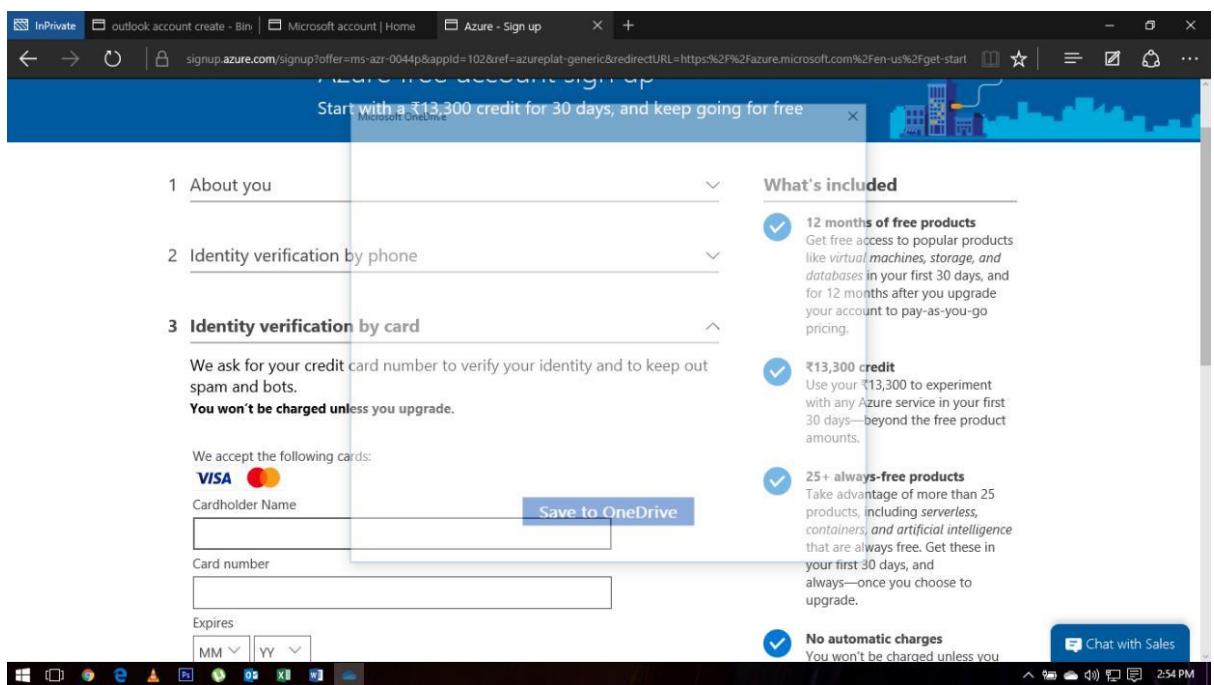


Practice Work No - 1:

Statement	Create an Azure account using any outlook/Gmail/Hotmail id.
Objective	The main objective of the task is to create an Azure account using a mail id and Credit card.
Outcomes	After executing this, one should be able to create a personal/corporate azure account.
Prerequisites	Email id, PAN Card (not mandatory), Credit Card (mandatory), Internet.

Follow below steps to create an azure account using credit card.

1. Create a new account using “outlook.com” or any other ID.
2. Login to: <https://azure.microsoft.com/en-us/>
3. Click Start Free.
4. Fill your mail ID.
5. Fill PAN details.



6. Fill card details

We ask for your credit card number to verify your identity and to keep out spam and bots.
You won't be charged unless you upgrade.

We accept the following cards:

Cardholder Name:

Card number:

Card number is a required field

Expires: /

CVV:

Address line 1:

Address line 2 (Optional):

Address line 3 (Optional):

City:

State:

₹13,300 credit
Use your ₹13,300 to experiment with any Azure service in your first 30 days—beyond the free product amounts.

25+ always-free products
Take advantage of more than 25 products, including serverless, containers, and artificial intelligence that are always free. Get these in your first 30 days, and always—once you choose to upgrade.

No automatic charges
You won't be charged unless you choose to upgrade. Before the end of your first 30 days, you'll be notified and have the chance to upgrade and start paying only for the resources you use beyond the free amounts.

Chat with Sales

7. Fill details & give OTP.

8. Click "I agree..." & then signup

I agree to the [subscription agreement](#), [offer details](#), and [privacy statement](#).

I would like information, tips, and offers from Microsoft or selected partners about Azure, including Azure Newsletter, Pricing updates, and other Microsoft products and services.

Sign up

12 months of free products
Get free access to popular products like virtual machines, storage, and databases in your first 30 days, and for 12 months after you upgrade your account to pay-as-you-go pricing.

₹13,300 credit
Use your ₹13,300 to experiment with any Azure service in your first 30 days—beyond the free product amounts.

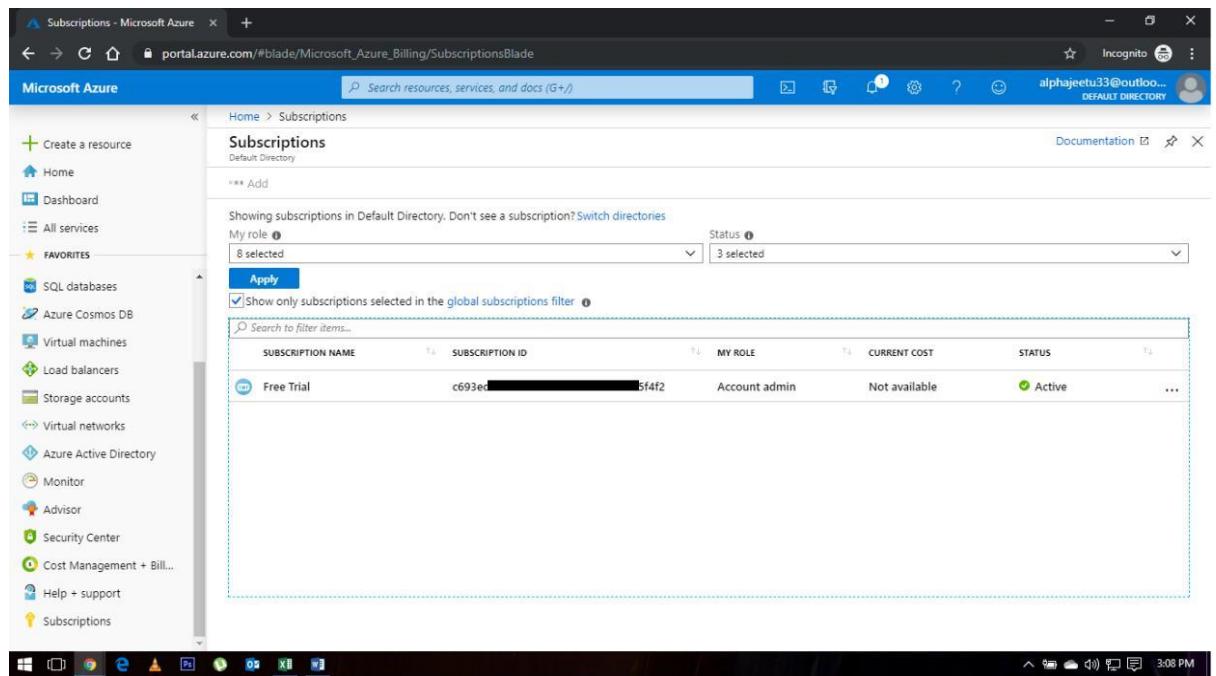
25+ always-free products
Take advantage of more than 25 products, including serverless, containers, and artificial intelligence that are always free. Get these in your first 30 days, and always—once you choose to upgrade.

No automatic charges
You won't be charged unless you

Chat with Sales

9. Login to: <https://portal.azure.com/#home>

10. Something like this will be visible.



The screenshot shows the Microsoft Azure portal's Subscriptions blade. The URL in the address bar is `portal.azure.com/#blade/Microsoft_Azure_Billing/SubscriptionsBlade`. The top navigation bar includes links for Home, Subscriptions, Create a resource, and Documentation. The user's email, `alphajeetu33@outlook.com`, is displayed in the top right corner. The main content area is titled "Subscriptions" and shows a table with one row of data:

SUBSCRIPTION NAME	SUBSCRIPTION ID	MY ROLE	CURRENT COST	STATUS
Free Trial	c693ec[REDACTED]5f4f2	Account admin	Not available	Active

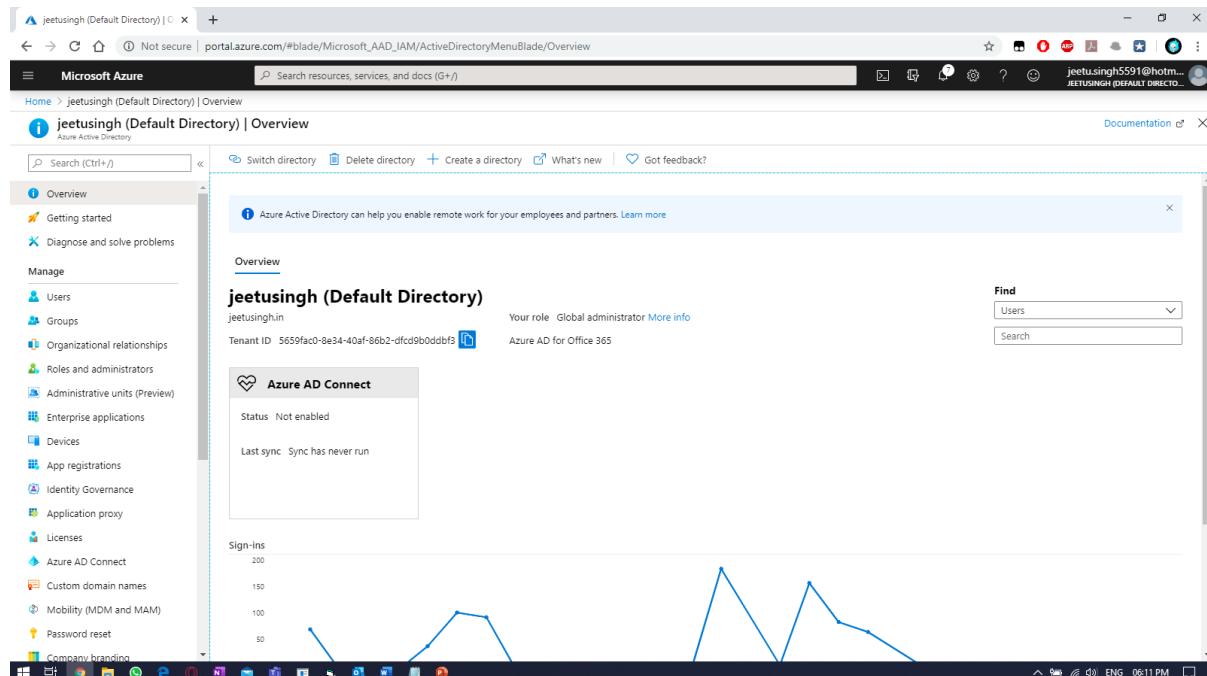
The table has columns for Subscription Name, Subscription ID, My Role, Current Cost, and Status. The "Status" column shows "Active". The "Subscription ID" column contains a redacted value. The "My Role" column indicates the user is an "Account admin". The "Current Cost" column shows "Not available". The "Status" column shows "Active".

Practice Work No - 2:

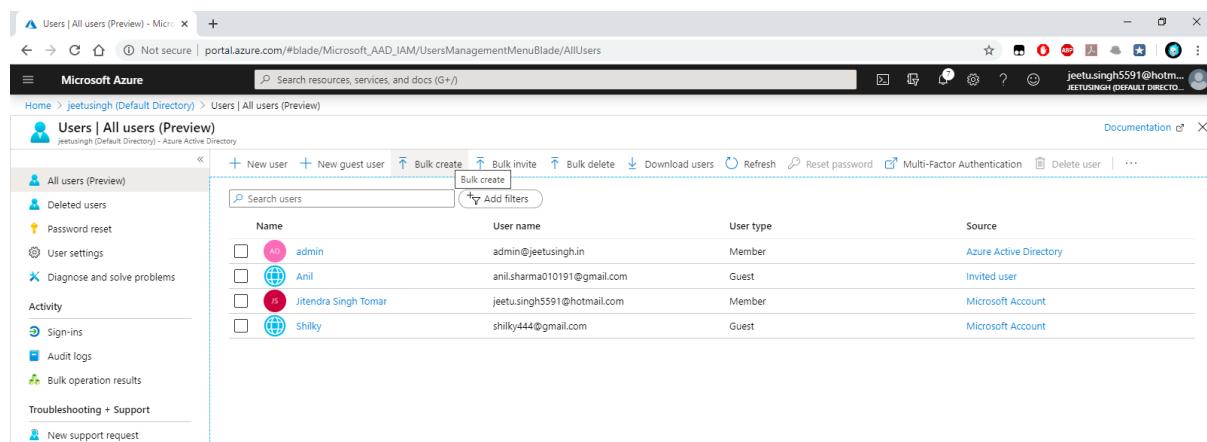
Statement	Implementing Azure Active Directory.
Objective	The main objective of the task is to create and manage Azure Active Directory using Azure portal.
Outcomes	After executing this, one should be able to create and manage the azure Active Directory.
Prerequisites	Working Azure account, Internet

[Task]: Create users in bulk using Active Directory on portal.

Switch to azure active directory blade & select Users blade.



Under USERS, select “Bulk Create” tab.



Name	User name	User type	Source
admin	admin@jeetusingh.in	Member	Azure Active Directory
Anil	anil.sharma010191@gmail.com	Guest	Invited user
Jitendra Singh Tomar	jeetu.singh5591@hotmail.com	Member	Microsoft Account
Shilky	shilky444@gmail.com	Guest	Microsoft Account

Download the default CSV and edit the content & upload it from the same portal.

The screenshot shows the Microsoft Azure portal's 'Users | All users (Preview)' page. On the right, there is a 'Bulk create user' section with three steps: 1. Download csv template (optional) with a 'Download' button, 2. Edit your csv file, and 3. Upload your csv file with a 'Select a file' input field. The main area displays a table of users with columns: Name, User name, User type, and several other columns partially visible. The user table includes entries for admin, Anil, Jitendra Singh Tomar, and Shilky.

Editing the CSV.

	A	B	C	D	E
1	version:v1.0				
2	Name [displayName] Required	User name [userPrincipalName] Required	Initial password [passwordProfile] Required	Block sign in (Yes/No) [accountEnabled] Required	First name [givenName]
3	Example: Chris Green	chris@contoso.com	myPassword1234	No	
4	user1	user1@jeetusingh5591hotmail.onmicrosoft.com	pass@word1	No	
5	user2	user2@jeetusingh5591hotmail.onmicrosoft.com	pass@word2	No	
6	user3	user3@jeetusingh5591hotmail.onmicrosoft.com	pass@word3	No	
7	user4	user4@jeetusingh5591hotmail.onmicrosoft.com	pass@word4	No	
8	user5	user5@jeetusingh5591hotmail.onmicrosoft.com	pass@word5	No	
9					

Uploading the CSV.

The screenshot shows the Microsoft Azure portal's 'Users | All users (Preview)' page. On the right, there is a 'Bulk create user' section with three steps: 1. Download csv template (optional) with a 'Download' button, 2. Edit your csv file, and 3. Upload your csv file with a file input field containing 'UserCreateTemplate.csv'. A success message 'File uploaded successfully' is shown above the 'Submit' button. The main area displays a table of users with columns: Name, User name, User type, and several other columns partially visible. The user table includes entries for admin, Anil, Jitendra Singh Tomar, and Shilky.

Refresh the azure portal.

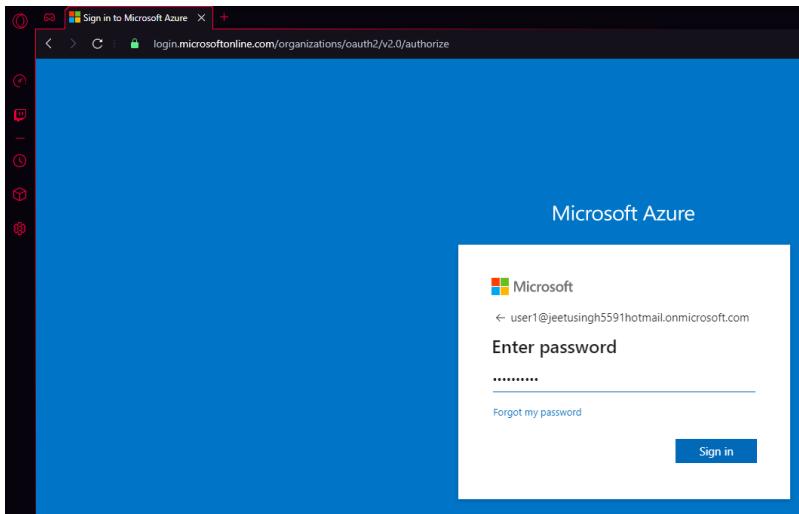
The screenshot shows the Microsoft Azure portal's 'Users | All users (Preview)' blade. On the right, there is a 'Bulk create user' interface. The table lists five users created via bulk upload:

Name	User name	User type
user1	user1@jeetusingh5591hotmail.onmicrosoft.com	Member
user2	user2@jeetusingh5591hotmail.onmicrosoft.com	Member
user3	user3@jeetusingh5591hotmail.onmicrosoft.com	Member
user4	user4@jeetusingh5591hotmail.onmicrosoft.com	Member
user5	user5@jeetusingh5591hotmail.onmicrosoft.com	Member

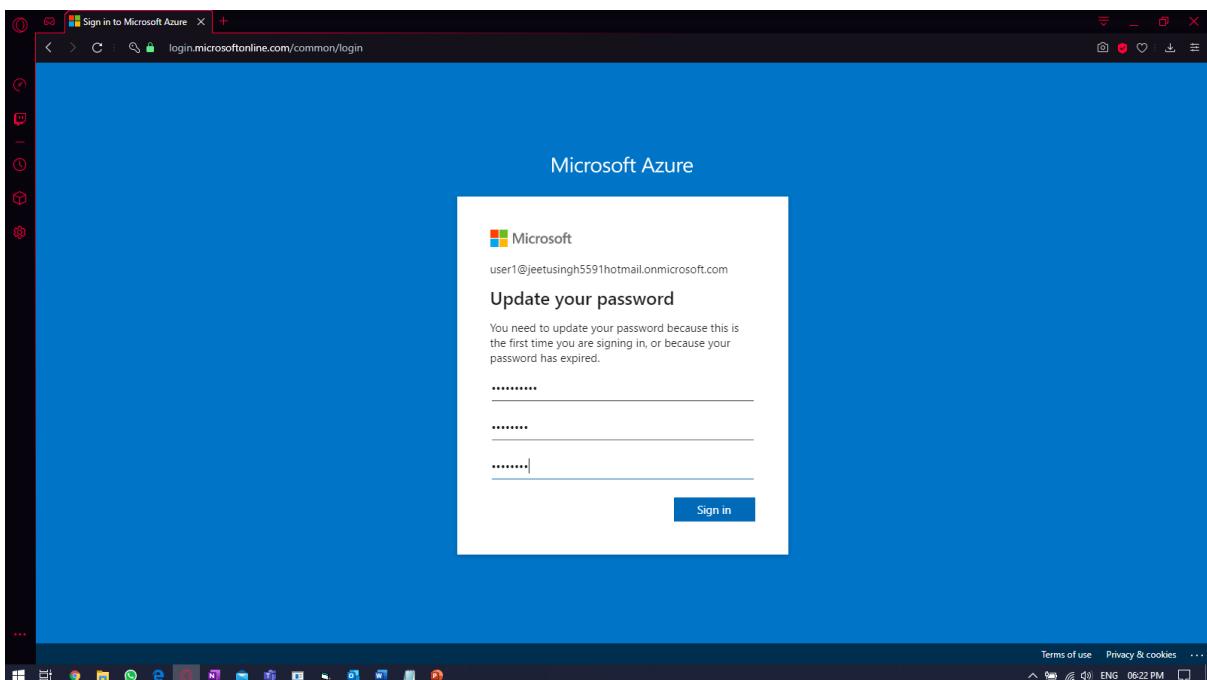
Login-in using the newly created user.

The screenshot shows a Microsoft Edge browser window displaying the Microsoft Azure sign-in page. The URL in the address bar is `login.microsoftonline.com/oauth2/v2.0/authorize`. The page has a blue header with the Microsoft logo and the word "Microsoft". Below the header, it says "Sign in" and "to continue to Microsoft Azure". There is an email input field with the value "user1@jeetusingh5591hotmail.onmicrosoft.com". Below the input field are links for "No account? Create one!" and "Can't access your account?". At the bottom of the page is a blue "Next" button. At the very bottom, there is a "Sign in with GitHub" button.

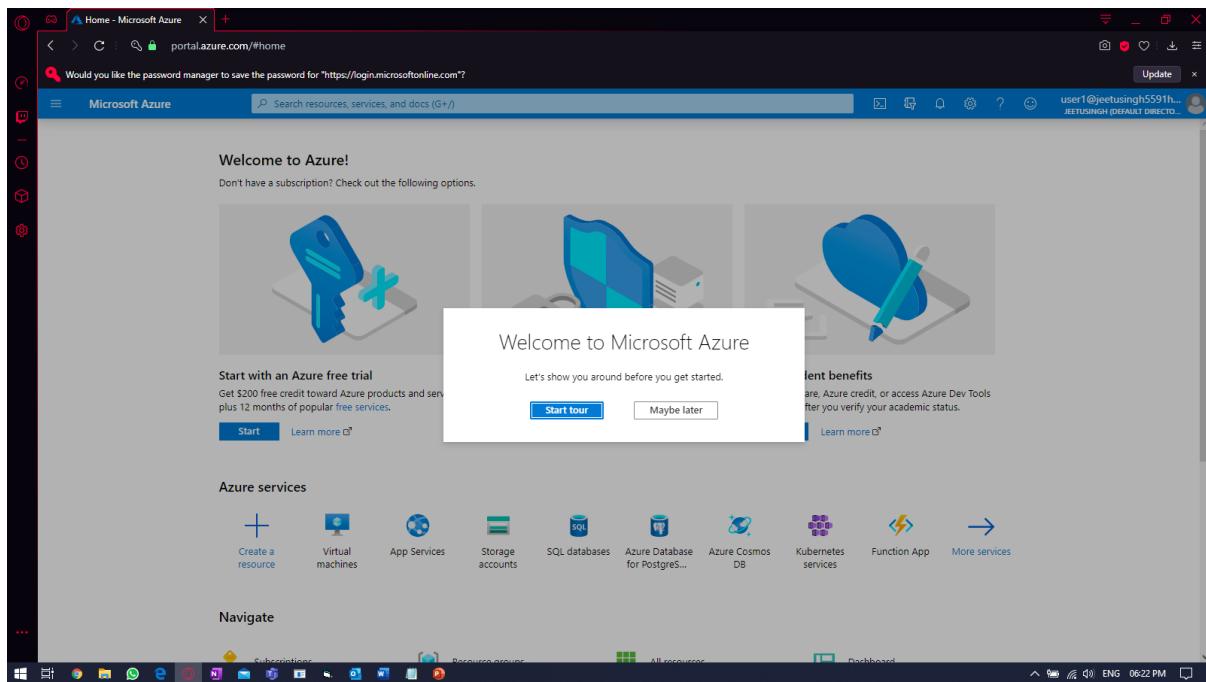
Providing password.



Providing new password



Login-in to portal.



Practice Work No - 3:

Statement	Implementing Multi-factor Authentication.
Objective	The main objective of the task is to enable extra step of security for users
Outcomes	After executing this, one should be able to implement MFA
Prerequisites	Working Azure account, Internet

[Task]: Enabling MFA for users

In active directory dashboard, click on users and click on Multi-factor authentication

Name	User principal name	User type	Directory synced	Identity issuer	Company name	Creation type
Anil Sharma	anil.sharma010191@gmail.com#EXT...	Member	No	anil.sharma010191@gmail.onmicrosoft.c...		
himanshu	himanshuhashit98_outlook.com#...	Guest	No	anil.sharma010191@gmail.onmicrosoft.c...		
hritik	hritik@anh.in	Member	No	anil.sharma010191@gmail.onmicrosoft.c...		
jitendra	jitendrastomar5593@gmail.com#EXT...	Guest	No	anil.sharma010191@gmail.onmicrosoft.c...		
On-Premises Directory Sync...	Sync_WIN-BD2LLEMBM8QH-4b47c13...	Member	Yes	anil.sharma010191@gmail.onmicrosoft.c...		
swi	swikru.bose@gmail.com#EXT#@an...	Guest	No	anil.sharma010191@gmail.onmicrosoft.c...		
user1	user1@anh.in	Member	No	anil.sharma010191@gmail.onmicrosoft.c...		
user2	himanshuhashit98@gmail.com#EX...	Guest	No	anil.sharma010191@gmail.onmicrosoft.c...		
xyz	xyz@anilrhythmsharma.tk	Member	Yes	anil.sharma010191@gmail.onmicrosoft.c...		

Select user and click on Enable on right panel.

Before you begin, take a look at the [multi-factor auth deployment guide](#).

