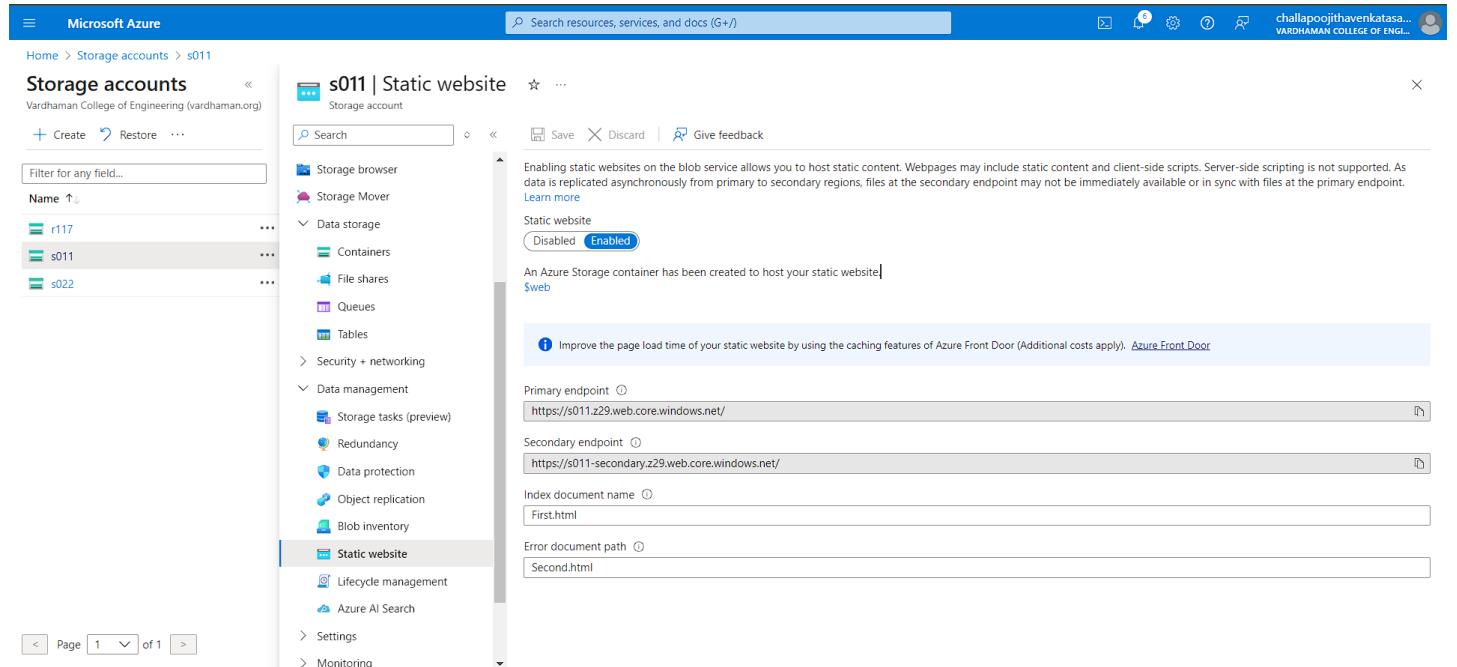
5.Click on containers and click on web and upload the files.



The screenshot shows the Microsoft Azure Storage account overview for the container '\$web'. A success message at the top right indicates 'Successfully uploaded blob(s)' and 'Successfully uploaded 2 blob(s.)'. The left sidebar includes links for Overview, Diagnose and solve problems, Access Control (IAM), and Settings. The main area displays a table of blobs with columns: Name, Modified, Access tier, Archive status, Blob type, Size, and Lease state. Two blobs are listed: 'First.html' and 'Second.html', both modified on 6/18/2024 at 11:07:33 PM, in the Hot (inferred) access tier, and are Block blobs with sizes 200 B and 21 B respectively, both available.

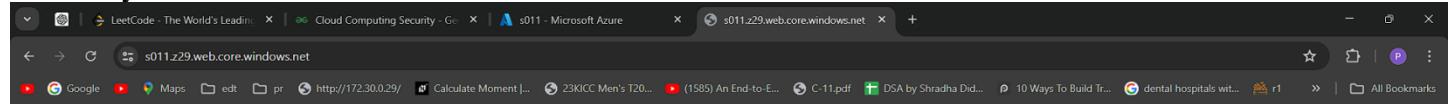
Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
First.html	6/18/2024, 11:07:33 PM	Hot (inferred)		Block blob	200 B	Available
Second.html	6/18/2024, 11:07:33 PM	Hot (inferred)		Block blob	21 B	Available

6.Copy the path from the primary endpoint and paste it in the browser to view the website.