View: [Sign-in allowed users](#) Multi-Factor Auth status: [Any](#) [**bulk update**](#)

<input type="checkbox"/> DISPLAY NAME ▾	USER NAME	MULTI-FACTOR AUTH STATUS
<input type="checkbox"/> Anil Sharma	anil.sharma010191@gmail.com	Disabled
<input checked="" type="checkbox"/> himanshu	himanshuvashisht96@outlook.com	Disabled
<input type="checkbox"/> Hritik	hritik@anrh.co.in	Disabled
<input type="checkbox"/> jitendrastomar5593	jitendrastomar5593@gmail.com	Disabled
<input type="checkbox"/> On-Premises Directory Syncronization	Sync_WIN-BD2LLEM86QH_4b47c1391118@anilsharma0101	Disabled
<input type="checkbox"/> Swi	swikruti.bose@gmail.com	Disabled
<input type="checkbox"/> user1	user1@anrh.co.in	Disabled
<input type="checkbox"/> user2	himanshuvashisht96@gmail.com	Disabled
<input type="checkbox"/> xyz	xyz@anilrhythmsharma.tk	Disabled

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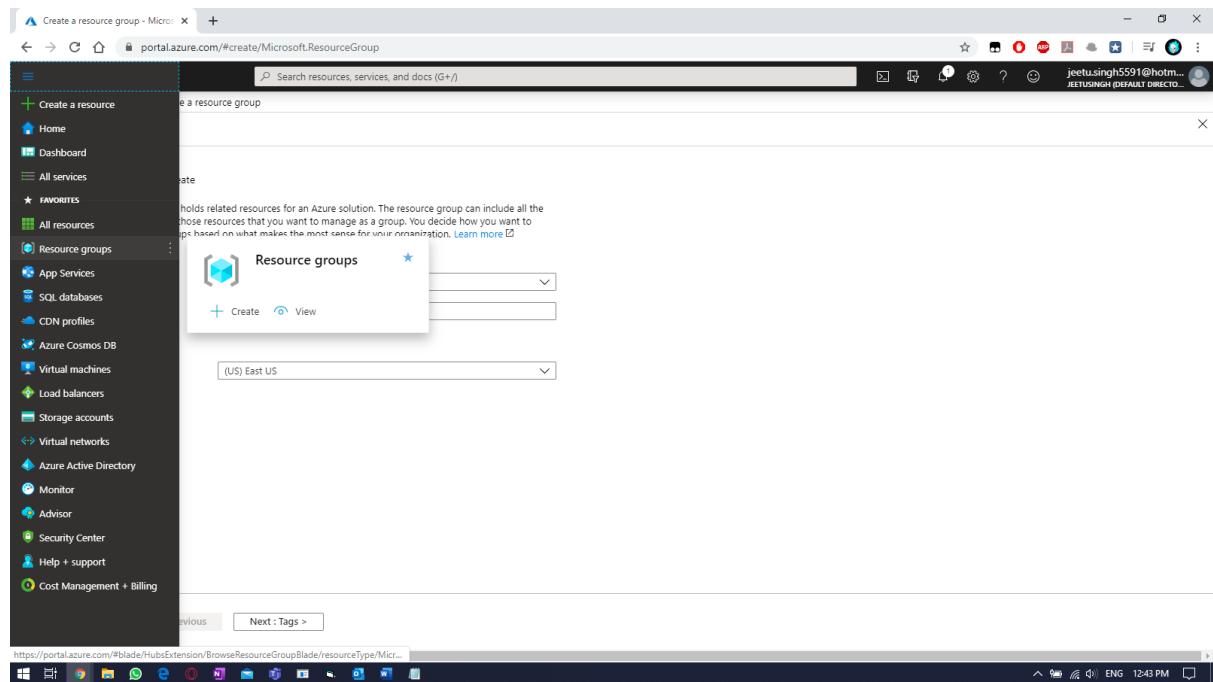
Practice Work No - 4:

Statement	Implementing and managing Azure networking.
Objective	The main objective of the task is to create and manage Azure network using Azure portal.
Outcomes	After executing this, one should be able to create and manage the azure virtual network (vnet).
Prerequisites	Working Azure account, Internet

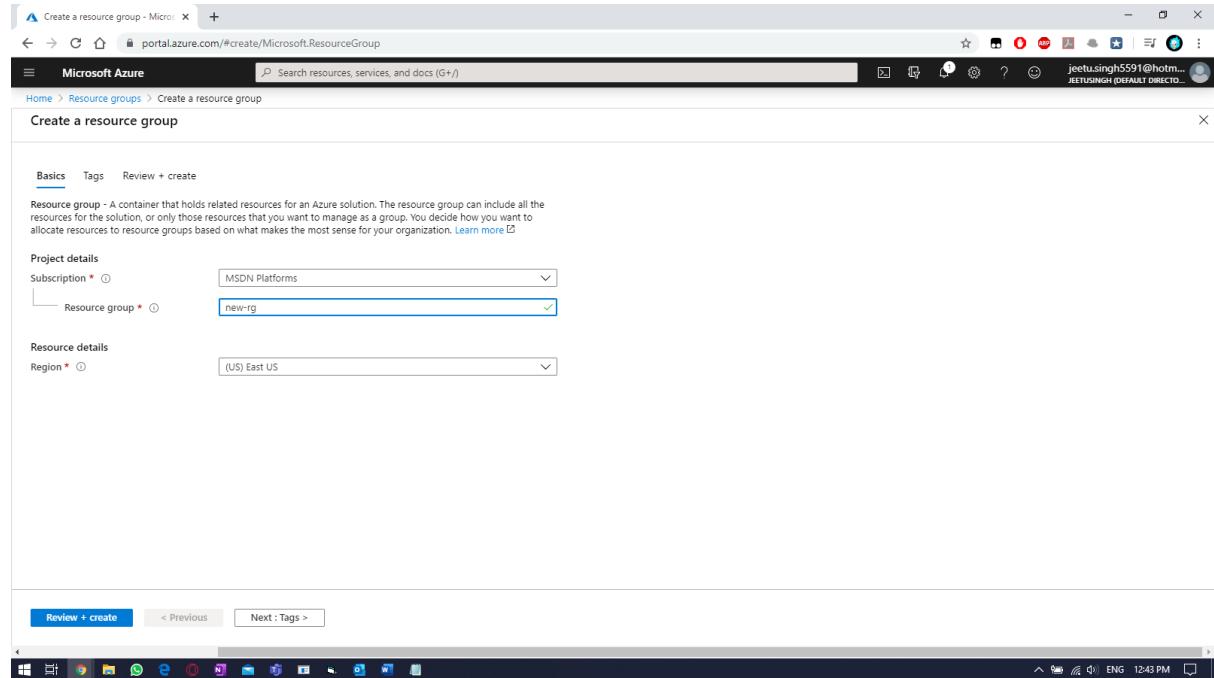
[Task]: Create a virtual network using IP address range as (172.16.0.0/16) and with 3 subnets.

Step1: Create a new resource group in any region of your choice.

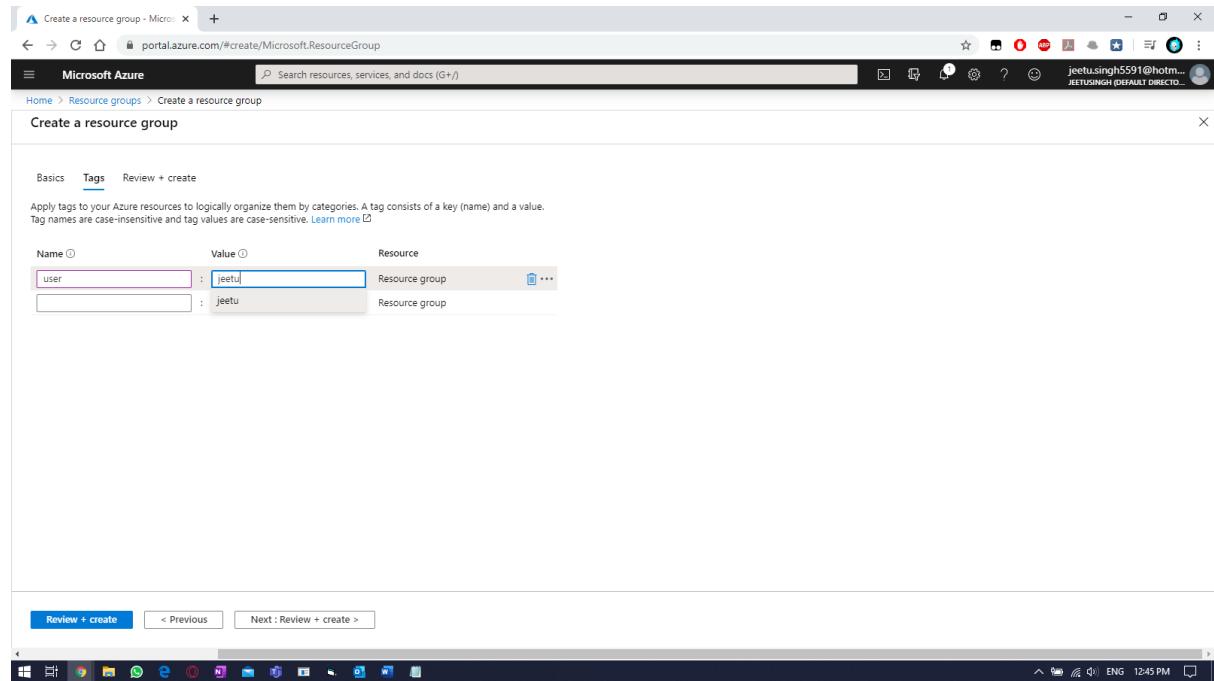
Select “Resource Group” on left hand side.



Click on Resource Group and fill the details like RG name & location.

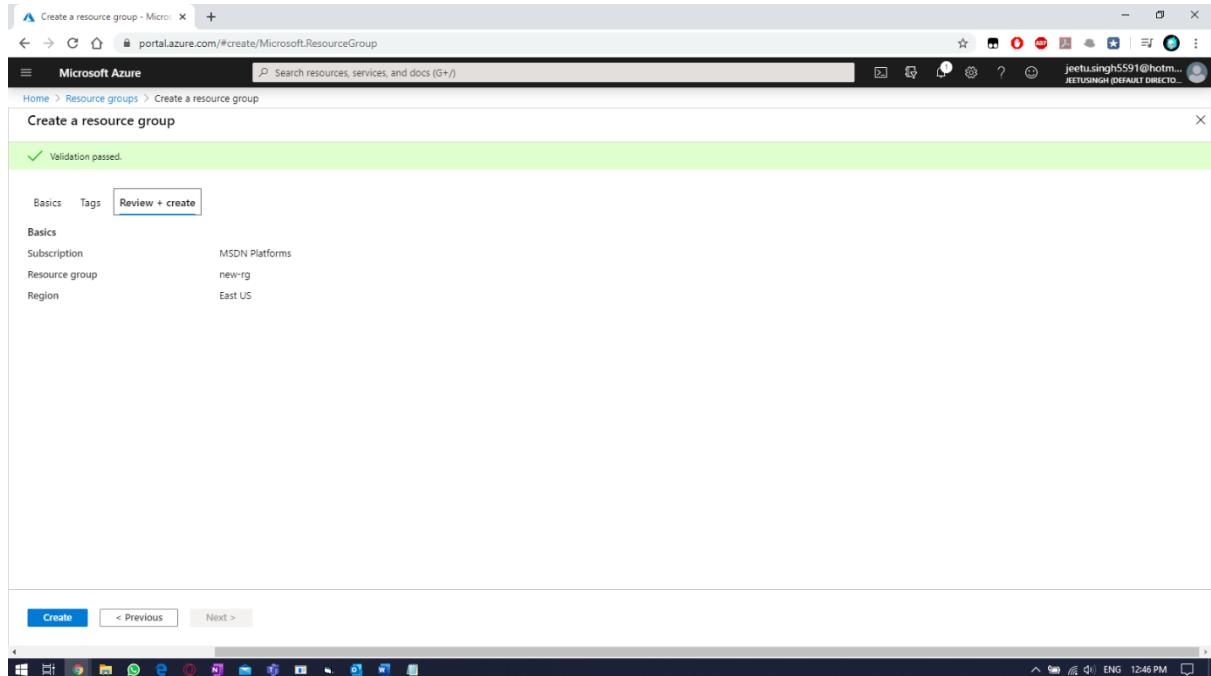


Then click on “TAGS” and fill the tags value (for billing)

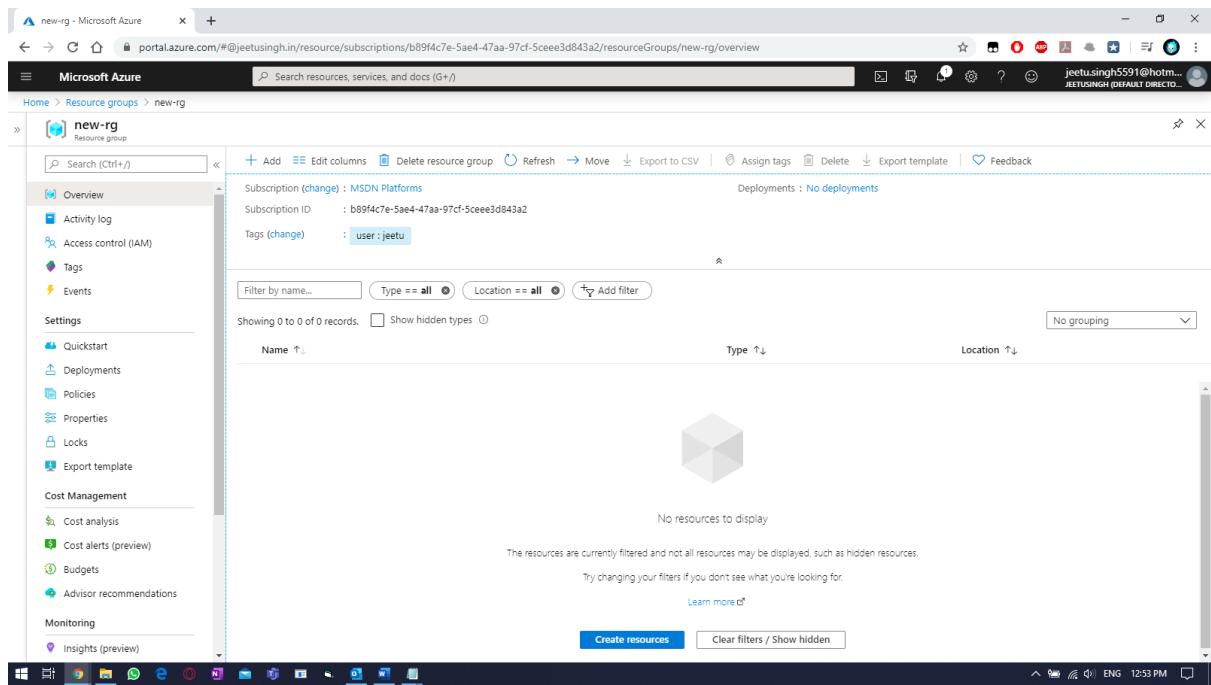


And click on “Next: Review + Create >”

Click on “Create” once validation is passed.



Verify.



Step2: Create a virtual network (vnet) in the above RG using same region/location as RG.

On left side, click on ellipses (3 small lines) & select virtual network.

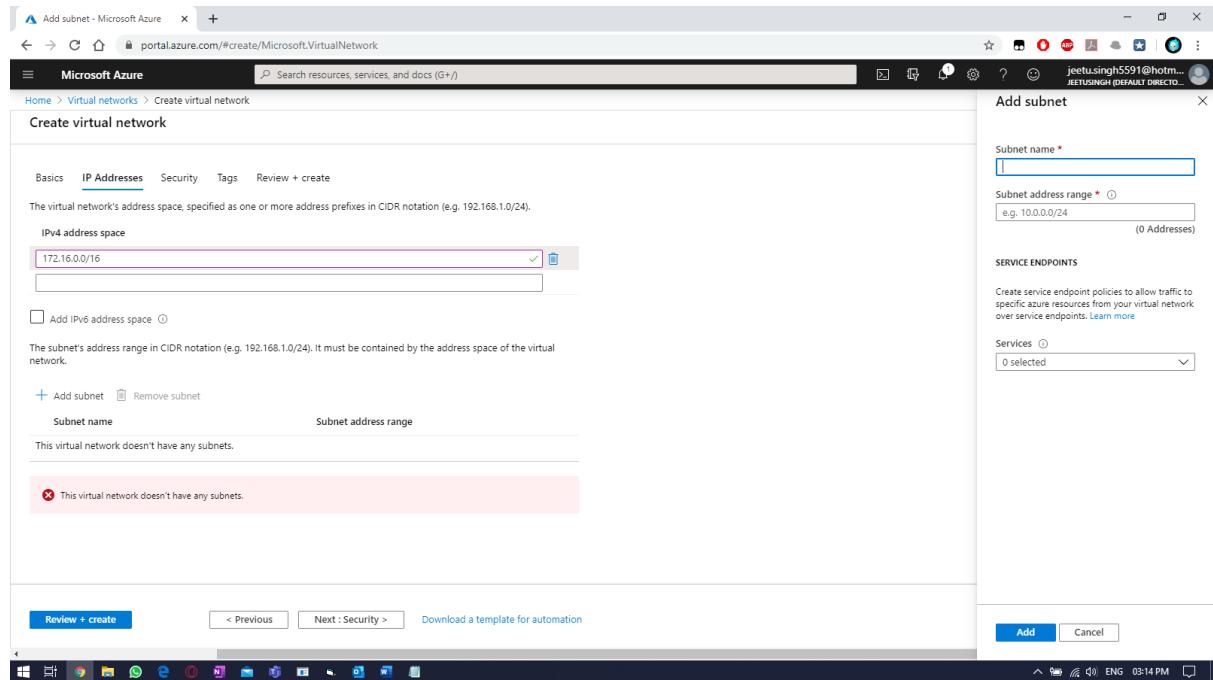
The screenshot shows the Microsoft Azure portal interface. On the left, there is a navigation sidebar with various service icons. The main area is titled 'Virtual networks' and contains a message: 'No resources to display'. There are buttons for 'Create resources' and 'Clear filters / Show hidden'.

To create a new vnet, click on “+ADD” or “Create Virtual Network” button. Fill the required details.

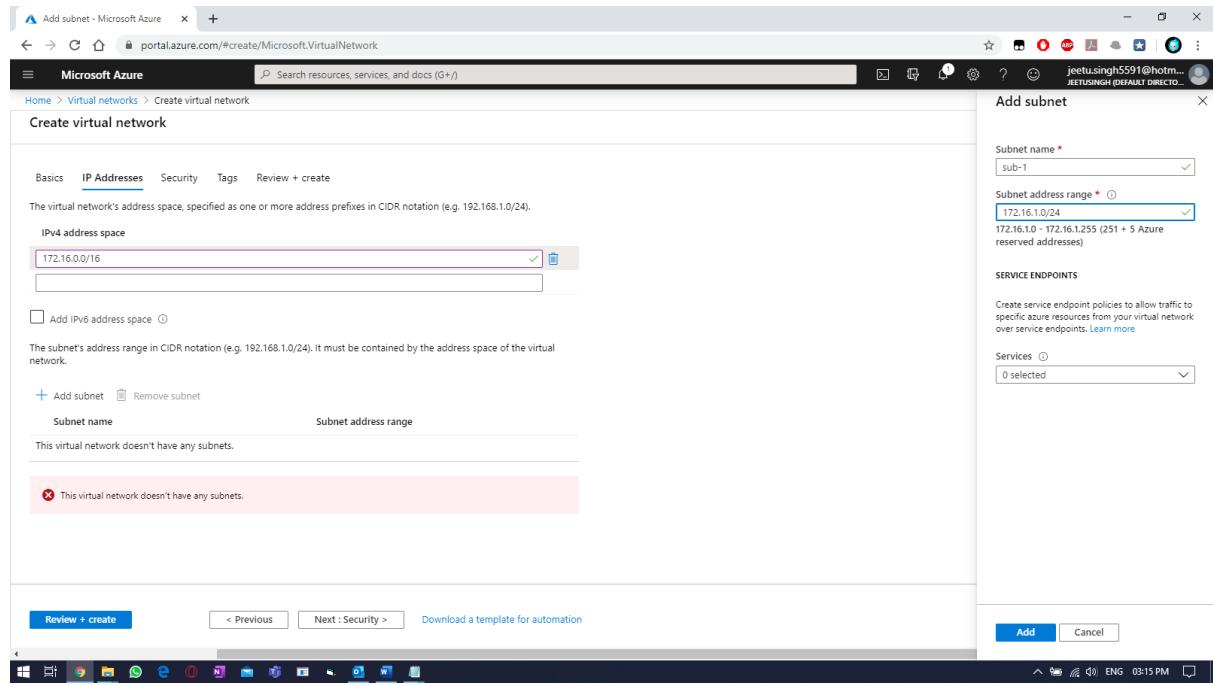
- Resource Group (RG) → new-rg
- Name → newrg-vnet
- Region → ‘East US’

And then click on “Next: IP Addresses >”

The screenshot shows the 'Create virtual network' wizard. The first step is 'Basics'. It has tabs for 'IP Addresses', 'Security', 'Tags', and 'Review + create'. Under 'Project details', 'Subscription' is set to 'MSDN Platforms' and 'Resource group' is set to 'new-rg'. In the 'Instance details' section, 'Name' is 'newrg-vnet' and 'Region' is '(US) East US'. At the bottom, there are buttons for 'Review + create', '< Previous' and 'Next : IP Addresses >', and 'Download a template for automation'.



Creating subnets:



Creating 2nd subnets.

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The current step is 'IP Addresses'. The IPv4 address space is set to 172.16.0.0/16. Two subnets are defined: 'sub-1' with the range 172.16.1.0/24 and 'sub-2' with the range 172.16.2.0/24. The 'Review + create' button is visible at the bottom.

Select defaults for “Security”

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The current step is 'Security'. Under 'DDoS protection', 'Basic' is selected. Under 'Firewall', 'Enabled' is selected. The 'Review + create' button is visible at the bottom.

Select the tags:

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The current step is 'Tags'. A single tag entry is visible: 'User' with the value 'jeetu'. Below the table, there are navigation buttons: 'Review + create' (highlighted in blue), '< Previous', 'Next : Review + create >', and 'Download a template for automation'.

Once validation passed, click on “create”.

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The current step is 'Review + create'. A green header bar indicates 'Validation passed'. The page displays the configuration details: Subscription (MSDN Platforms), Resource group (new-rg), Name (newrg-vnet), Region (East US), IP address space (172.16.0.0/16), Subnet (sub-1 (172.16.1.0/24), sub-2 (172.16.2.0/24)), Tags (User: jeetu), and Security (BastionHost: Disabled, DDoS protection plan: Basic, Firewall: Disabled). At the bottom, there are buttons for 'Create' (highlighted in blue), '< Previous', 'Next >', and 'Download a template for automation'.

Wait for the deployment to get finished.

The screenshot shows the Microsoft Azure portal interface. The main title bar says "Microsoft.VirtualNetwork-20200509125542 | Overview". On the left, there's a navigation menu with "Overview", "Inputs", "Outputs", and "Template". The main content area has a heading "Your deployment is underway". Below it, deployment details are listed: Deployment name: Microsoft.VirtualNetwork-20200509125542, Subscription: MSDN Platforms, Resource group: new-rg. To the right, a status message says "Deployment succeeded" with a green checkmark, followed by the text "Deployment 'Microsoft.VirtualNetwork-20200509125542' to resource group 'new-rg' was successful.". There are two buttons at the bottom right: "Go to resource" and "Pin to dashboard". A sidebar on the right provides links to "Security Center", "Free Microsoft tutorials", and "Work with an expert". The taskbar at the bottom shows various pinned icons.

Click on “Go to resource”

This screenshot is identical to the one above, but the deployment status has changed. The main content area now says "Your deployment is complete" with a green checkmark. The deployment details remain the same: Deployment name: Microsoft.VirtualNetwork-20200509125542, Subscription: MSDN Platforms, Resource group: new-rg. The status message on the right now says "Deployment 'Microsoft.VirtualNetwork-20200509125542' to resource group 'new-rg' was successful." The "Go to resource" button is highlighted with a blue border. The sidebar and taskbar are also present.

On left side, select Virtual network and select your vnet.

The screenshot shows the Microsoft Azure portal interface. The left sidebar has 'Virtual networks' selected under 'newrg-vnet'. The main content area is titled 'newrg-vnet' and shows the 'Overview' tab. Key details visible include:

- Resource group: new-rg
- Location: East US
- Subscription: MSDN Platforms
- Subscription ID: b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2
- Tags: User : jeetu
- Address space: 172.16.0.0/16
- DNS servers: Azure provided DNS service

The 'Connected devices' section indicates 'No results.'

Adding 3rd subnet and adding a DNS server.

Select “subnets” within the vnet you created earlier, select “+Subnet” to add another one.

The screenshot shows the 'Subnets' blade for 'newrg-vnet'. The left sidebar has 'Subnets' selected under 'newrg-vnet'. The main content area shows a table of existing subnets:

Name	Address range	IPv4 available addresses	Delegated to	Security group	Actions
sub-1	172.16.1.0/24	251	-	-	...
sub-2	172.16.2.0/24	251	-	-	...

A '+ Subnet' button is visible at the top left of the table area.

Fill required details. Then select “OK”

Add subnet

Name

Address range (CIDR block) 172.16.3.0 - 172.16.3.255 (251 + 5 Azure reserved addresses)

NAT gateway

Network security group

Route table

Service endpoints

Delegate subnet to a service

OK

& verify.

Successfully added subnet
Successfully added subnet 'sub-3' to virtual network 'newrg-vnet'.

Name	Address range	IPv4 available addresses	Delegated to	Security group
sub-1	172.16.1.0/24	251	-	---
sub-2	172.16.2.0/24	251	-	---
sub-3	172.16.3.0/24	251	-	---

Adding DNS for the VNET.

Select “DNS servers” within your vnet & select “custom”, then fill your required valid DNS servers.

The screenshot shows the Microsoft Azure portal interface. The left sidebar navigation bar is visible, with 'newrg-vnet | DNS servers' selected under the 'Virtual network' category. The main content area displays the 'DNS servers' settings for the 'newrg-vnet'. A warning message at the top states: 'Virtual machines within this virtual network must be restarted to utilize the updated DNS server settings.' Below this, there is a section titled 'DNS servers' with a radio button for 'Default (Azure-provided)' and another for 'Custom'. The 'Custom' option is selected. A list of DNS servers is shown, with '2.2.2.2' highlighted in a blue selection box. Other entries in the list include '172.16.1.4', '8.8.8.8', '4.4.4.4', and 'Add DNS server'. The bottom right corner of the screen shows the Windows taskbar with various icons and system status information.

Practice Work No – 5 & 6:

Statement	Implementing virtual machines.
Objective	The main objective of the task is to create and manage Azure virtual machine (VM) using Azure portal.
Outcomes	After executing this, one should be able to create and manage the azure virtual machine (VM). Access virtual machine using RDP and Putty.
Prerequisites	Working Azure account, Internet

[Task]: Create a new VM using the vnet you created earlier (newrg-vnet) and use first subnet (sub-1) for the VM. Also use the storage created earlier. Connect to the VM using credentials provided earlier at the time of VM creation. And perform backup of the current VM.

Select the virtual machine (VM) tab from left side.

Azure portal screenshot showing the Virtual machines blade. The sidebar on the left lists various services like Home, Dashboard, All services, Resource groups, App Services, SQL databases, etc. The main area shows a table for Virtual machines with one entry: 'Virtual machines' (Status:待机). Below it is a section titled 'Free training from Microsoft' with links to 'Introduction to Azure virtual machines', 'Create a Windows virtual machine in Azure', 'Create a Linux virtual machine in Azure', and 'Useful links'. A large blue button at the bottom right says 'Create virtual machine'.

Click on “add” & fill the required details to create the VM.

Microsoft Azure - Create a virtual machine

Project details

Subscription: MSDN Platforms
Resource group: new-rg

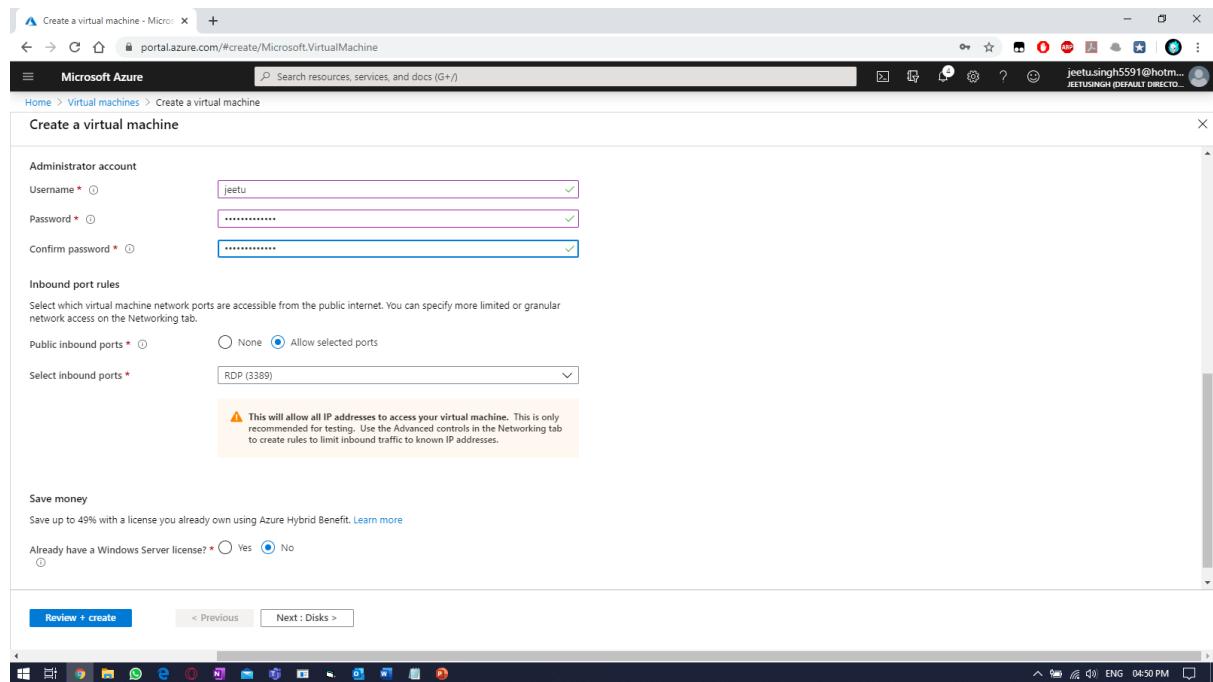
Instance details

Virtual machine name: win2016
Region: (US) East US
Availability options: No infrastructure redundancy required
Image: Windows Server 2016 Datacenter
Azure Spot instance: No

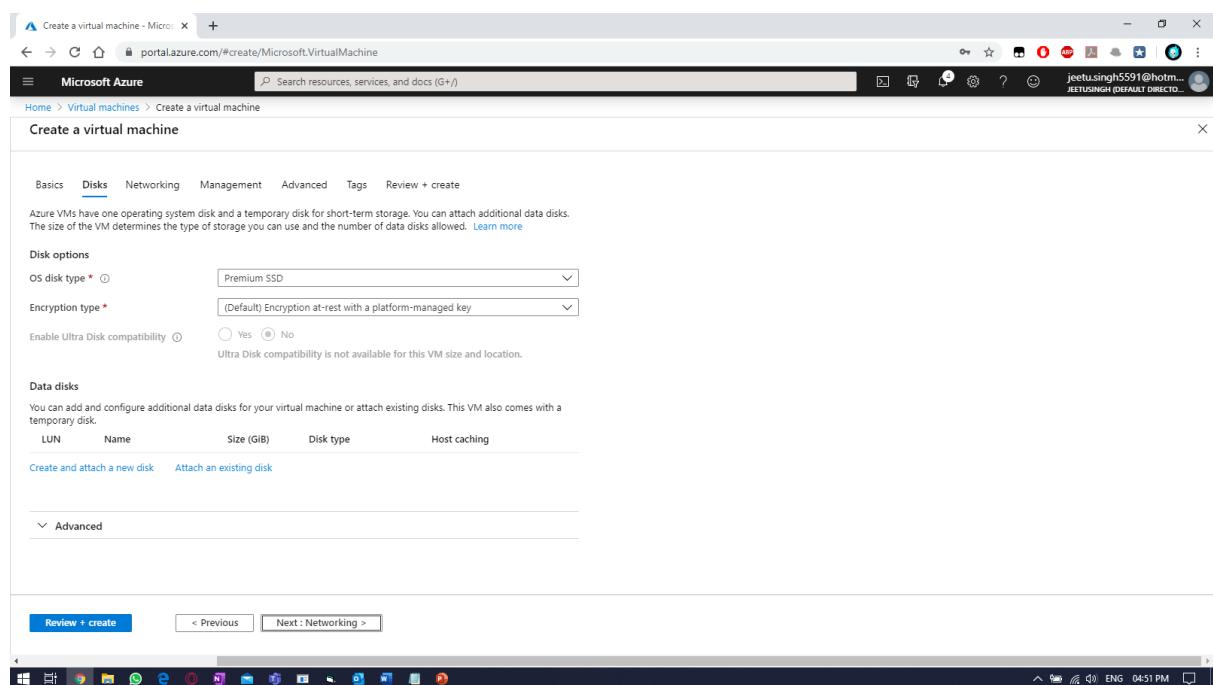
Administrator account

Review + create < Previous Next: Disks >

Provide username & password for the VM:



Click “Next: Disk >”



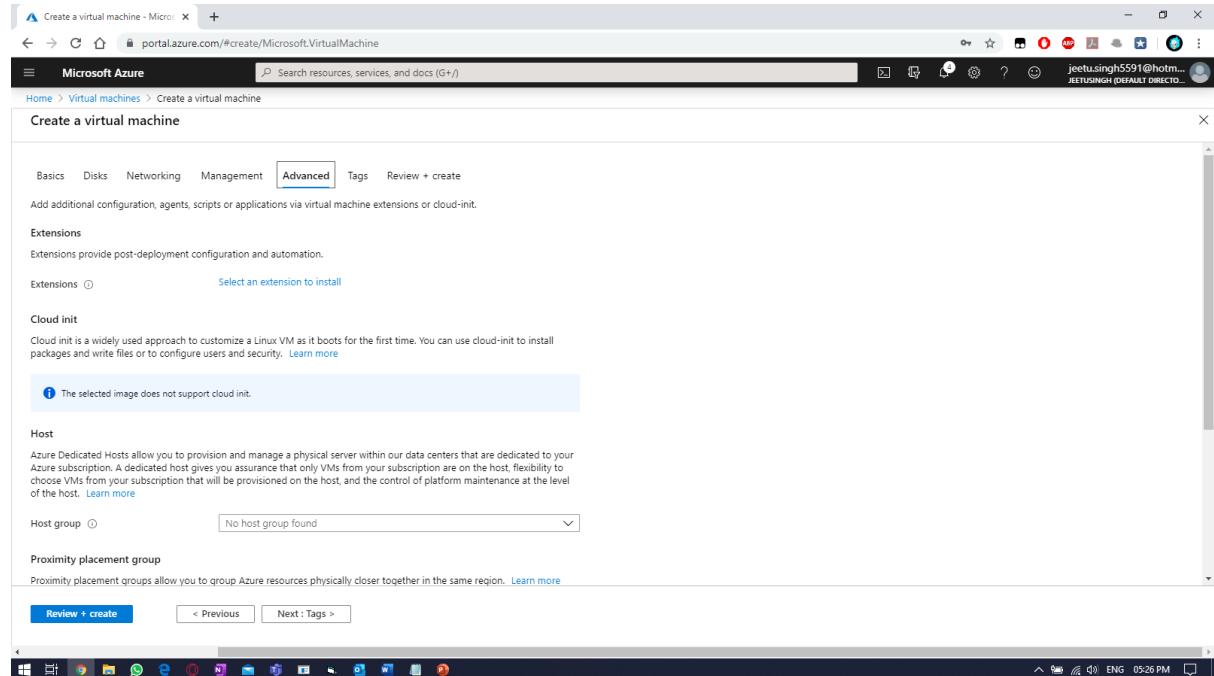
No changes required. Click “Next: Networking >” & select the virtual network created earlier and enable RDP port.

The screenshot shows the 'Create a virtual machine' wizard on the 'Networking' tab. The 'Virtual network' dropdown is set to 'newrg-vnet' with 'Create new' as an option. The 'Subnet' dropdown is set to 'sub-1 (172.16.1.0/24)' with 'Manage subnet configuration' available. The 'Public IP' dropdown is set to '(new) win2016-ip' with 'Create new' available. Under 'NIC network security group', 'Basic' is selected. Under 'Public inbound ports', 'Allow selected ports' is selected, and 'RDP (3389)' is chosen from the dropdown. A warning message states: '⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.' Navigation buttons at the bottom include 'Review + create', '< Previous', and 'Next : Management >'.

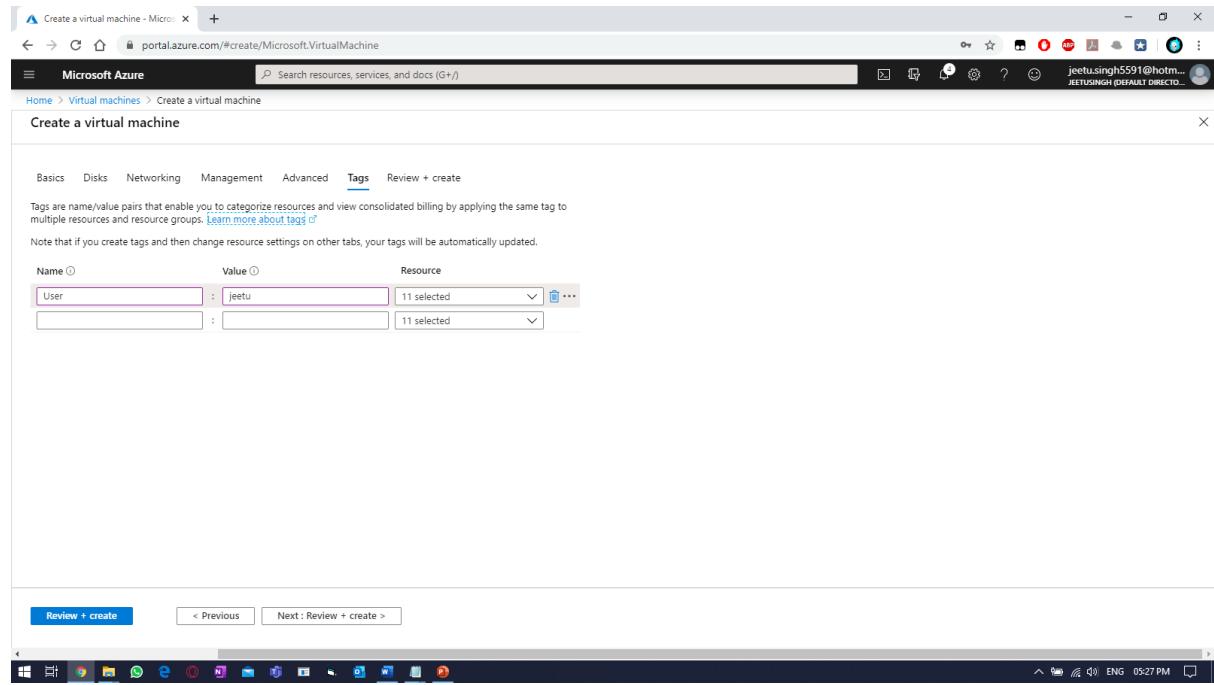
Select the storage account you created earlier and click “Next: Advanced >”

The screenshot shows the 'Create a virtual machine' wizard on the 'Management' tab. The 'Diagnostics storage account' dropdown is set to 'newrgst0' with 'Create new' available. Under 'Monitoring', 'Boot diagnostics' is set to 'On' and 'OS guest diagnostics' is set to 'On'. Under 'Identity', 'System assigned managed identity' is set to 'Off'. Under 'Auto-shutdown', 'Enable auto-shutdown' is set to 'On'. Navigation buttons at the bottom include 'Review + create', '< Previous', and 'Next : Advanced >'.

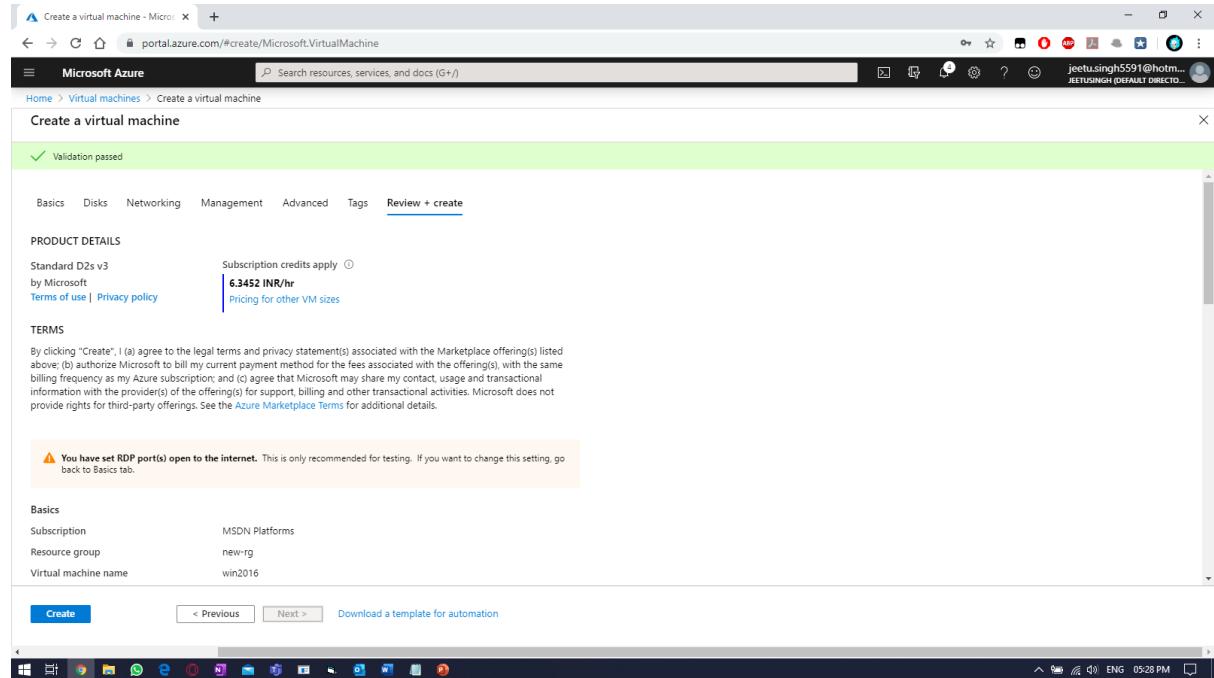
Nothing to change to in advanced, as no extension are to be installed.



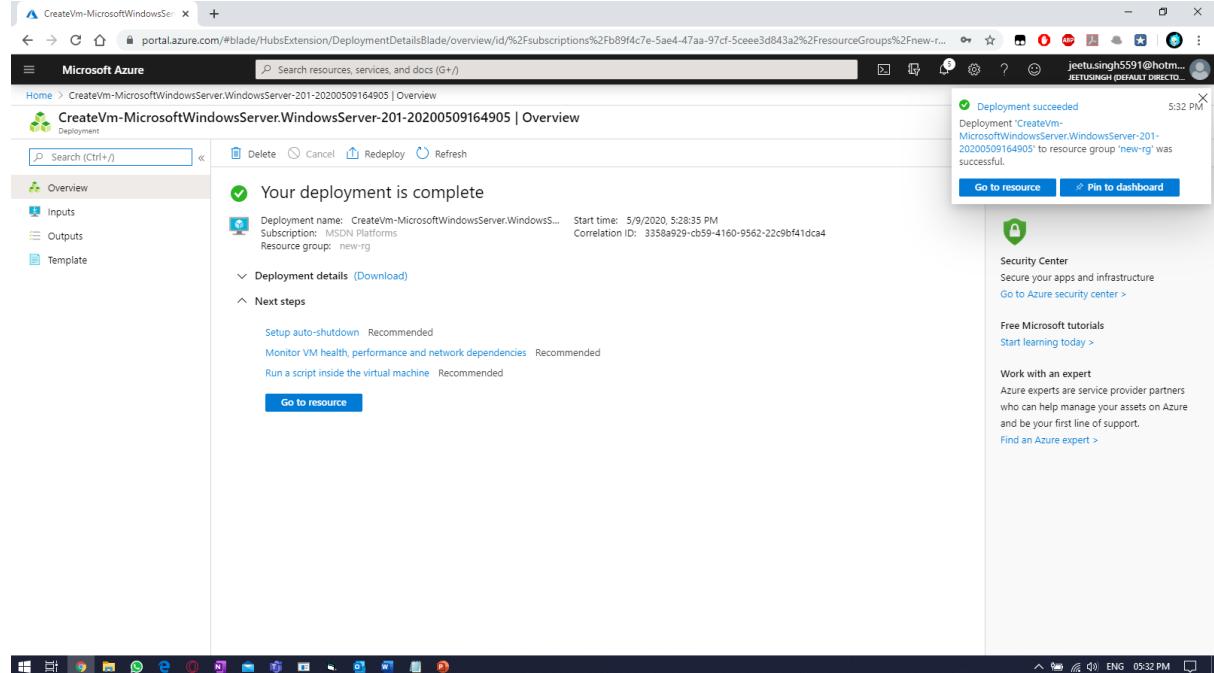
Attach the tags and create “Next: Review + Create”



If validation is passed, then click “Create”.



Click to “Go to resource”, once finished.



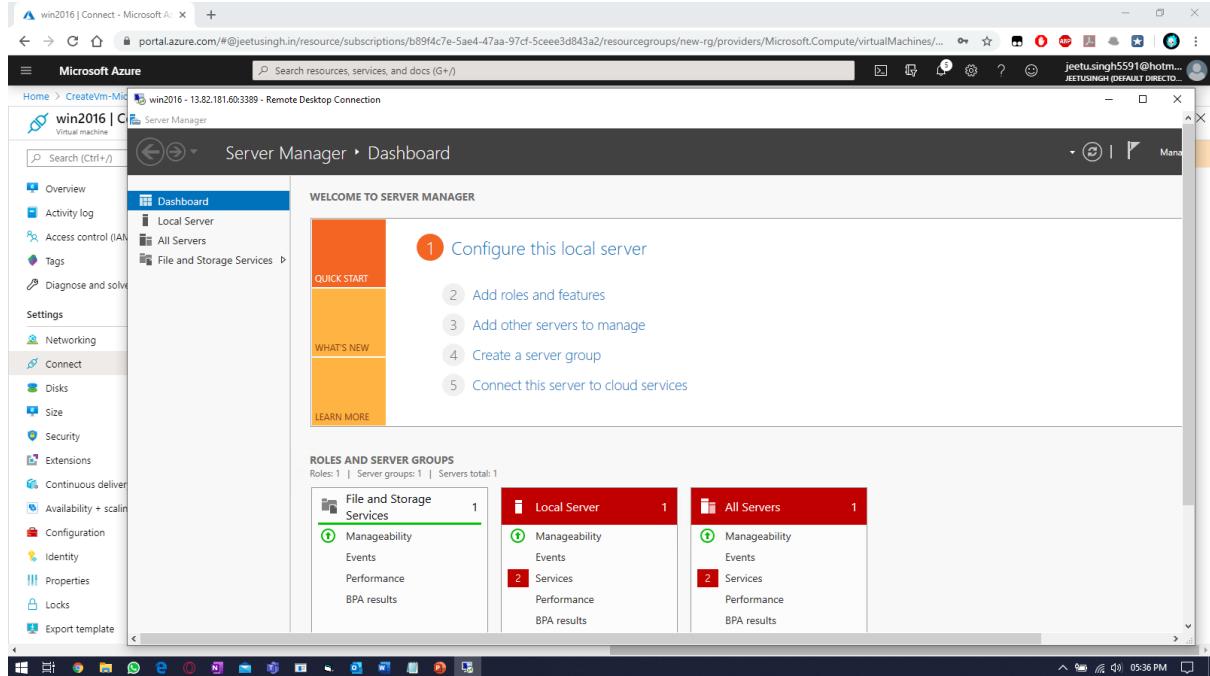
To connect to the VM, click on “CONNECT” and select RDP.

The screenshot shows the Microsoft Azure portal interface for a virtual machine named 'win2016'. The main pane displays the VM's configuration, including its IP address (13.82.181.60), operating system (Windows Server 2016 Datacenter), and storage details. On the left, a navigation menu lists various settings like Overview, Activity log, and Connect. The 'Connect' option is selected, and the sub-menu shows three options: RDP, SSH, and Bastion. The RDP option is currently active. Below the configuration, there are three performance charts: CPU (average), Network (total), and Disk bytes (total), each showing usage over the last hour. At the bottom, a Windows taskbar is visible with icons for Start, File Explorer, Task View, and other applications.

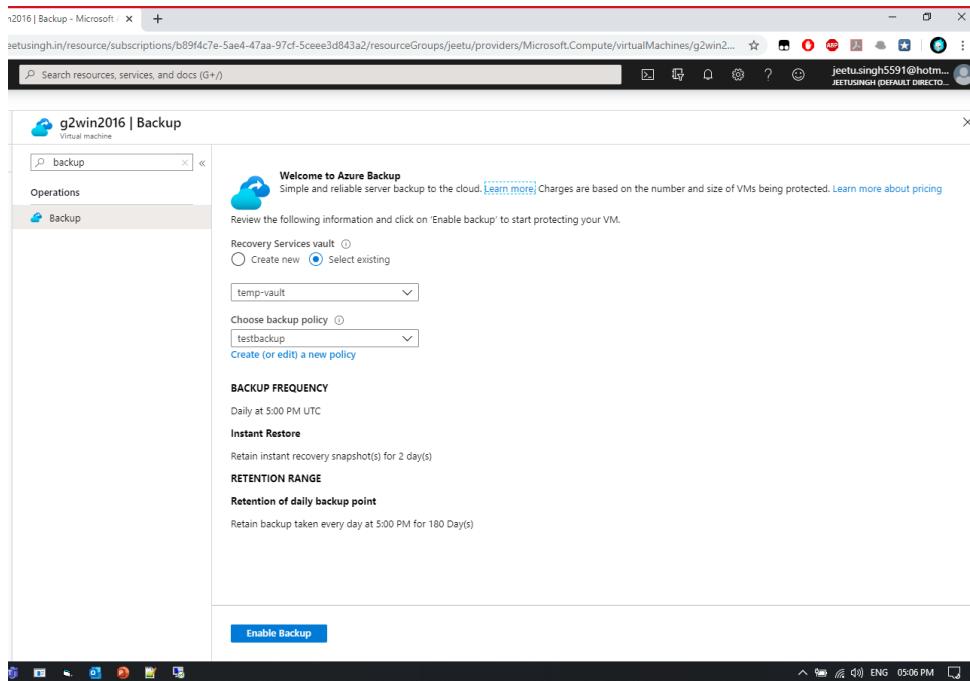
Download RDP & provide username & password.

This screenshot shows the 'Connect with RDP' dialog box within the Microsoft Azure portal. It asks for the IP address (13.82.181.60) and port number (3389). A 'Windows Security' dialog box is overlaid, prompting for 'jeetu' and a password. The 'Remember me' checkbox is unchecked. At the bottom of the dialog are 'OK' and 'Cancel' buttons. The background shows the same Azure VM overview page as the previous screenshot.