The screenshot shows the Microsoft Azure Storage account settings for the account 's011'. The 'Static website' section is selected. It shows that the static website is enabled. The primary endpoint is set to 'https://s011.z29.web.core.windows.net/'. The index document name is 'First.html' and the error document path is 'Second.html'. A note suggests improving page load time using Azure Front Door. The left sidebar lists other storage services like Storage browser, Storage Mover, Data storage, File shares, Queues, Tables, Security + networking, Data management, Storage tasks (preview), Redundancy, Data protection, Object replication, Blob inventory, Lifecycle management, and Azure AI Search. The bottom navigation bar shows 'Page 1 of 1'.

7.Primary document website



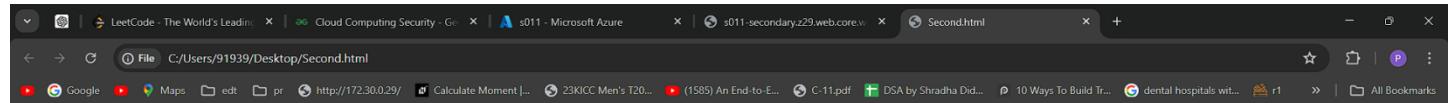
Welcome to CCV

Links for Google and Facebook

1. [Google](#)

2. [Facebook](#)

Error document



Invalid page

Q17) Create an Object replication in Azure machine

1. Create a Storage account with Name: s011 click on create and deployment completed

The screenshot shows the Microsoft Azure Deployment Overview page for a deployment named s011_1718621347431. The status is "Your deployment is complete". Deployment details include a start time of 6/17/2024, 4:19:15 PM, and a correlation ID of fbeef50c-2bc7-4d63-885f-688a846d37f6. A "Go to resource" button is present. On the right, there are promotional cards for Cost Management, Microsoft Defender for Cloud, and Azure experts.

2. Under Data storage click new container with name: c011 and upload image.

The screenshot shows the Microsoft Azure Storage account s011. The left sidebar shows the "Containers" blade selected. A table lists one container named "Slogs". The right side shows a "New container" dialog with fields for "Name" (c011), "Anonymous access level" (Private), and a note about anonymous access being disabled. A "Create" button is at the bottom.

The screenshot shows the Microsoft Azure Storage Explorer interface. On the left, under 'Containers', the 'c011' container is selected. The main pane displays a table with columns 'Name', 'Modified', 'Access tier', and 'Archive status'. A message at the top states 'No results'. To the right, a modal window titled 'Upload blob' is open, containing a central area for dragging files or browsing for them, and a checkbox for 'Overwrite if files already exist'.

3. Create another storage account name: s022 and add container name: c022

The screenshot shows the Microsoft Azure Deployment status page for deployment 's022_1718621751754'. It indicates that the deployment is complete. Deployment details include: Deployment name: s022_1718621751754, Subscription: Azure for Students, Resource group: NetworkWatcherRG. The deployment started at 6/17/2024, 4:26:00 PM with Correlation ID: 126dft37-c10b-4fb9-b8cd-45123277f28b. A success message states 'Deployment succeeded' and 'Deployment "s022_1718621751754" to resource group "NetworkWatcherRG" was successful.' A 'Go to resource' button is present. The right side of the screen features promotional cards for Cost Management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

The screenshot shows the Microsoft Azure Storage accounts page for storage account 's022'. Under the 'Containers' section, a 'New container' dialog is open with the name 'c022' entered. The 'Anonymous access level' dropdown is set to 'Private (no anonymous access)'. A note states 'The access level is set to private because anonymous access is disabled on this storage account.' Below the dialog, the 'Create' and 'Give feedback' buttons are visible. The left sidebar lists other storage accounts: r117, s011, and s022.

4. In Storage account (s011) go to Under Data management click on Object Replication.

The screenshot shows the Microsoft Azure Storage accounts page for storage account s011. The left sidebar lists various storage services: Storage browser, Storage Mover, Data storage (Containers, File shares, Queues, Tables), Security + networking, Data management (Storage tasks (preview), Redundancy, Data protection), and Object replication. The 'Object replication' option is currently selected. The main content area displays two tables: 'Objects copied from this account' and 'Objects copied into this account'. Both tables show no replication policies found.

5. Click on create Replication rules

- Destination Storage account: s022
- Source container: c011
- Destination container: c022(copy cover – only new object change)

The screenshot shows the 'Create replication rules' dialog. It starts with a note that blob change feed and blob versioning are automatically enabled for the source and destination storage accounts. The 'Destination details' section asks to specify the source storage account and the destination storage account. The 'Container pair details' section shows a single pair: Source container c011 and Destination container c022, with the 'Copy over' option selected. A note at the bottom says to configure more than 10 container pairs using a JSON file. At the bottom are 'Create' and 'Cancel' buttons.

6. Check in storage account in s022 to container-c022(verify image)