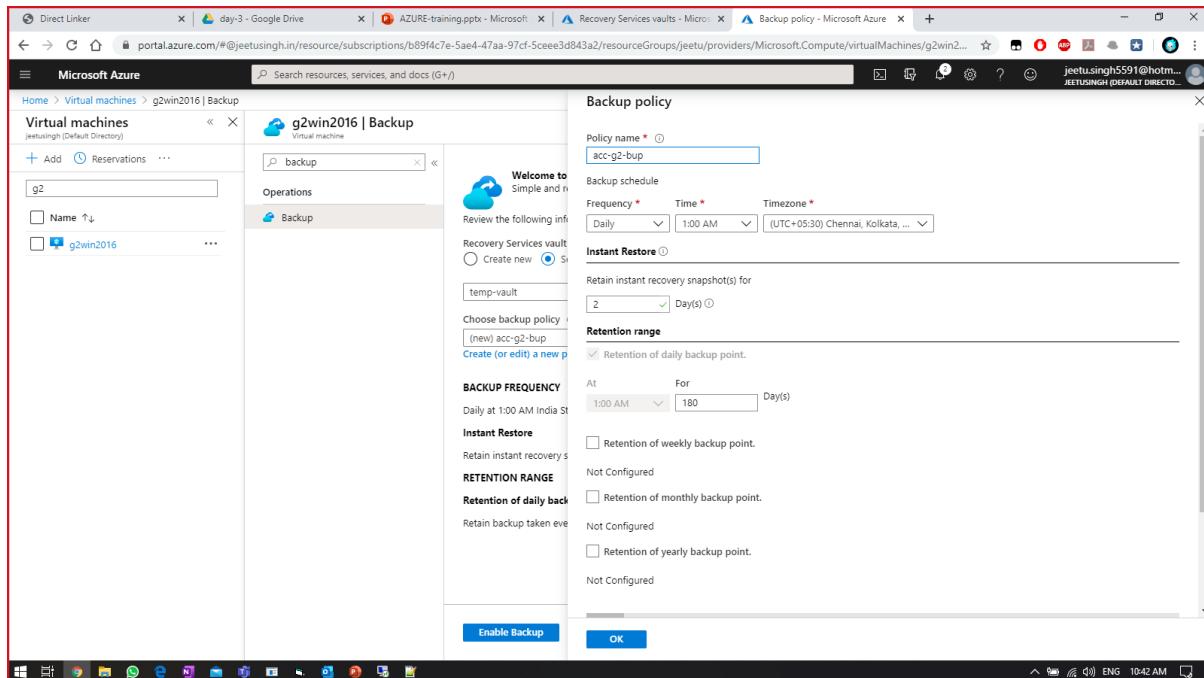
Verify:



Perform the backup for any windows VM. Select a VM & search for "backup" blade.



Enable backup & create backup policy.

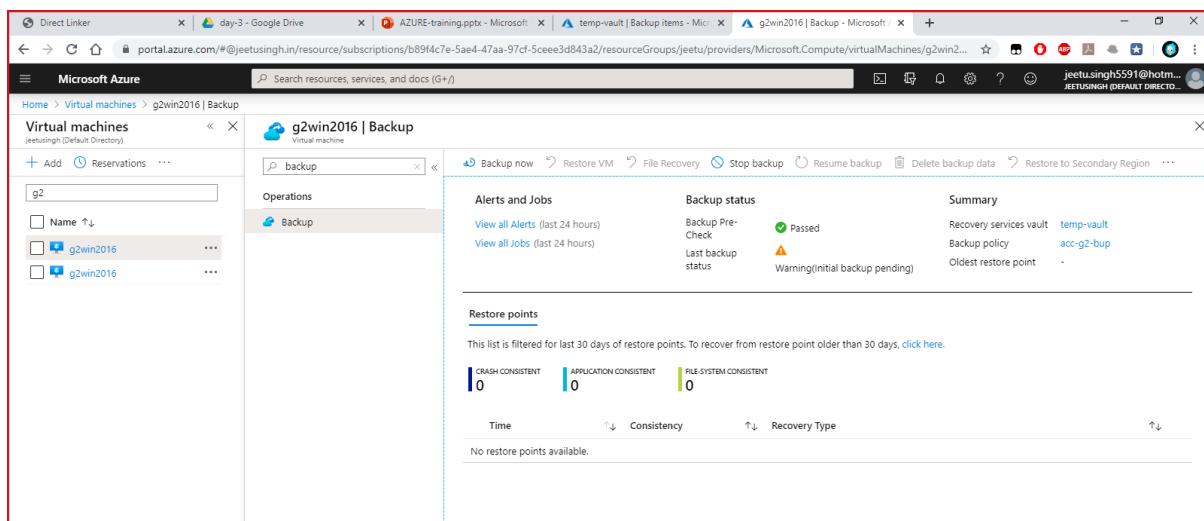


The screenshot shows the Azure portal interface for managing backups of a virtual machine. On the left, a sidebar lists 'Virtual machines' with one item named 'g2'. The main panel is titled 'g2win2016 | Backup' and displays the 'Backup policy' configuration. Key settings include:

- Policy name:** acc-g2-bup
- Frequency:** Daily
- Time:** 1:00 AM
- Timezone:** (UTC+05:30) Chennai, Kolkata, ...
- Instant Restore:** Retain instant recovery snapshot(s) for 2 Day(s)
- Retention range:** Retention of daily backup point. At 1:00 AM For 180 Day(s)
- RETENTION RANGE:** Options for weekly, monthly, yearly, and yearly backup points are listed under 'Not Configured'.

At the bottom, there are 'Enable Backup' and 'OK' buttons.

Once backup is ready,



The screenshot shows the Azure portal interface for managing backups of a virtual machine. The main panel is titled 'g2win2016 | Backup' and displays the following information:

- Alerts and Jobs:** Links to 'View all Alerts' and 'View all Jobs' from the last 24 hours.
- Backup status:** Shows a green checkmark for 'Passed' and a warning for 'Initial backup pending'.
- Summary:** Lists the 'Backup services vault' as 'temp-vault' and the 'Backup policy' as 'acc-g2-bup'.
- Restore points:** States that no restore points are available.

Select backup now,

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2/resourceGroups/shilky-RG/providers/Microsoft.RecoveryServices/vaults/temp-vault/providers/Microsoft.Backup/backupItems/g2win2016>. The page title is "Backup Items (Azure Virtual Machine) > g2win2016". The main content area displays the "Backup status" section, which includes "Backup Pre-Check: Passed" and "Last backup status: Warning (initial backup pending)". Below this is a "Restore points" section with tabs for "CRASH CONSISTENT", "APPLICATION CONSISTENT", and "FILE-SYSTEM CONSISTENT", all showing 0 restore points available. A "Time" column header is present, followed by "Consistency" and "Recovery Type" headers.

Select the backup time and click OK

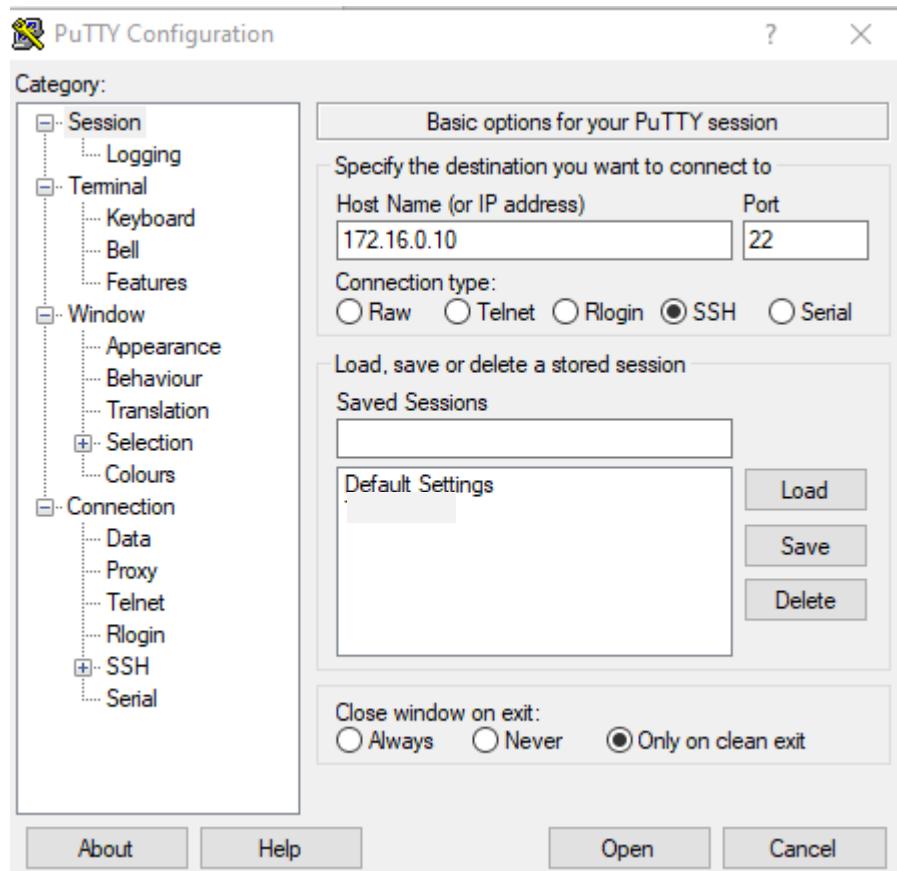
The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2/resourceGroups/shilky-RG/providers/Microsoft.RecoveryServices/vaults/temp-vault/providers/Microsoft.Backup/backupItems/g2win2016/BackupNow>. The page title is "Backup Now > g2win2016". The main content area shows a "Retain Backup Till" input field set to "05/28/2020".

Something like this will be visible.

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2/resourceGroups/shilky-RG/providers/Microsoft.RecoveryServices/vaults/temp-vault>. The page title is "temp-vault - Microsoft Azure". The main content area shows the "temp-vault" Recovery Services vault selected. It displays various metrics and status indicators, including "Backup Pre-Check Status (Azure VMs)" (0 Critical, 0 Warning), "Backup Jobs" (1 In progress, 0 Failed), and "Backup Storage" (Cloud - LRS: 0 B, Cloud - GRS: 0 B). The left sidebar shows a list of other vaults: "temp-vault" (selected), "temp-vault" (jeetusingh (Default Directory)), and "vault520".

Connecting a linux machine using putty:

- Run putty on your system and enter the connection details of the linux machine as displayed in the example below and click open

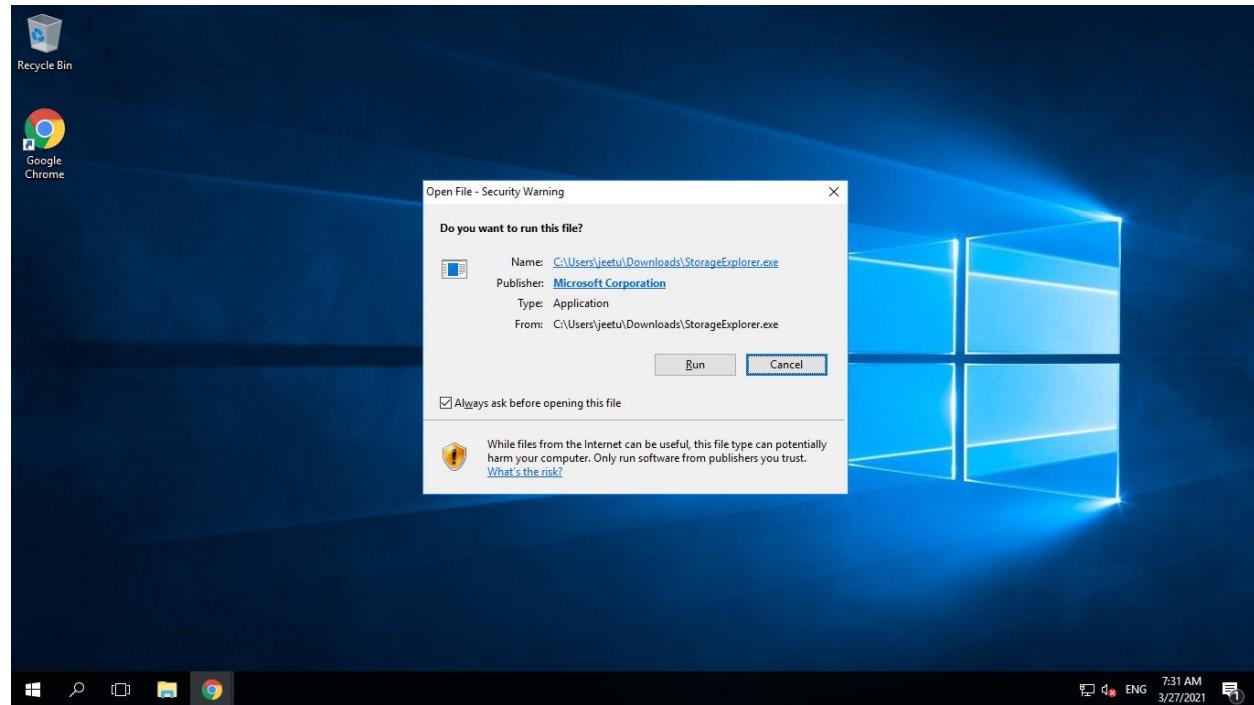


Lab 7: - Install Azure storage explorer & use it to connect & manage Azure storage accounts.

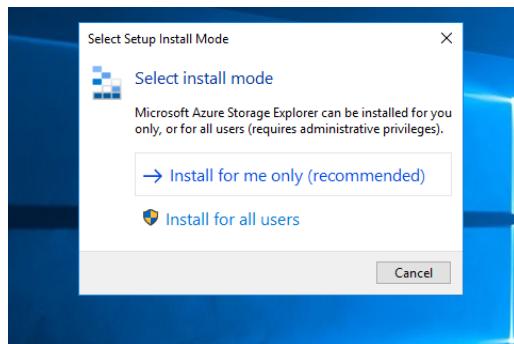
To download Azure storage explorer, browse to <https://azure.microsoft.com/en-us/features/storage-explorer/> & select the required operating system & then click on “Download”.

The screenshot shows the Microsoft Azure website with the URL <https://azure.microsoft.com/en-us/features/storage-explorer/>. The page title is "Azure Storage Explorer". Below the title, it says "Free tool to easily manage your Azure cloud storage resources anywhere, from Windows, macOS, or Linux". A dropdown menu for "Operating system" is open, showing "Windows" selected. A blue "Download now" button is visible. The bottom navigation bar includes links for "Product overview", "Features", "Security", "Getting started", and "Documentation". On the right side, there's a "Chat with Sales" button and a timestamp "7:30 AM 3/27/2021".

After download is done, click on the “Azure explorer.exe” file to install it.



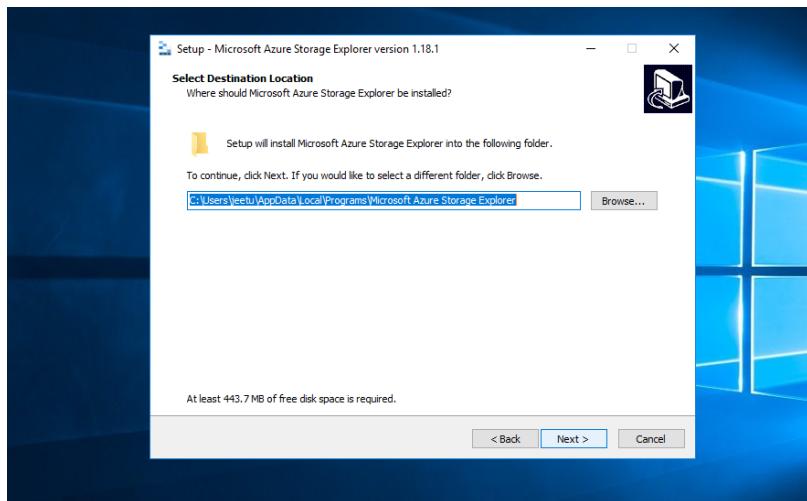
Select “Install for me only”.



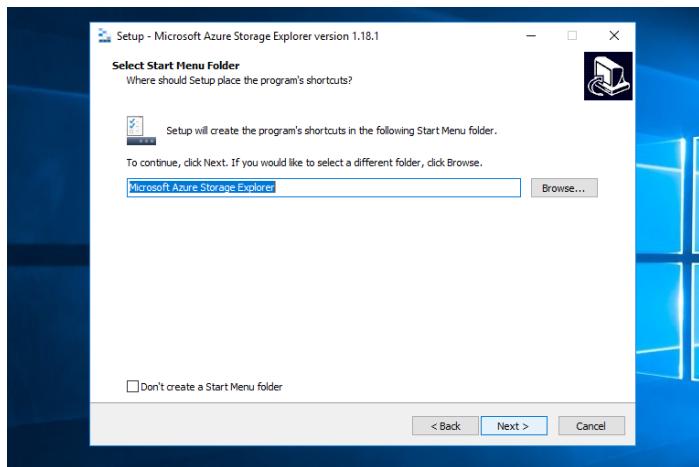
Select the “I accept the agreement” option to install it.



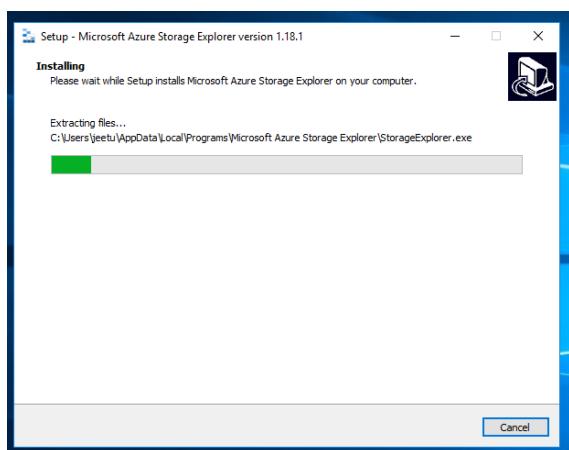
Select the default location:-

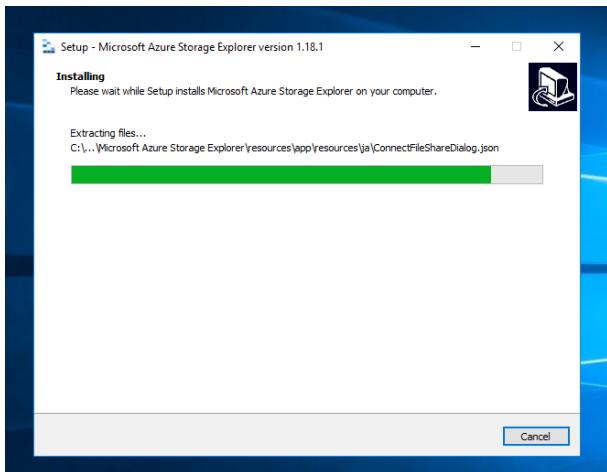


Click "Next" with default options: -

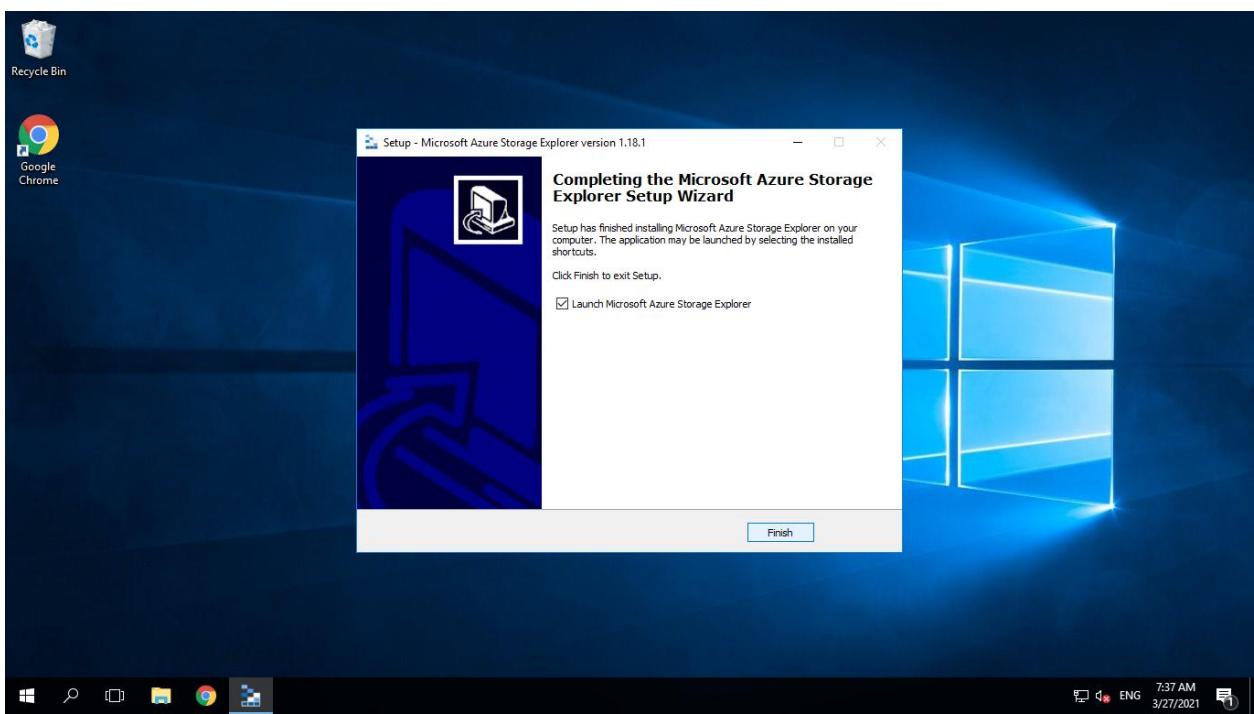


Let it get installed.

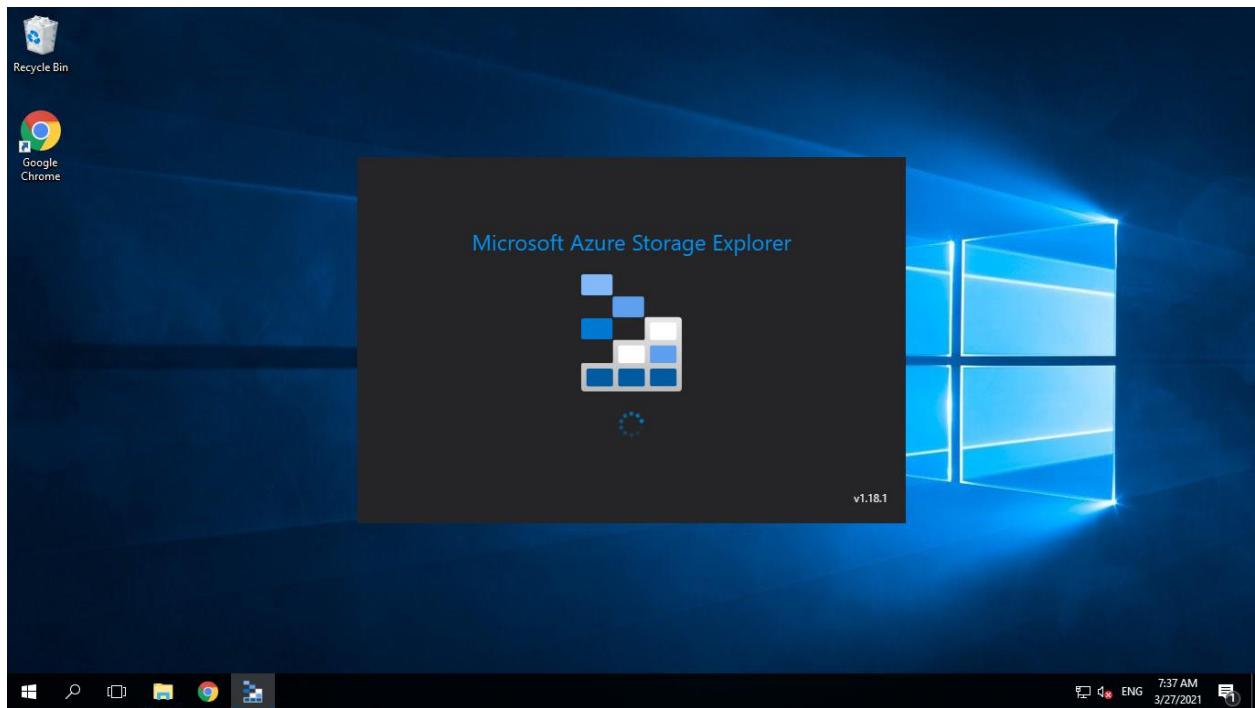




After installation is successfully done, click on “Finish”



Wait some time to get it loaded:



After it is loaded, you can check the version (it may differ for you)

Microsoft Azure Storage Explorer

File Edit View Help

EXPLORER

Release Notes: 1.18.1

March 2021 (Version 1.18.1)

Welcome to Storage Explorer version 1.18.1. Notable changes in this release compared to 1.17.0 include a refreshed connect experience, enhanced SAS support for ADLS Gen2, and improvements to startup performance. This version also hotfixes several issues introduced in 1.18.0. For more details on all of these changes and more, continue reading below.

Hotfixes

- In 1.18.0, if you did not have access to the keys for your Storage account, you would be unable to browse data plane resources. This issue has been fixed. [#4151](#)
- In 1.18.0, the new Connect dialog did not include the ability to attach a Storage account via a SAS URL. This functionality has been restored. [#4149](#)
- When generating shared access signatures, % characters are now properly being encoded. [#4141](#)

New

General

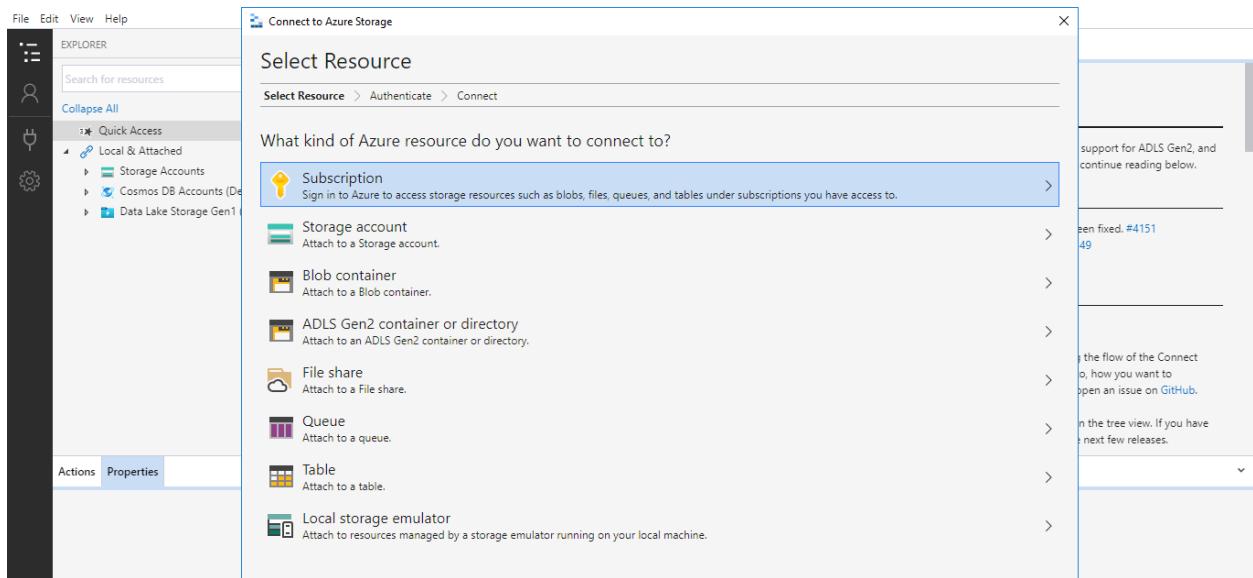
- The Connect dialog has been overhauled and refreshed in order to reduce complexity and confusion. This has been accomplished by optimizing the flow of the Connect dialog towards more clearly guiding you through the connect experience. The dialog now asks you what type of resource you want to connect to, how you want to authenticate the connection, and finally the specific details for that connection. If you have any feedback regarding the new experience, please open an issue on [GitHub](#). [#2965](#)
- Several optimizations have been completed to decrease the startup time of Storage Explorer and the time it takes to load actionable resources in the tree view. If you have any feedback regarding startup performance please open an issue on [GitHub](#). We will continue addressing startup related performance over the next few releases.

Actions Properties Activities

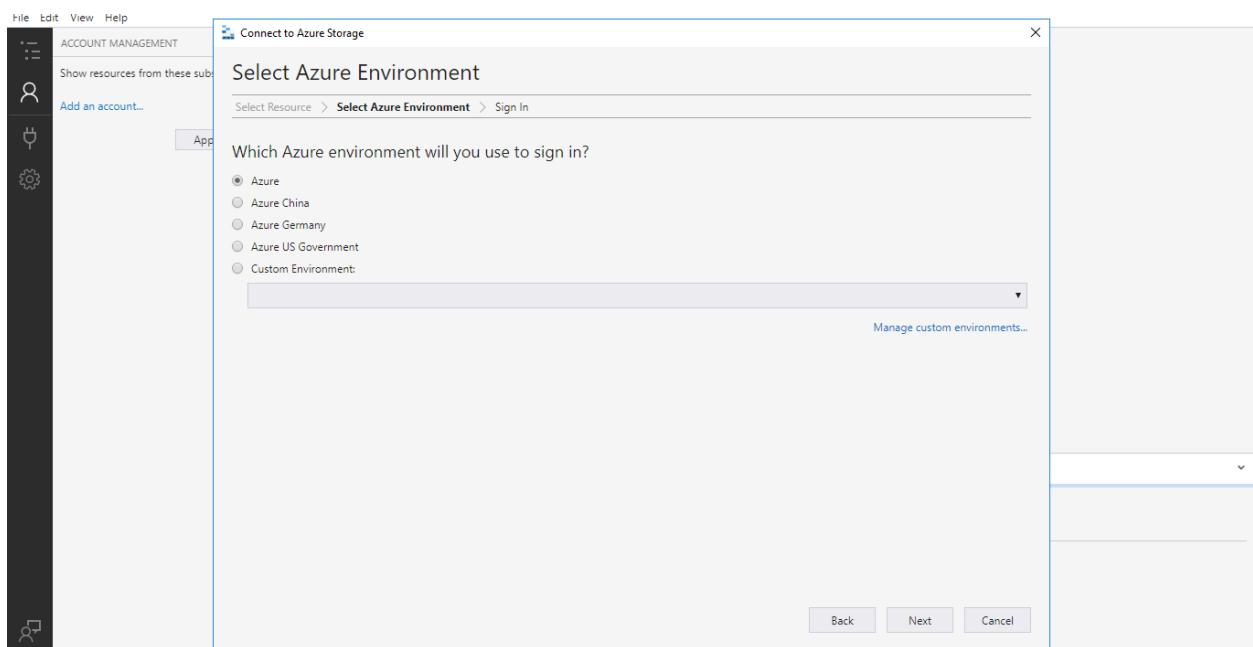
Clear completed Clear successful

7:37 AM 3/27/2021

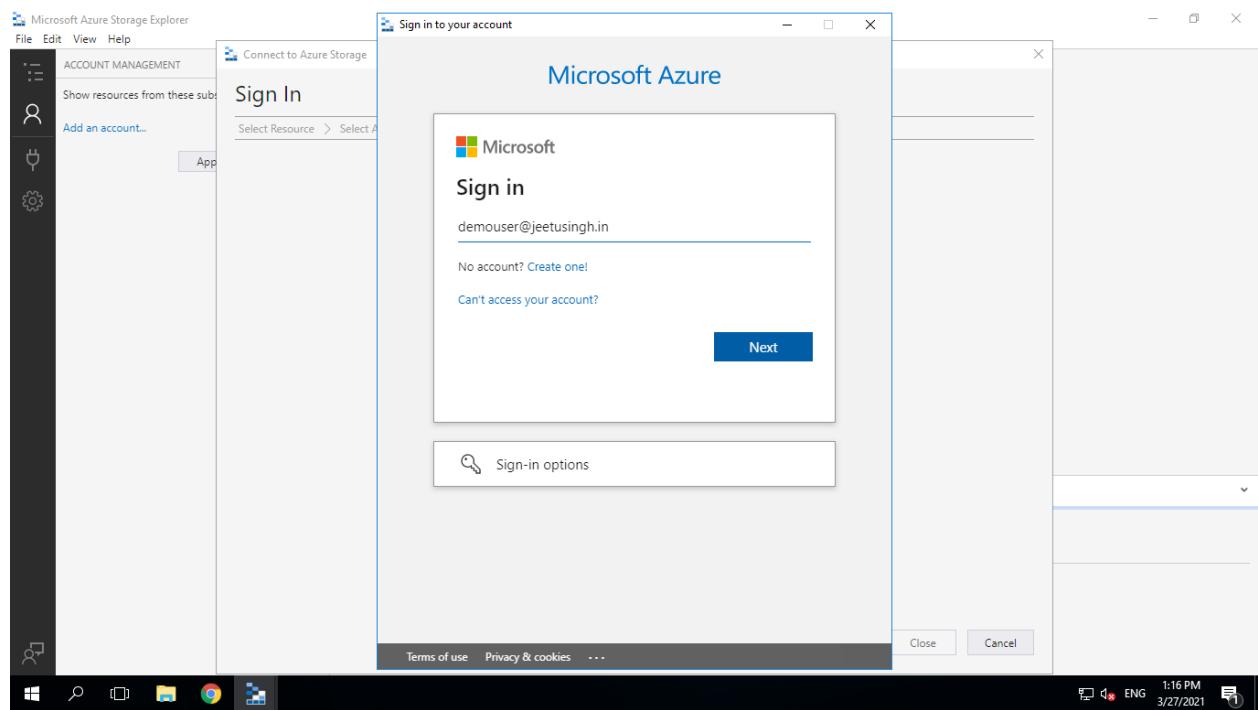
Select the “Subscription” option from the following:



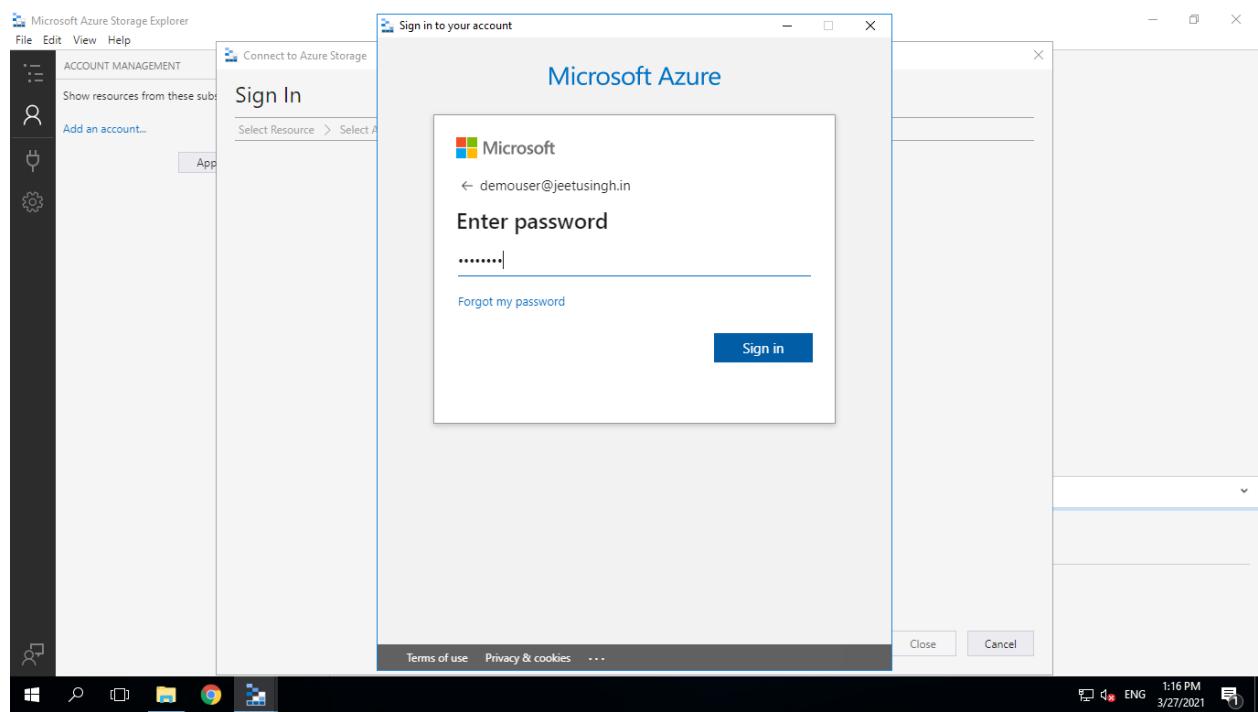
Select “Azure” radio-button to login to Azure account:



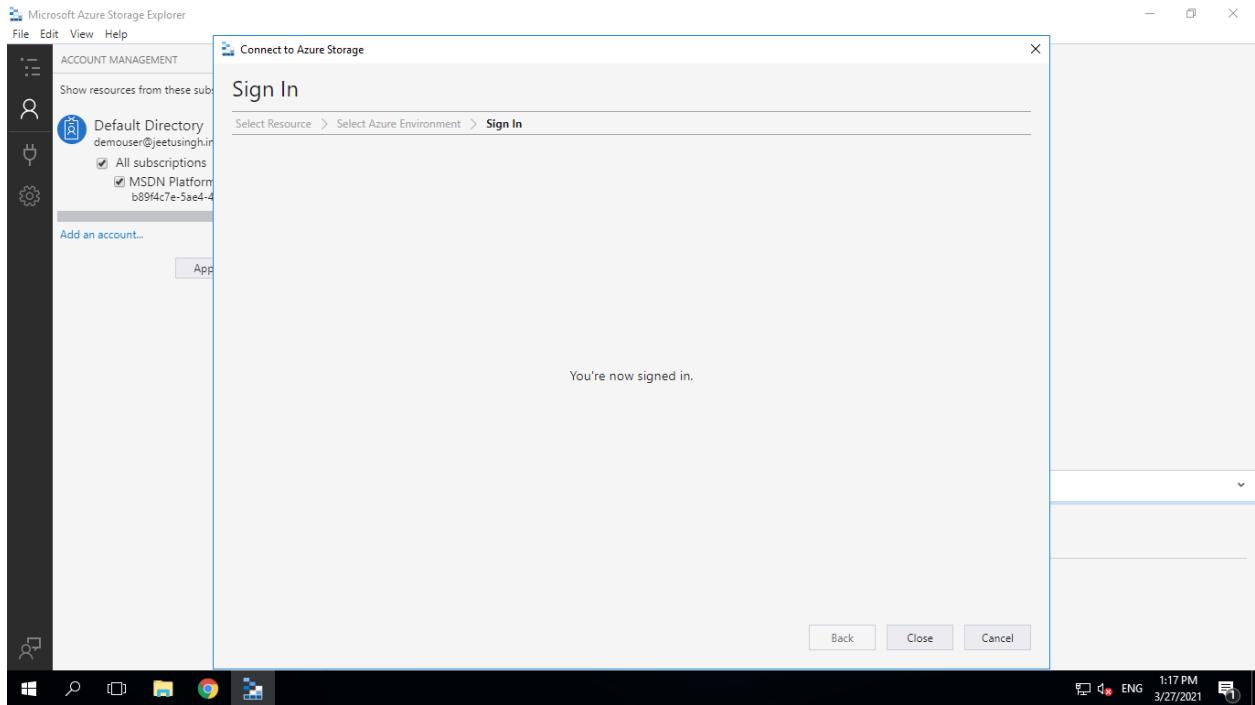
Login to Azure using your own email ID. (here is an example as demouser)



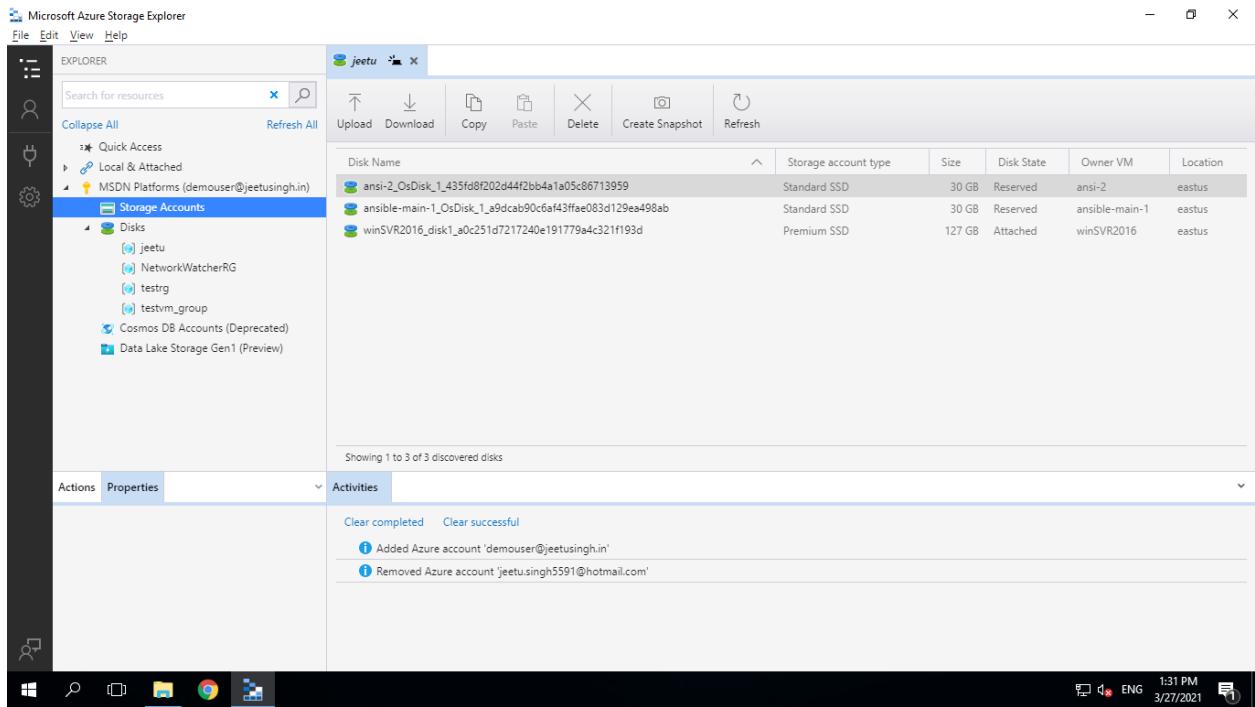
Enter proper password:



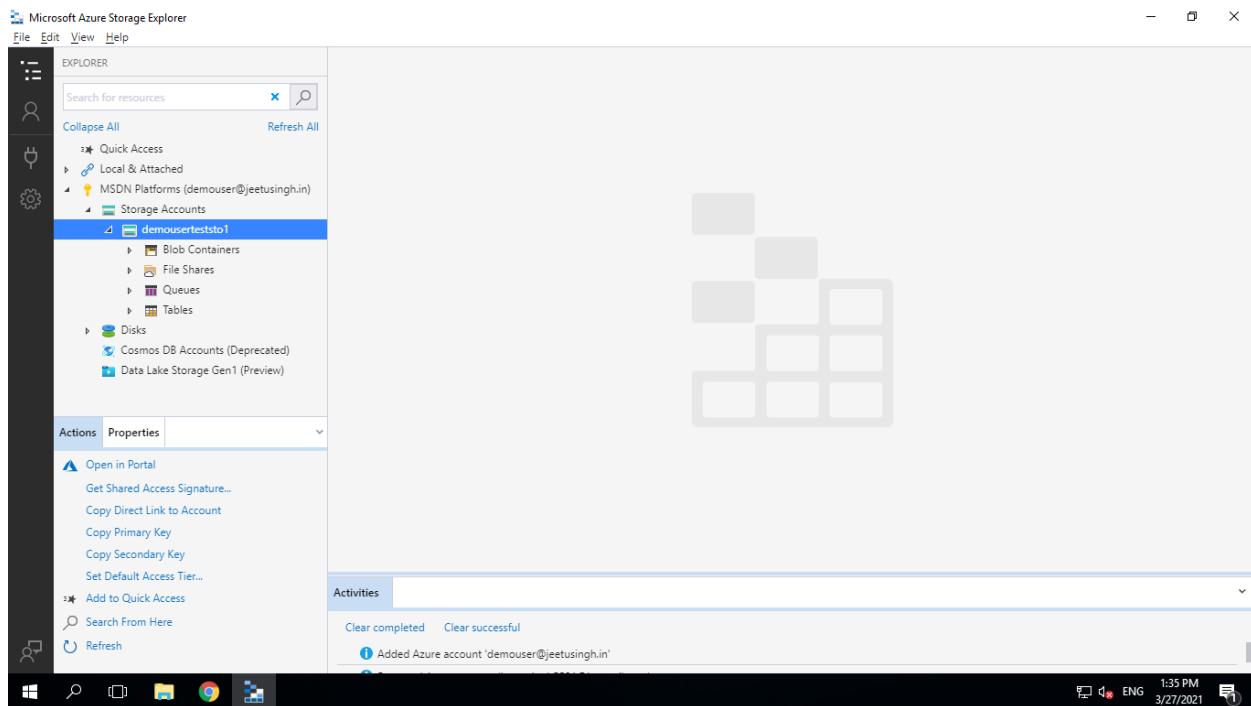
Once logged in successfully, you should be getting something like this:



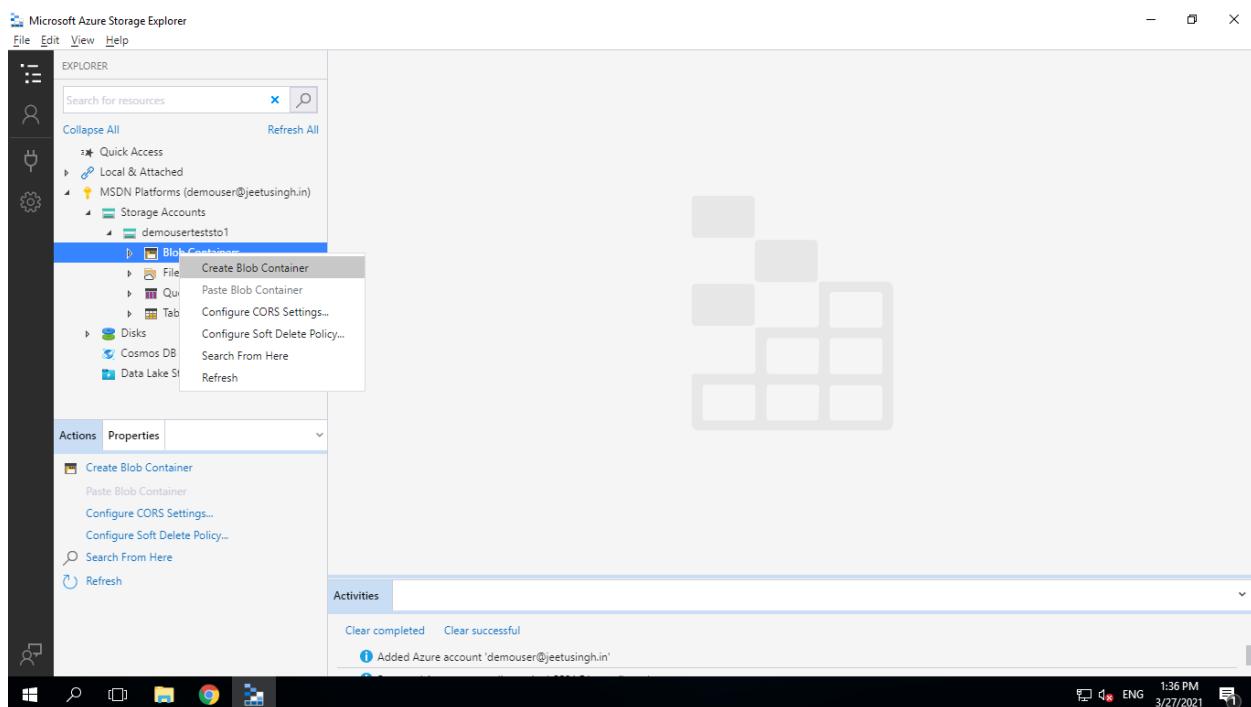
Once you click on the Storage option, similar to this might appear (I already have few Azure data disks present).



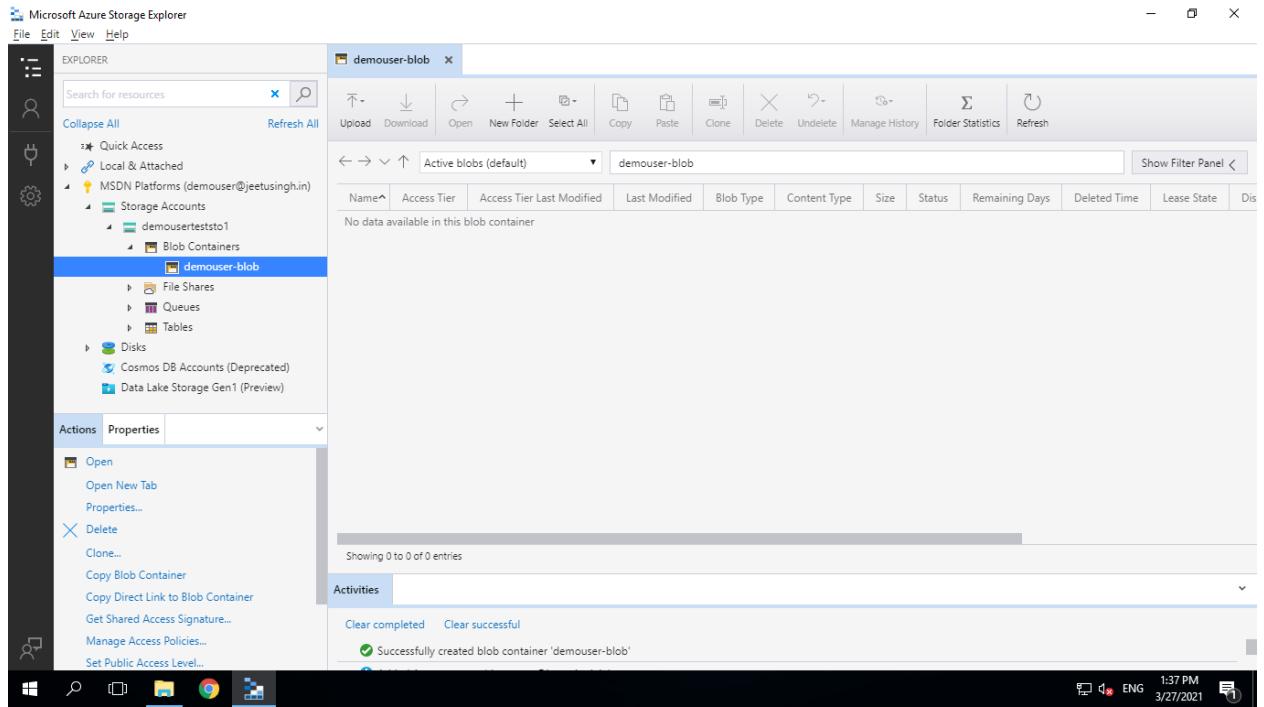
Manually create an Azure storage account is not already exists, else connect to it using the explorer.



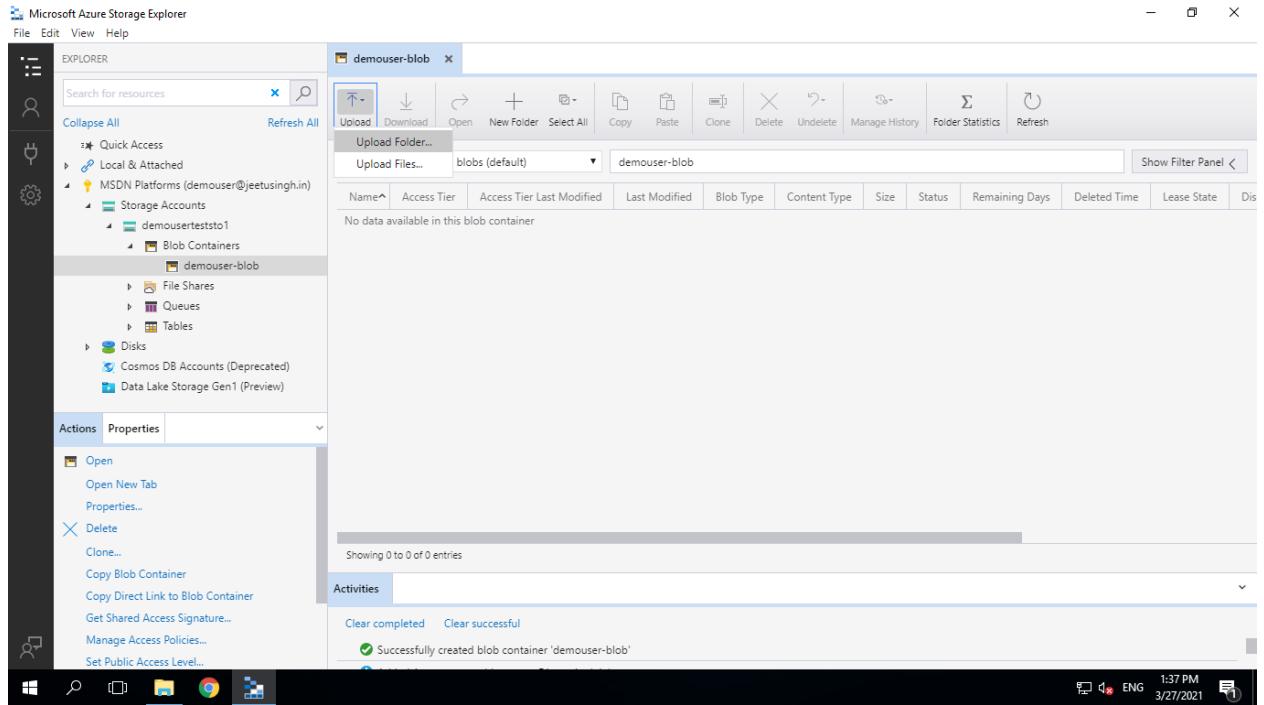
Creating a new BLOB container:



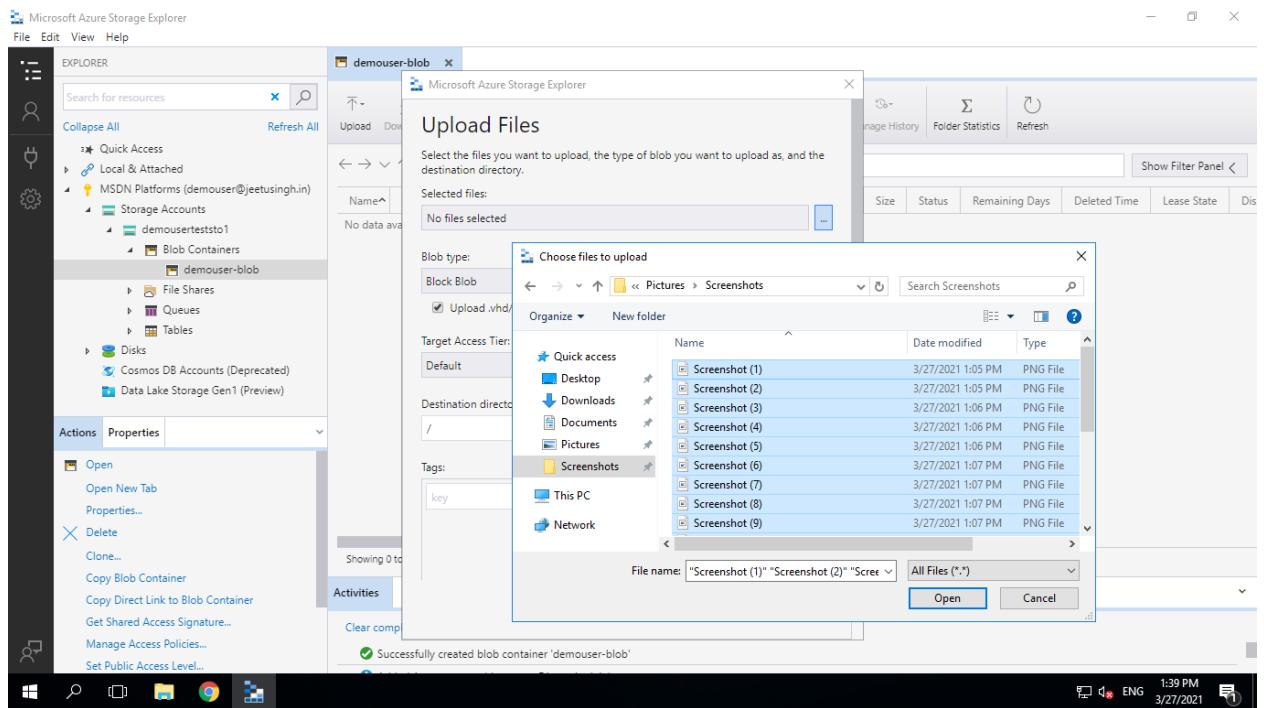
Name of the BLOB (demouser-blob) only in small letters:



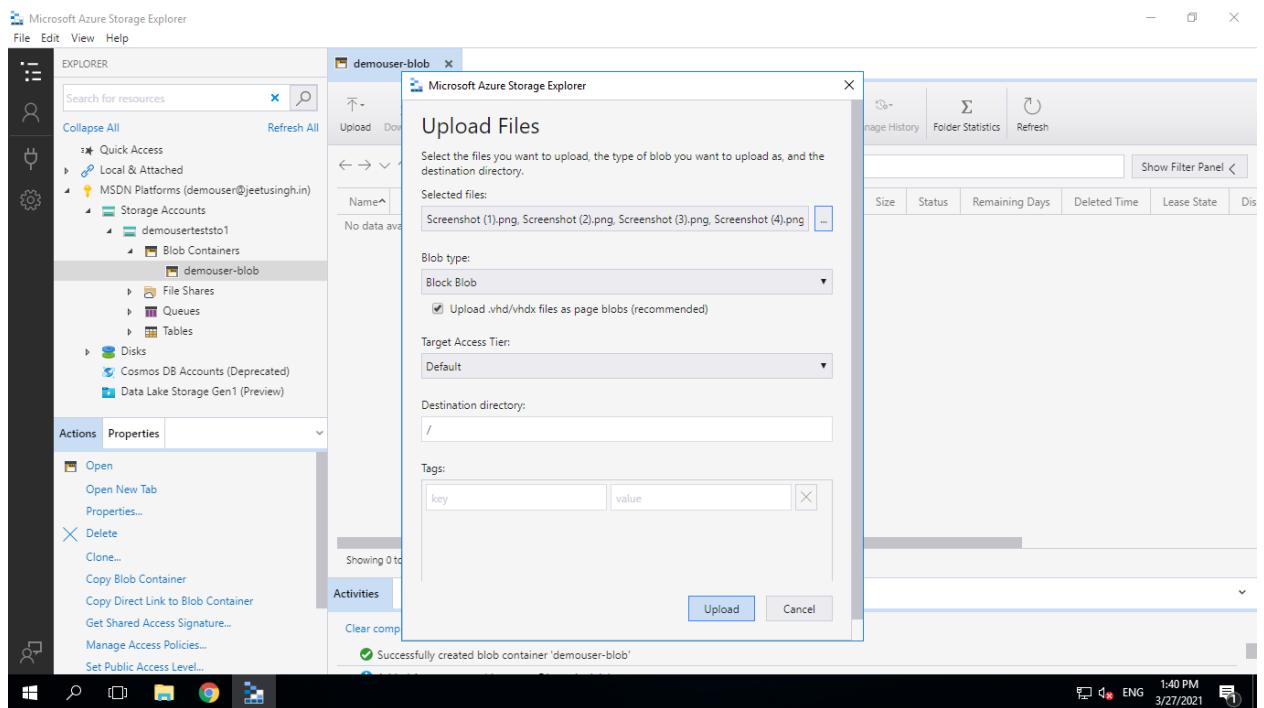
You can now upload any file(s) or folder(s) to the Azure storage account directly, without logging into the web portal:



Here's an example how to upload multiple files (PNG files) in the BLOB container:



Select the “Upload” button:



In the centre-pane, you can verify the images with the logs written in the below pane:

The screenshot shows the Microsoft Azure Storage Explorer interface. In the left sidebar, under 'EXPLORER', there is a tree view of storage accounts, including 'demouser-teststo1' which contains a 'Blob Containers' folder with 'demouser-blob'. The main pane displays a table of 'Active blobs (default)' in the 'demouser-blob' container. The table includes columns for Name, Access Tier, Access Tier Last Modified, Last Modified, Blob Type, Content Type, Size, Status, Remaining Days, and Deleted. There are 19 items listed, all of which are 'Hot (inferred)' blobs of type 'Block Blob' with various image/png content types and sizes ranging from 415.8 KB to 77.5 KB. The status for most is 'Active', except for one which is 'Deleted'. The bottom pane shows a log of activities, including the creation of the blob container and the addition of an Azure account.

To verify it from the web portal, login the Azure storage & switch to the BLOB container:

The screenshot shows the Azure Storage Blob Container page for 'demouser-blob'. The left sidebar has sections for Overview, Diagnose and solve problems, and Access Control (IAM). The main area shows a table of blobs with columns: Name, Modified, Access tier, Blob type, Size, and Lease state. The blobs listed are 'Screenshot (1).png' through 'Screenshot (19).png', all modified on 3/27/2021 at 1:40:56 PM, with an access tier of 'Hot (Inferred)', blob type 'Block blob', and available lease state. A search bar at the top allows filtering by prefix.

Lab 8: - Create an Azure SQL database single database client to create tables

Search for Azure SQL database:

The screenshot shows the Microsoft Azure portal homepage with a search bar at the top containing 'azure sql'. The search results are displayed under the 'Services' section. The first result, 'Azure SQL', is highlighted with a gray background. Other results include 'Azure Database for MySQL servers', 'SQL databases', 'Azure Cosmos DB', 'Azure Lighthouse', 'Azure Sentinel', 'SQL managed instances - Azure Arc', 'SQL Server - Azure Arc', 'Azure Database for MySQL flexible servers', and 'Azure Database for PostgreSQL server groups - Azure Arc'. To the right of the search results, there is a 'Marketplace' section with links to 'Azure SQL documentation - Azure SQL | Microsoft Docs', 'What is the Azure SQL Database service? - Azure SQL ...', 'Azure SQL Database documentation - Azure SQL Database ...', and 'Azure Hybrid Benefit - Azure SQL Database & SQL Managed ...'. Below the search results, there are sections for 'Documentation', 'Resource Groups', and 'Tools'.

Click on “new” to create a new storage account:

The screenshot shows the 'Azure SQL - Microsoft Azure' blade. At the top, there is a search bar with 'Search resources, services, and docs (G/+)'. Below the search bar, the page title is 'Azure SQL' and it says 'jeetusinh (Default Directory)'. There are buttons for '+ New', 'Reservations', 'Manage view', 'Refresh', 'Export to CSV', 'Open query', 'Assign tags', 'Delete', and 'Feedback'. A filter bar at the top includes 'New', 'Subscription == all', 'Resource group == all', 'Location == all', and 'Add filter'. The main content area displays a message: 'Showing 0 to 0 of 0 records.' and 'No Azure SQL resources to display. Try changing your filters if you don't see what you're looking for.' Below this message is a 'Create Azure SQL resource' button. The interface also includes sorting options for 'Name', 'Resource...', 'Service tier', 'Resource group', 'Location', and 'Subscription'.

Select the type of database you want to create (in this case select **SQL database**, with resource type as ‘Single database’) & click on “Create”:

The screenshot shows the 'Select SQL deployment option' page in the Microsoft Azure portal. It displays three options: 'SQL databases', 'SQL managed instances', and 'SQL virtual machines'. The 'SQL databases' section is selected, showing its description: 'Best for modern cloud applications. Hyperscale and serverless options are available.' A dropdown menu for 'Resource type' is open, showing 'Single database' as the selected option. Below the dropdown are 'Create' and 'Show details' buttons. The other two sections show similar descriptions and resource type dropdowns.

Fill the required details:

The screenshot shows the 'Create SQL Database' wizard in the Microsoft Azure portal, specifically on the 'Basics' tab. The title is 'Create SQL Database - Microsoft'. The top navigation bar includes 'Search resources, services, and docs (G+)', a user profile, and a 'demouser@jeetusingh.in' account. The main content area shows the 'Create SQL Database' page with tabs for 'Basics' (selected), 'Networking', 'Additional settings', 'Tags', and 'Review + create'. A note at the top says: 'Create a SQL database with your preferred configurations. Complete the Basics tab then go to Review + Create to provision with smart defaults, or visit each tab to customize. [Learn more](#)'.

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](#)

Database details

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources.

Database name * ✓

[Review + create](#) [Next : Networking >](#)

Click on “create new” to create a new server:

The screenshot shows the 'Create SQL Database' wizard in the Microsoft Azure portal. The 'Subscription' is set to 'MSDN Platforms' and the 'Resource group' is 'jeetu'. In the 'Database details' section, the 'Database name' is 'demousersqlldb' and the 'Server' dropdown is set to 'Select a server' with 'Create new' highlighted in red. A validation error message 'The value must not be empty.' is displayed below the 'Server' dropdown. The 'Compute + storage' section shows 'Please select a server first.' and a 'Configure database' link. At the bottom, there are 'Review + create' and 'Next : Networking >' buttons.

Fill the details with a strong password (at least 12 characters) & click on “ok”

The screenshot shows the 'Create SQL Database' wizard with a 'New server' configuration overlay. The 'Server name' is 'demousersqlldb.database.windows.net', 'Server admin login' is 'demouser', and both 'Password' and 'Confirm password' fields contain masked text. The 'Location' is '(US) East US'. An 'OK' button is visible at the bottom right of the overlay. The main wizard interface shows the same setup as the previous screenshot, with the 'Server' dropdown still set to 'Select a server'.

Select the required option according to your needs (here I am select the default options) & click on networking

Create SQL Database

Subscription * MSDN Platforms

Resource group * jeetu

Database details

Database name * demousersqldb

Server * (new) demousersqldb (East US)

Want to use SQL elastic pool? * No

Compute + storage * General Purpose

Review + create Next : Networking >

Select the connectivity method, based on requirement & go to ‘additional settings’:

Create SQL Database

Basics Networking Additional settings Tags Review + create

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'demousersqldb' and all databases it manages. [Learn more](#)

Network connectivity

Choose an option for configuring connectivity to your server via public endpoint or private endpoint. Choosing no access creates with defaults and you can configure connection method after server creation. [Learn more](#)

Connectivity method * No access

Review + create < Previous Next : Additional settings >

Select all default & select 'tag':

The screenshot shows the 'Create SQL Database' wizard on the 'Additional settings' tab. The 'Data source' section is visible, with options for 'Use existing data' (None, Backup, Sample). The 'Database collation' section shows 'None' selected. The 'Azure Defender for SQL' section also has 'None' selected. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next : Tags >'.

Provide tag values (optional) & click on 'Review + Create':

The screenshot shows the 'Create SQL Database' wizard on the 'Tags' tab. It displays a table for adding tags:

Name	Value	Resource
		2 selected

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

Verify all options & click on “Create”:

Product details

SQL database by Microsoft

Estimated cost per month: 16662.84 INR

Terms of use | Privacy policy

Basics

Subscription: MSDN Platforms

Resource group: jeetu

Region: East US

Database name: demousersaldb

Create < Previous Download a template for automation

Wait until the deployment is over:

Microsoft.SQLDatabase.newDatabaseNewServer_bc928bbe78d84842abf70 | Overview

Deployment is in progress

Deployment name: Microsoft.SQLDatabase.newDatabaseNewServ... Start time: 3/27/2021, 1:53:37 PM

Subscription: MSDN Platforms Correlation ID: aa38d60e-e6e2-44d5-9c22-b09e4d2832c7

Resource group: jeetu

Deployment details (Download)

Resource	Type	Status	Operation details
No results.			

Security Center

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Go to Azure security center >

Free Microsoft tutorials

Start learning today >

Work with an expert

Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

Find an Azure expert >

Verify:

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2/resource>. The top navigation bar includes 'Microsoft Azure' and a search bar. On the right, it shows the user 'demouser@jeetusingh.in' and 'JEETUSINGH [DEFAULT DIRECTOR...]'.

The main content area displays the 'demousersqlDb' database details under the 'SQL Database' category. The 'Overview' tab is selected. Key information shown includes:

- Resource group: jeetu
- Status: Online
- Location: East US
- Subscription: MSDN Platforms
- Subscription ID: b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2
- Tags: Click here to add tags
- Server name: demousersqlDb.database.windows.net
- Elastic pool: No elastic pool
- Connection strings: Show database connection strings
- Pricing tier: General Purpose: Gen5, 2 vCores
- Earliest restore point: No restore point available

Below the details, there's a chart titled 'Compute utilization' showing usage over the last 1 hour, 24 hours, or 7 days. The chart has a scale from 0% to 100%.

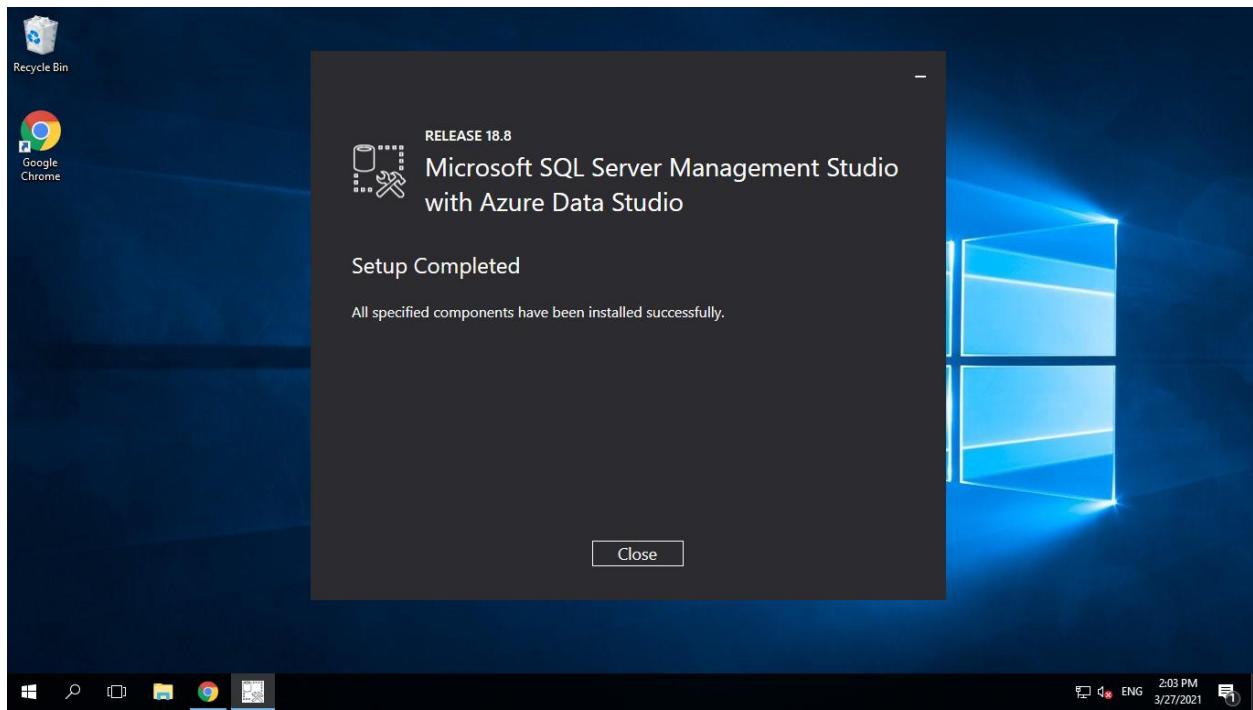
To create table, we can use SQL Server Management Studio (SSMS) using
<https://aka.ms/ssmsfullsetup>

Click install to begin:

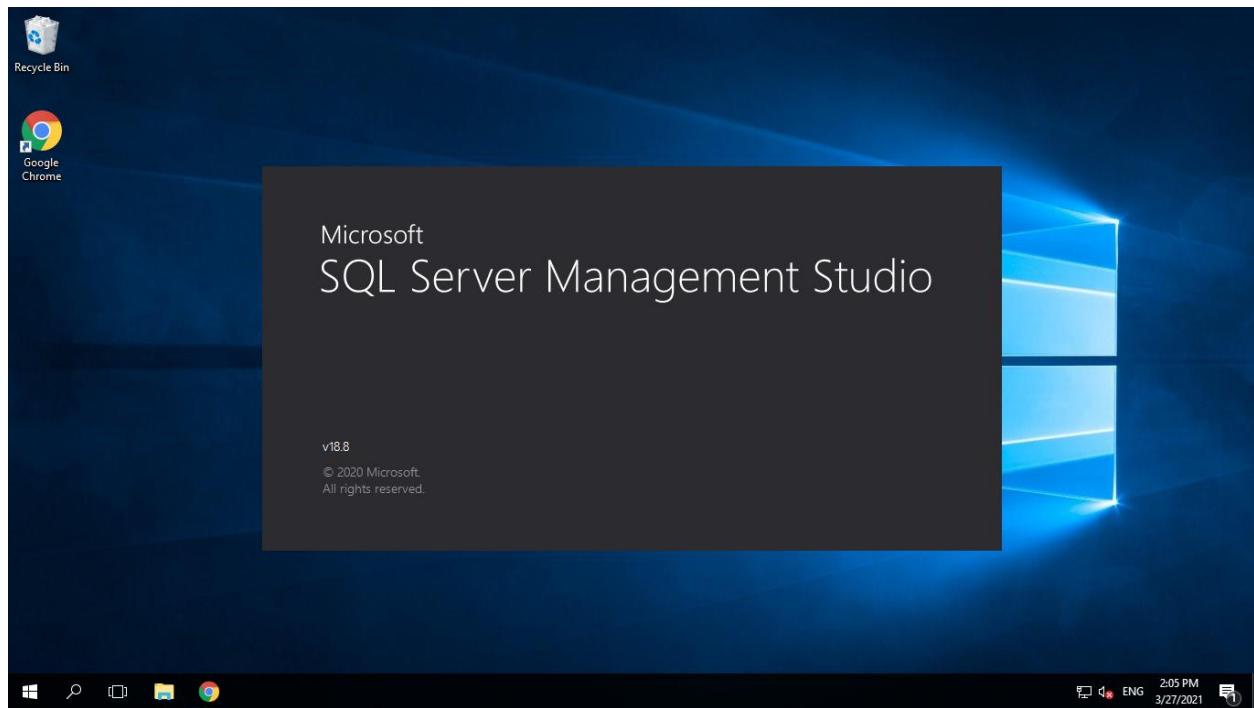




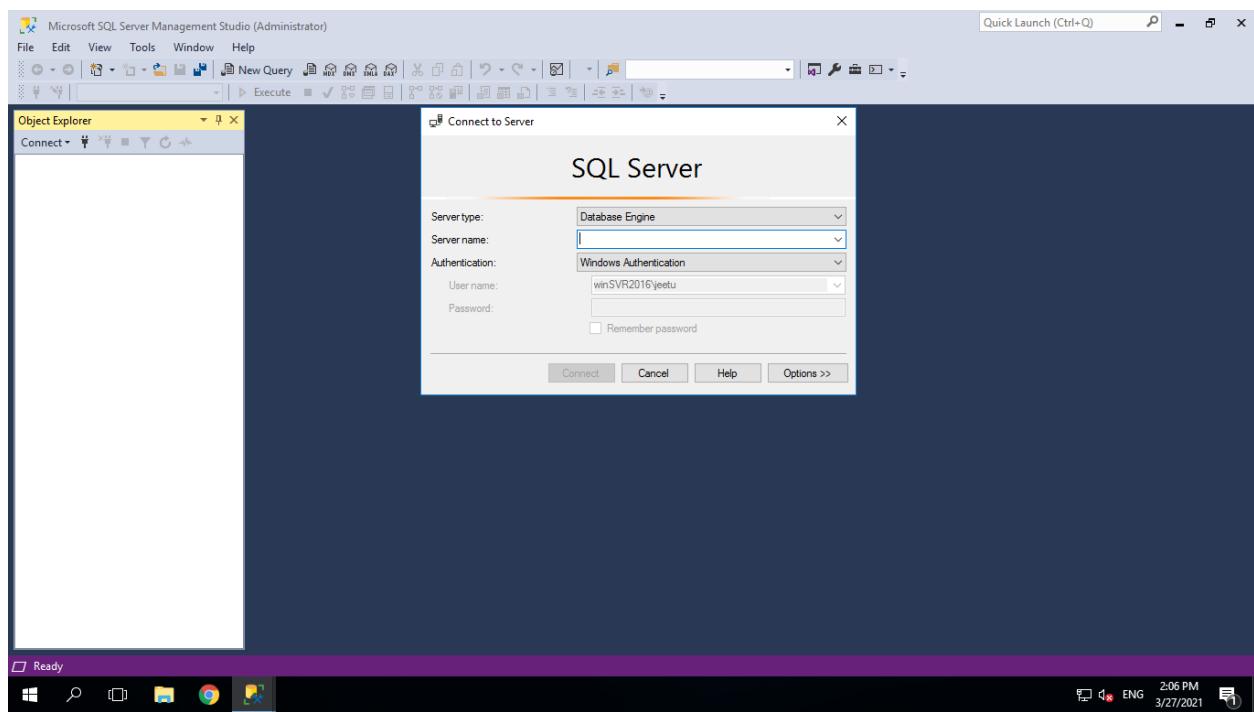
Verify:



Search for SQL Server Management Studio:



Fill the details:



Service name: copy it from the web portal

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2/resource>. The user is signed in as demouser@jeetusingh.in. The main page displays the 'demousersqldb' database under the 'Microsoft.SQLDatabase' service. The 'Overview' tab is selected. Key details shown include:

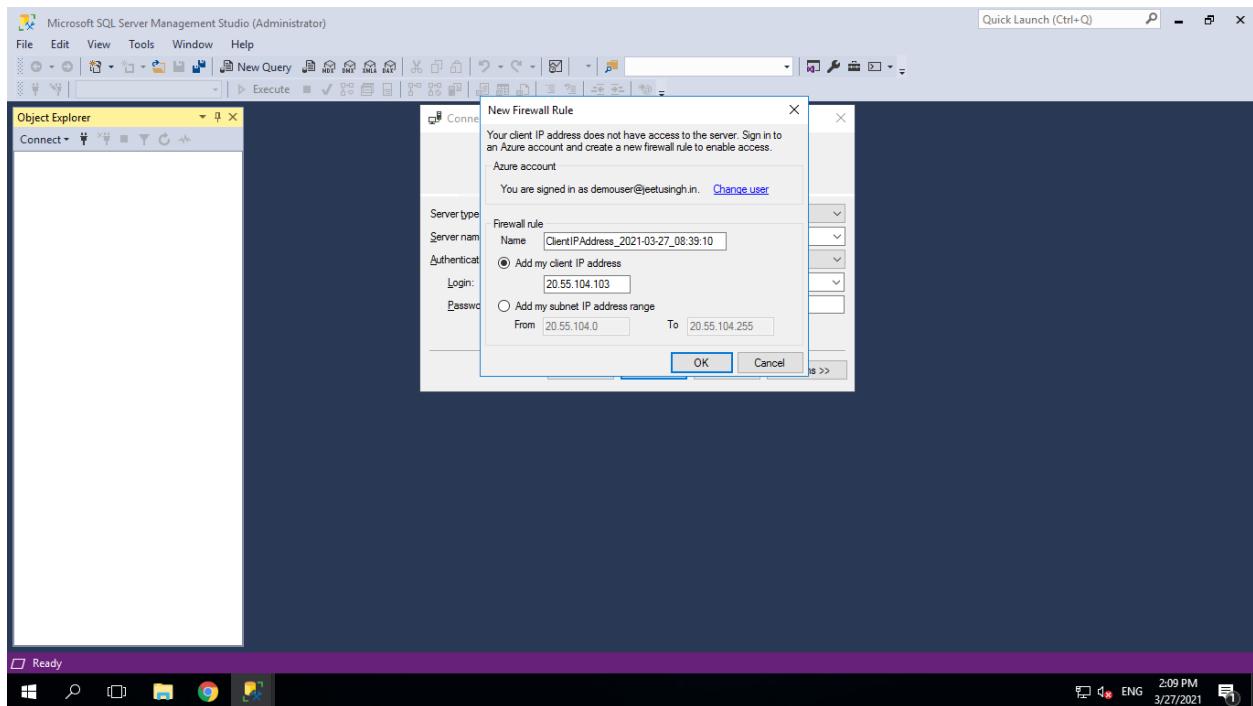
- Resource group: jeetu
- Status: Online
- Location: East US
- Subscription: MSDN Platforms
- Subscription ID: b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2
- Tags: Click here to add tags
- Server name: demousersqldb.database.windows.net
- Elastic pool: No elastic pool
- Connection strings: Show database connection strings
- Pricing tier: General Purpose: Gen5, 2 vCores
- Earliest restore point: No restore point available

Below the details, there's a chart titled 'Compute utilization' showing usage over the last 1 hour, 24 hours, or 7 days. The chart has a Y-axis from 0% to 100% and an X-axis showing time intervals.

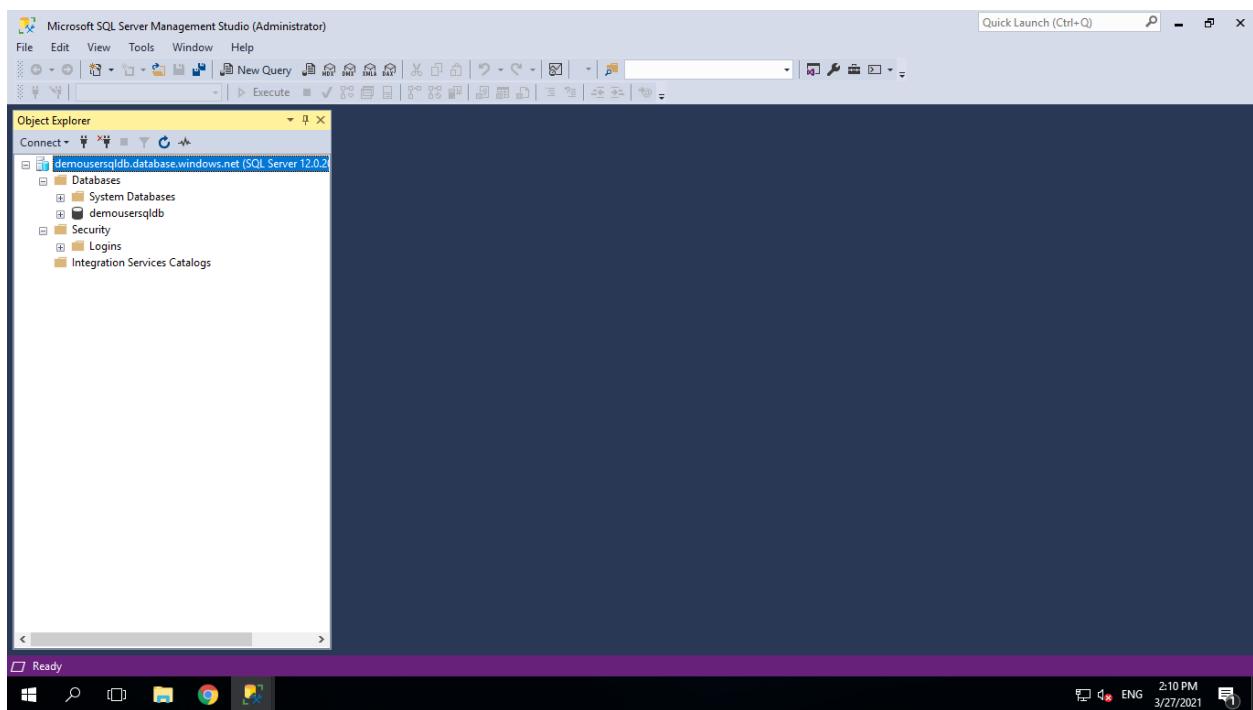
Select authentication method: SQL Server Authentication

The screenshot shows the Microsoft SQL Server Management Studio (Administrator) window. The 'Object Explorer' pane is visible on the left. A 'Connect to Server' dialog box is open in the center, titled 'SQL Server'. The 'Server type' dropdown is set to 'Database Engine'. The 'Server name' dropdown contains 'demousersqldb.database.windows.net'. The 'Authentication' dropdown is set to 'SQL Server Authentication'. The 'Login' dropdown contains 'demouser' and the 'Password' field contains a masked password. The 'Remember password' checkbox is unchecked. At the bottom of the dialog are 'Connect', 'Cancel', 'Help', and 'Options >' buttons.

Provide username & password of the Azure:



Verify:



Lab 9: - Demonstrate steps to create a static HTML web app & publish it in Azure

To create a static website & host the web pages, use storage account:

Switch to Azure storage account, search “Static website”.

The screenshot shows the Azure portal interface for managing a storage account named 'demousersteststo1'. The 'Static website' tab is selected under the 'Settings' section. The 'Essentials' panel displays basic information: Resource group (jeetu), Standard/Hot access tier, Read-access geo-redundant storage (RA-GRS) replication, StorageV2 account kind, and East US/West US location. It also shows the subscription (MSDN Platforms) and subscription ID (b89f4c7e-5ae4-47aa-97cf-5ceee3d843a2). A note about classic alerts retiring in 2021 is present. At the bottom, there are links for 'Containers', 'File shares', and 'Tables'.

Click in “Enabled”:

The screenshot shows the 'Static website' configuration page for the 'demousersteststo1' storage account. The 'Enabled' button is highlighted in red, indicating it has been selected. Other configuration options include 'Index document name' (empty) and 'Error document path' (empty).

Type “index.html” in the Index document & “error.html” in error document page:

The screenshot shows the Microsoft Azure portal interface for a storage account named 'demouserteststo1'. The 'Static website' tab is selected under the 'Settings' section. The 'Enabled' button is checked. The 'Index document name' field contains 'index.html' with a green checkmark. The 'Error document path' field contains 'error.html' with a green checkmark. A note at the top states: '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.' A 'Save' button is visible at the top.

& click "SAVE" and verify.

The screenshot shows the Microsoft Azure portal interface for the same storage account 'demouserteststo1'. The 'Static website' tab is selected under 'Settings'. A message at the top states: 'An Azure Storage container has been created to host your static website. \$web'. The 'Primary endpoint' field contains 'https://demouserteststo1.z13.web.core.windows.net/' and the 'Secondary endpoint' field contains 'https://demouserteststo1-secondary.z13.web.core.windows.net/'. The 'Index document name' field contains 'index.html' with a green checkmark. The 'Error document path' field contains 'error.html' with a green checkmark. The 'Enabled' button is checked. A 'Save' button is visible at the top.

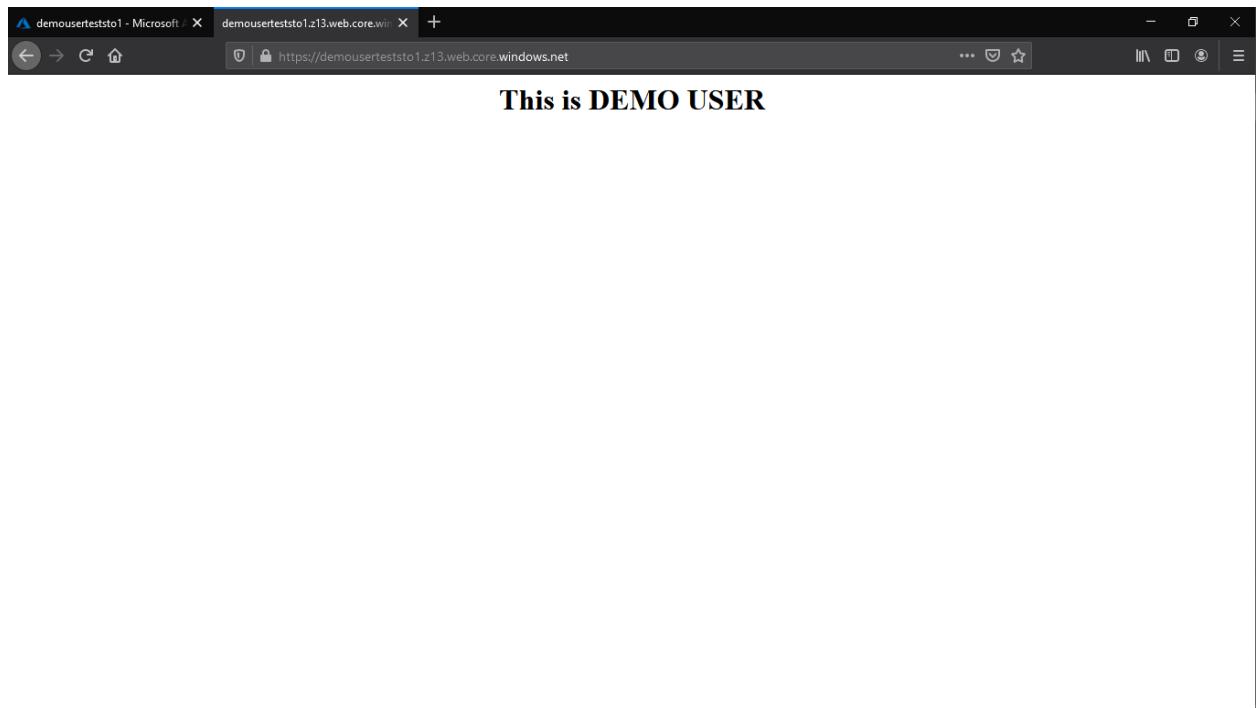
Switch to BLOB container, you would find a new container “\$web”. Upload the index.html & error.html to this container.

The screenshot shows the Microsoft Azure Storage portal. On the left, the navigation pane shows 'Storage accounts' and 'demouserteststo1'. Under 'demouserteststo1', there is a 'Container' section with '\$web' selected. The main area displays the '\$web' container's properties, including 'Authentication method: Access key (Switch to Azure AD User Account)' and 'Location: \$web'. A table lists blobs: 'error.html' and 'index.html', both modified on 3/27/2021 at 2:32:06 PM, with 'Hot (Inferred)' access tier and 'Block blob' type. To the right, an 'Upload blob' dialog is open for '\$web'. It has a 'Files' section with a 'Select a file' input field and a checkbox for 'Overwrite if files already exist'. Below it is an 'Advanced' section. At the bottom, a 'Upload' button is visible, and the 'Current uploads' section shows two completed uploads: 'index.html' (79 B / 79 B) and 'error.html' (92 B / 92 B).

Copy the URL from the static primary endpoint:

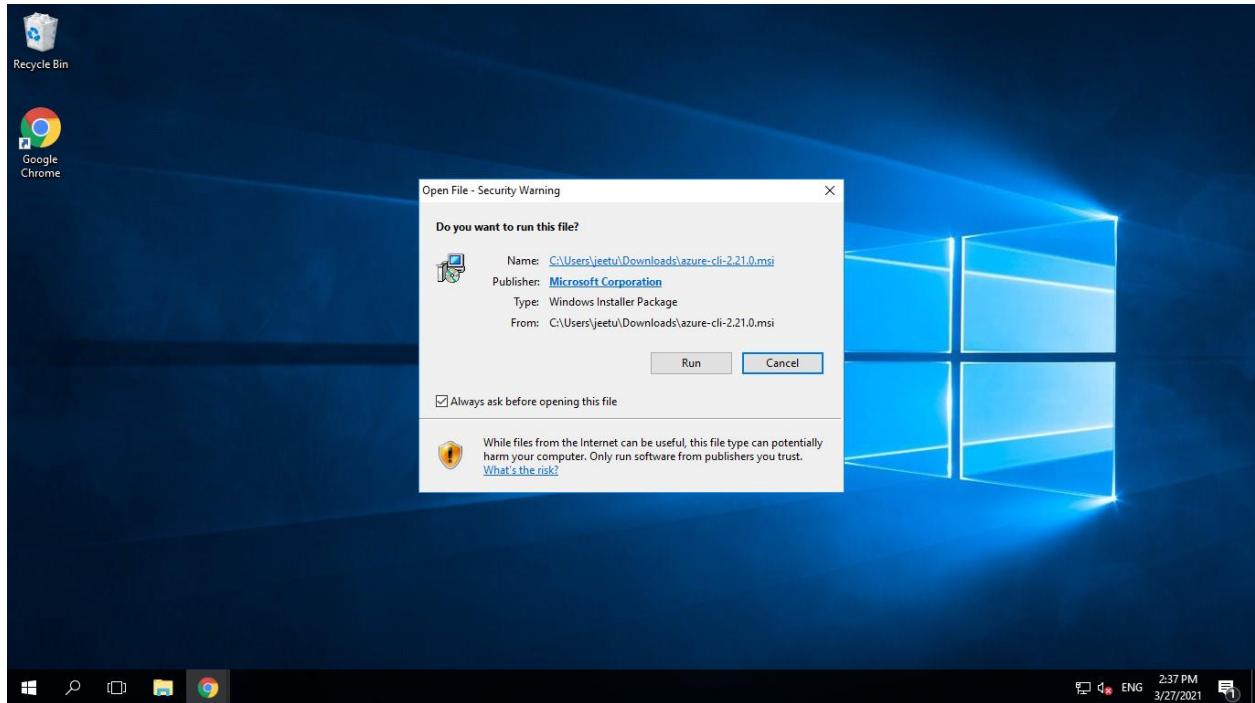
The screenshot shows the Microsoft Azure Storage portal for 'demouserteststo1'. In the navigation pane, 'Static website' is selected under 'Settings'. The main area shows the 'Static website' configuration. The 'Enabled' switch is turned on. A note states: 'Enabling static websites on the blob service 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.' Below this, it says 'An Azure Storage container has been created to host your static website: \$web'. The 'Primary endpoint' is set to 'https://demouserteststo1.z13.web.core.windows.net/'. The 'Secondary endpoint' is set to 'https://demouserteststo1-secondary.z13.web.core.windows.net/'. The 'Index document name' is 'index.html' and the 'Error document path' is 'error.html'.

Copy & paste the URL in the web browser:

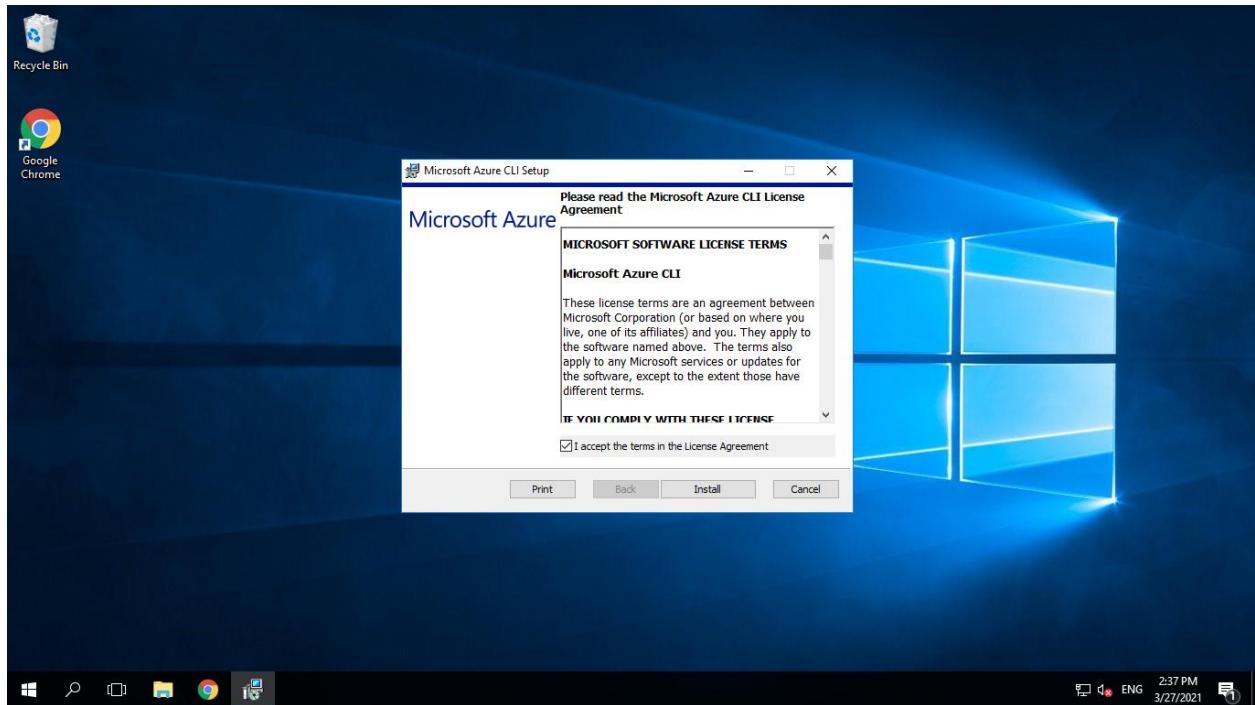


Lab 10: - Configure a local machine with Azure CLI & use CLI to create an instance

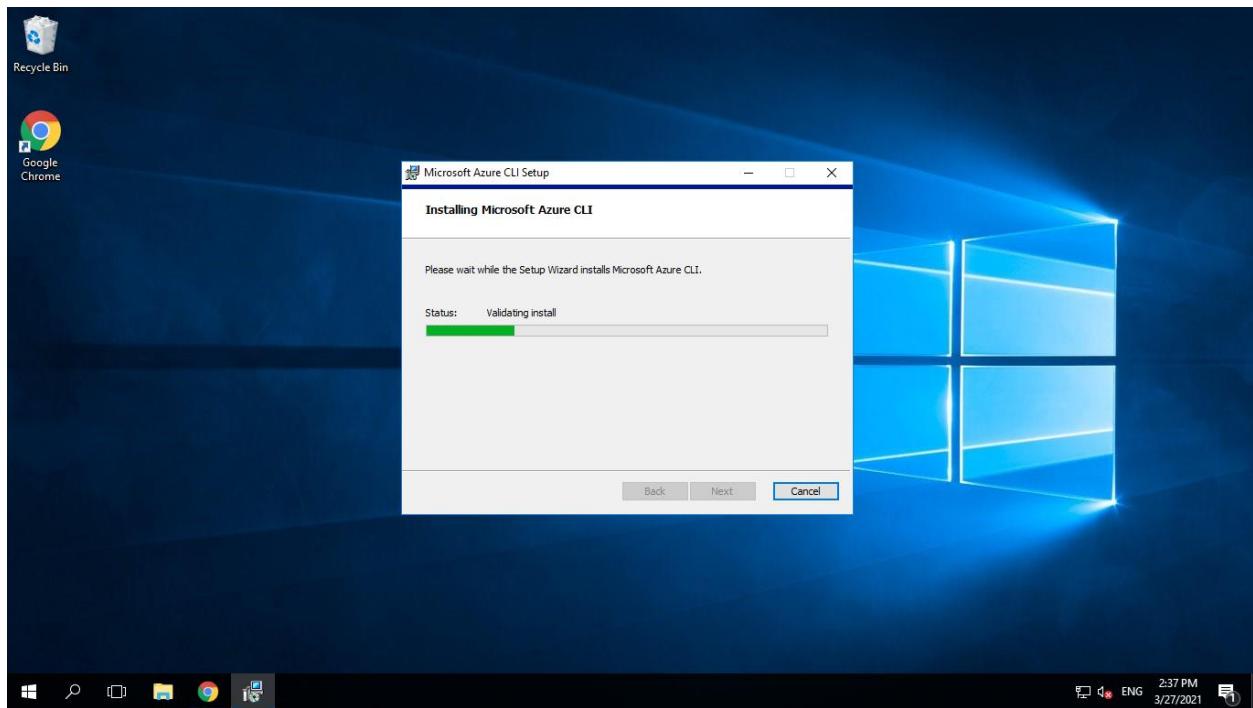
Download & install Azure CLI using: <https://docs.microsoft.com/en-us/cli/azure/install-azure-cli-windows?tabs=azure-cli>



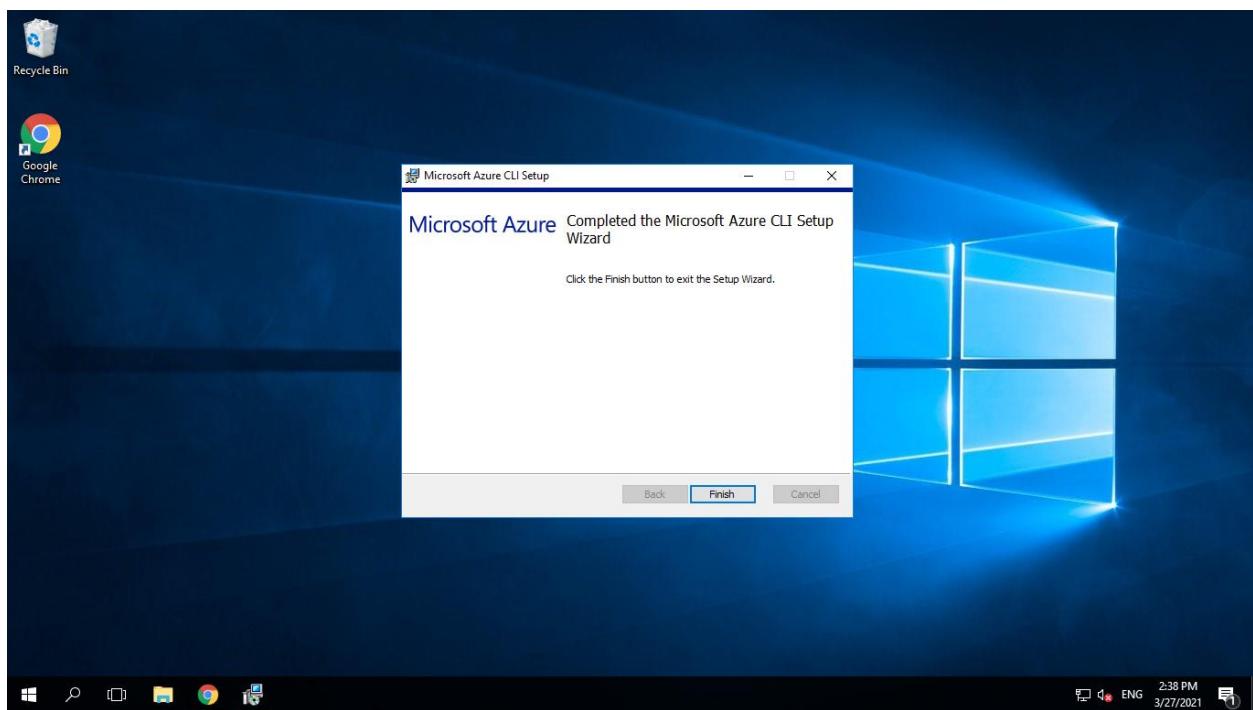
After, running the setup, accept license agreement & click INSTALL.



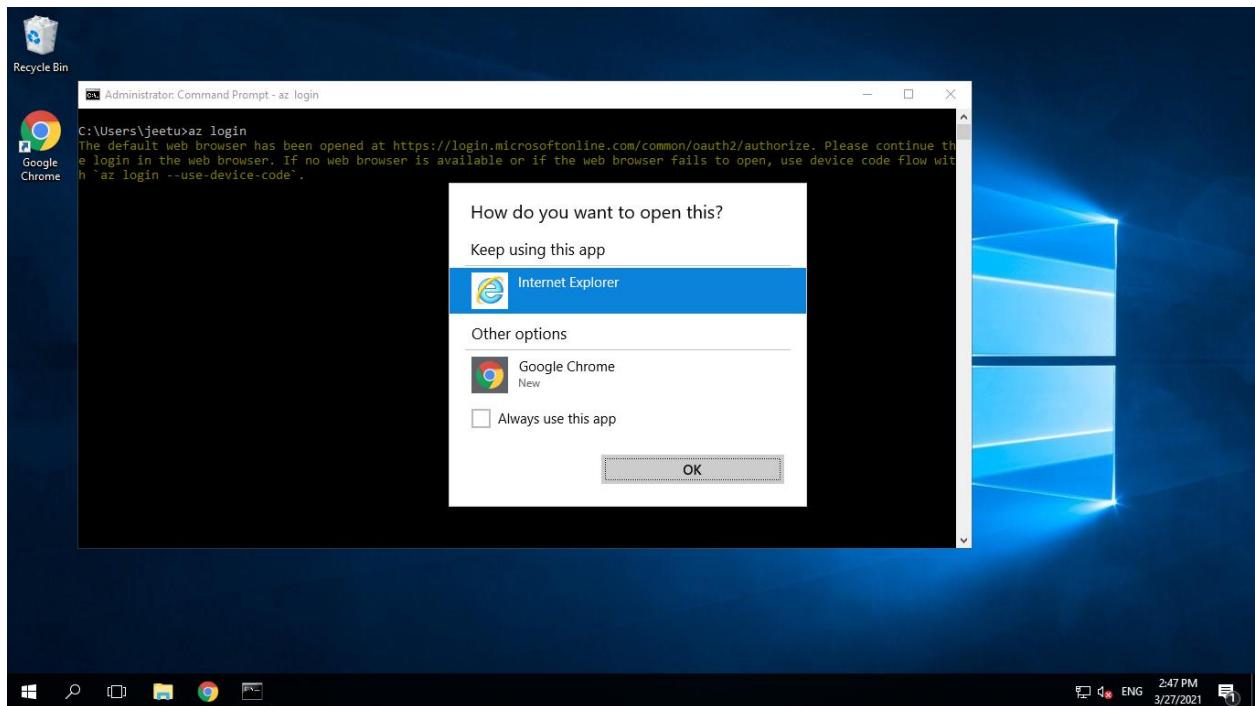
Wait until:



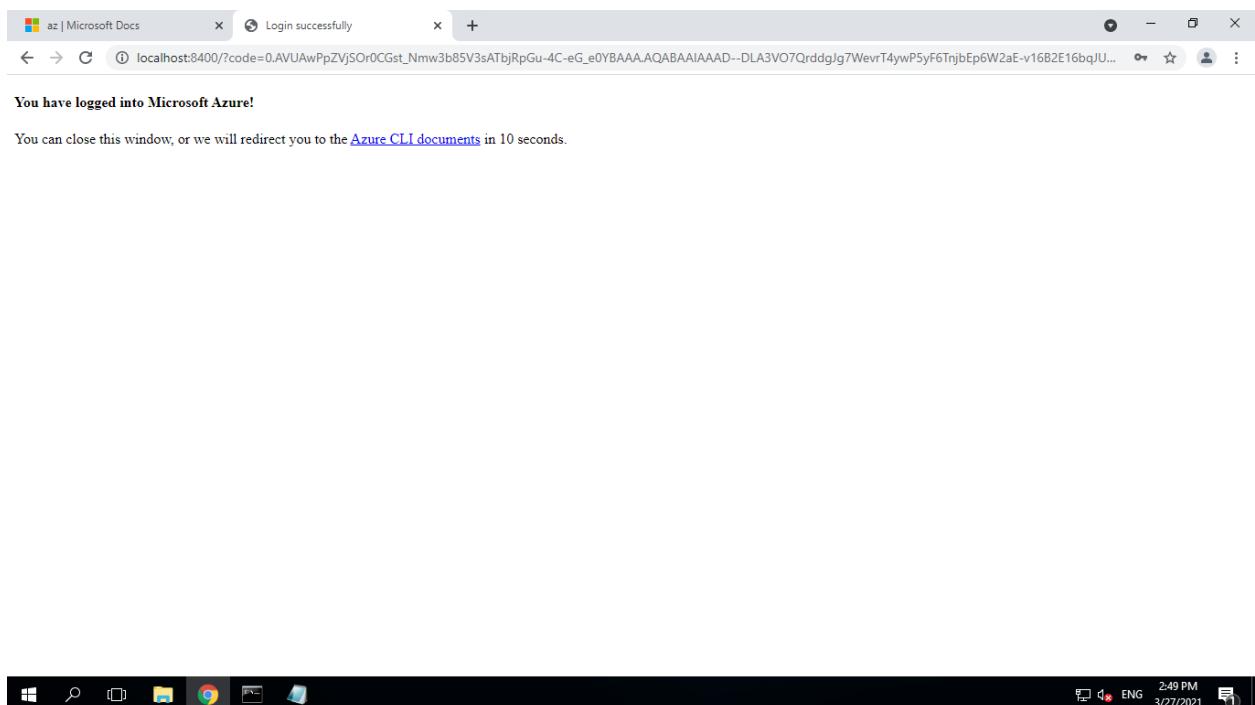
Click on 'install':



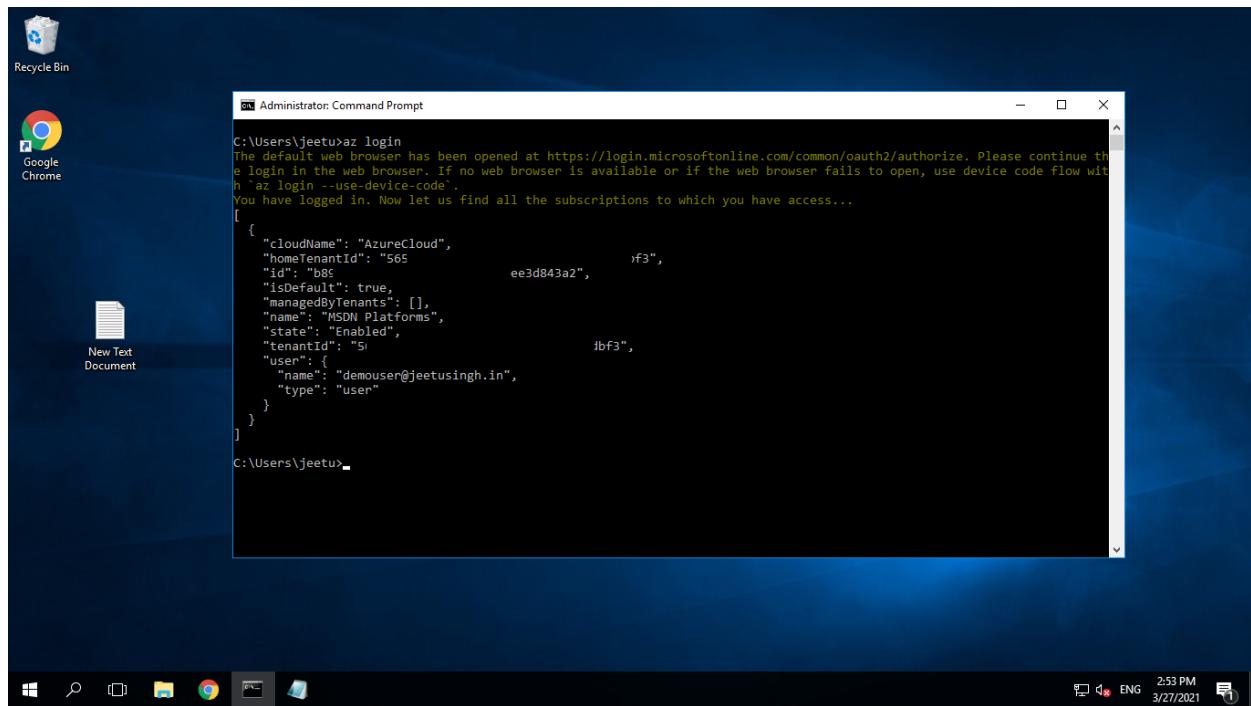
Run the command prompt using & run the “az login” command:



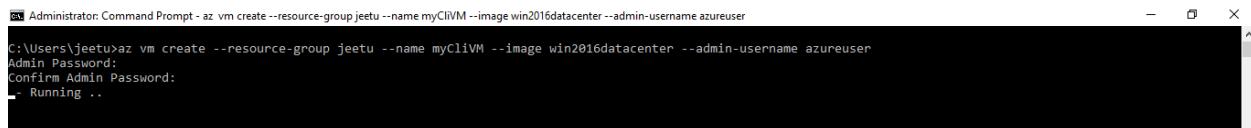
Select any web browser of your choice & provide username & password:



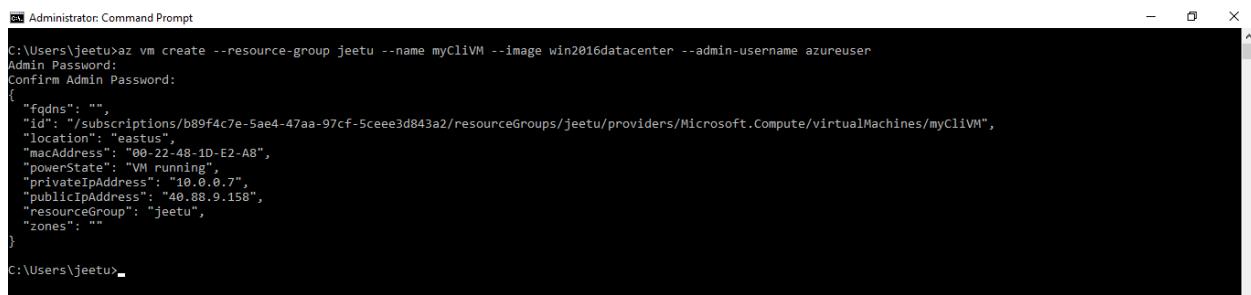
Verify on the command prompt (due to security reasons, some values in ID are covered):



Execute the command & fill the password.



& verify:



Lab 11: - Create charts from metric values, visual correlate trends using Azure monitor

Search for the Azure Monitor within the Azure Portal:

The screenshot shows the Azure Monitor Overview page. On the left, there's a navigation sidebar with links like Overview, Activity log, Alerts, Metrics, Logs, Service Health, and Workbooks. Below that is an Insights section with links for Applications, Virtual Machines, Storage accounts, Containers, Networks, and SQL (preview). The main content area features a banner with the text "Monitor your applications and infrastructure" and "Get full stack visibility, find and fix problems, optimize your performance, and understand customer behavior all in one place." It includes two cards: "Monitor & Visualize Metrics" (with a pie chart and bar chart icon) and "Query & Analyze Logs" (with a magnifying glass and document icon).

Select “Virtual Machine” within Insights blade:

The screenshot shows the Azure Monitor | Virtual Machines blade. The left sidebar has links for Metrics, Logs, Service Health, Workbooks, Insights (selected), Virtual Machines (selected), Storage accounts, Containers, Networks, SQL (preview), Azure Cosmos DB, Key Vaults, Azure Cache for Redis, and Insights Hub. The main area shows a table with columns for Name, Monitor Coverage, and Workspace. It lists several virtual machines: MSDN Platforms (6 of 6 coverage), jeetu (4 of 4 coverage), ansi-2, ansible-main-1, myCliVM, winSRV2016, testrg (2 of 2 coverage), testvm, and testvm1. For most machines, it says "Cannot enable - Virtual machine is not running". There are "Enable" buttons for winSRV2016 and testvm.

Name	Monitor Coverage	Workspace
MSDN Platforms	6 of 6	
jeetu	4 of 4	
ansi-2	Cannot enable - Virtual machine is not running (Why?)	
ansible-main-1	Cannot enable - Virtual machine is not running (Why?)	
myCliVM	Not enabled	Enable
winSRV2016	Not enabled	Enable
testrg	2 of 2	
testvm	Cannot enable - Virtual machine is not running (Why?)	
testvm1	Cannot enable - Virtual machine is not running (Why?)	

Select “Storage Account” within Insights blade:

The screenshot shows the Azure Monitor interface with the "Storage accounts" blade selected. The left sidebar includes links for Metrics, Logs, Service Health, Workbooks, Storage accounts (which is highlighted), Containers, Networks, SQL (preview), Azure Cosmos DB, Key Vaults, Azure Cache for Redis, and Insights Hub. The main area displays a table with two rows of storage account data. The columns include Subscription, Transactions, Transactions Timeline, E2E Latency, Server Latency, ClientOtherError..., and AuthorizationEr... . The first row for "demouserestst01" shows 178 transactions, 20.73ms latency, 14.96ms server latency, 47 errors, and 2 authorization errors. The second row for "sqlvavighv65ph4di" shows 20 transactions, 13.33ms latency, 8.67ms server latency, 8 errors, and 2 authorization errors.

Subscription	Transactions	Transactions Timeline	E2E Latency	Server Latency	ClientOtherError...	AuthorizationEr...
demouserestst01	178	20.73ms	14.96ms	47	2	
sqlvavighv65ph4di	20	13.33ms	8.67ms	8	2	

Go to “Overview” within Insights blade, select “Monitor & Visualize Metrics”:

The screenshot shows the Azure Monitor interface with the "Overview" blade selected. The left sidebar includes links for Overview (which is highlighted), Activity log, Alerts, Metrics (which is also highlighted), Logs, Service Health, Workbooks, and other Insights categories. The main area features a central message: "Monitor your applications and infrastructure. Get full stack visibility, find and fix problems, optimize your performance, and understand customer behavior all in one place. Learn more". Below this are three sections: "Monitor & Visualize Metrics" (with a bar chart icon), "Query & Analyze Logs" (with a magnifying glass icon), and "Setup Alert & Actions" (with a gear and plus icon). Each section has a brief description and a "Explore Metr..." or "Search Logs" button.

Monitor your applications and infrastructure
Get full stack visibility, find and fix problems, optimize your performance, and understand customer behavior all in one place. [Learn more](#)

Monitor & Visualize Metrics
Metrics are numerical values available from Azure Resources helping you understand the health, operation & performance of your systems.
[Explore Metr...](#)

Query & Analyze Logs
Logs are activity logs, diagnostic logs and telemetry from monitoring solutions; Analytics queries help with troubleshooting & visualizations.
[Search Logs](#)

Setup Alert & Actions
Alerts notify you of critical conditions and potentially take corrective automated actions based on triggers from metrics or logs.
[Create Alert](#)

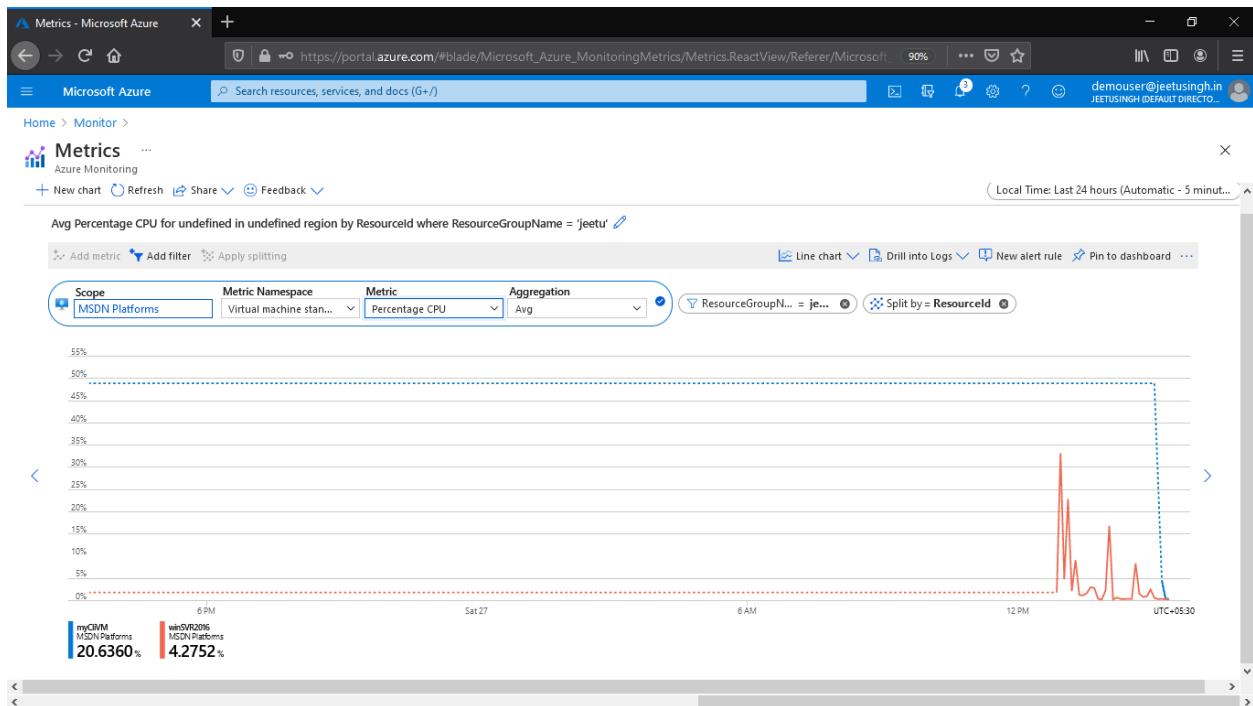
Select the scope:

The screenshot shows the Azure Metrics blade with the 'Select a scope' dialog open. The dialog has tabs for 'Browse' and 'Recent'. Under 'Resource types', 'All resource types' is selected. Under 'Locations', 'All locations' is selected. A search bar is present. The main area shows a table with columns 'Scope', 'Resource type', and 'Location'. It displays one row: 'No results' under 'Scope', 'Resource type' under 'Resource type', and 'Loading...' under 'Location'. Below the table, a section titled 'Selected scopes' shows 'No scopes selected'. At the bottom are 'Apply' and 'Cancel' buttons.

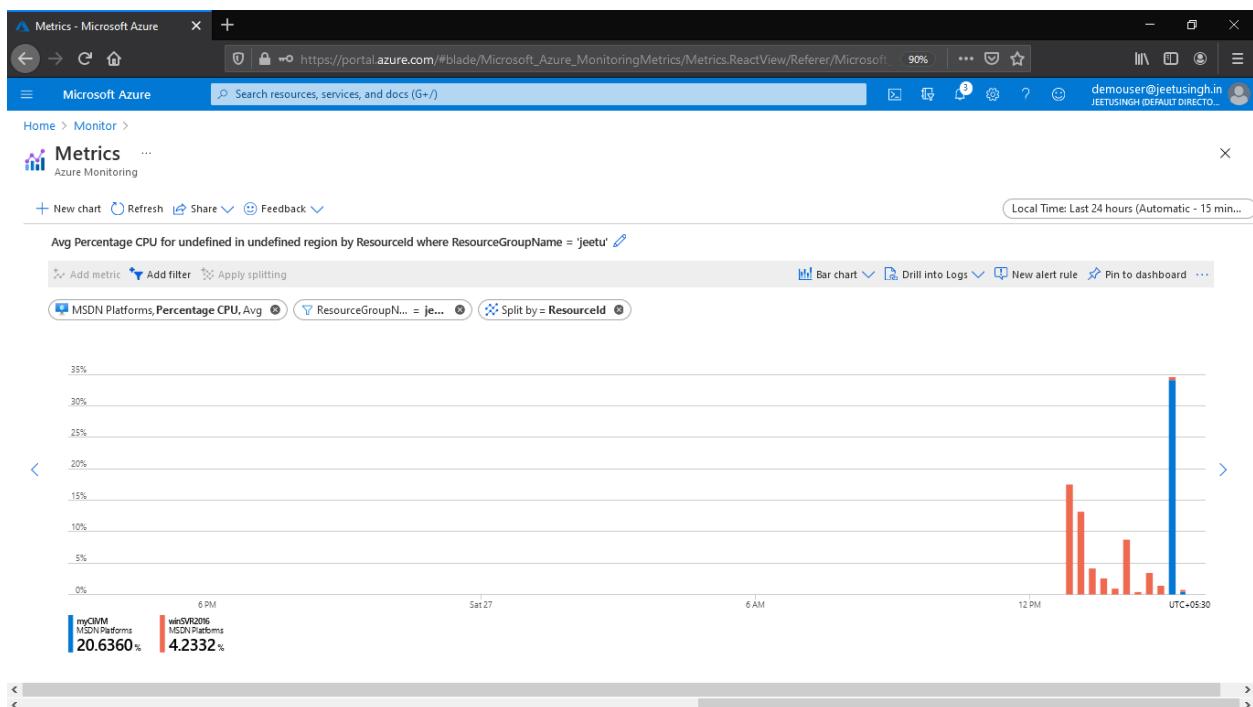
Select any resource group & any resource type & click APPLY:

The screenshot shows the Azure Metrics blade with the 'Select a scope' dialog open. The 'Scope' dropdown now lists several resource groups: 'MSDN Platforms', 'networkwatcherr', 'jeetu', and 'testrg'. The 'Resource type' dropdown is set to 'Virtual machines' and the 'Location' dropdown is set to 'East US'. A note at the top right explains that Azure limits selections to one resource type and one location. The 'Selected scopes' section shows '1 scope' selected: 'jeetu'. The 'Refine scope' section shows 'Virtual machines' selected for Resource type and 'East US' selected for Location. At the bottom are 'Apply' and 'Cancel' buttons.

Select any metric (for ex: Metric = Percentage CPU):



Use 'chart' option to change the view:



Lab 12: - Demonstrate the use of pricing calculator to configure & estimate the Azure products that you plan to use in your cloud architecture

Browse to the URL to check for the estimated cost for Azure resources depending on the type of usage: <https://azure.microsoft.com/en-in/pricing/calculator/>

Select the category (ex: Compute), to find the costing:

The screenshot shows the Azure Pricing Calculator interface. The top navigation bar includes links for Metrics, Pricing Calculator, Overview, Solutions, Products, Documentation, Pricing, Training, Marketplace, Partners, Support, Blog, More, and Free account. The main content area has tabs for Products, Example Scenarios, Saved Estimates, and FAQ. A search bar says "Select a product to include it in your estimate." Below it is a "Search products" input field. On the left is a sidebar with a "Featured" section and a "Compute" section highlighted. The main grid contains cards for Virtual Machines, Machine Scale Sets, Azure Kubernetes Service (AKS), App Service, Container Instances, Batch, Cloud Services, Azure VMware Solution, Windows Virtual Desktop, and Azure Spring Cloud.

Fill the details for the virtual machine based on the requirement:

The screenshot shows the Azure Virtual Machines pricing calculator for a DS3 v2 VM. The top header shows "Virtual Machines" with a note about 1 DS3 v2 (4 vCPUs, 14 GB RAM) x 730 Hours; Windows. The price is Upfront: US\$0.00 and Monthly: US\$367.97. The main form includes fields for REGION (West US), OPERATING SYSTEM (Windows), TYPE (OS Only), TIER (Standard), CATEGORY (All), INSTANCE SERIES (All), and INSTANCE (DS3 v2: 4 vCPUs, 14 GB RAM, 28 GB Temporary storage, US\$0.504/hour). Below this, there's a VIRTUAL MACHINES section with inputs for quantity (1) and hours (730). A "Savings Options" section discusses Reserved VM Instances and compares Pay as you go vs 1/3 year reserved options. The total cost is shown as US\$203.67 for pay-as-you-go and US\$164.25 for a 3-year reserved instance. A "Chat with Sales" button is visible at the bottom right.

Check for the monthly cost in USD:

The screenshot shows the Microsoft Azure Pricing Calculator interface. At the top, there are two tabs: "Metrics - Microsoft Azure" and "Pricing Calculator | Microsoft". The URL is https://azure.microsoft.com/en-in/pricing/calculator/. The main content area displays estimated costs for various resources:

Resource Type	Average per month (US\$0.00 charged upfront)	Total Cost
Managed Disks	US\$203.67	US\$367.92
Storage transactions	US\$164.25	US\$0.05
Bandwidth	US\$0.00	US\$0.00
		Upfront cost US\$0.00
		Monthly cost US\$367.97

Below the resource list, there is a section for "Support" with a dropdown menu set to "Included" and a value of "US\$0.00". Under "Programmes and Offers", the "Licensing Programme" is set to "Microsoft Online Services Agreement". There is also a "SHOW DEV/TEST PRICING" button and a "Chat with Sales" link.

Check for the licensing program & click on “save” to save the estimate:

The screenshot shows the Microsoft Azure Pricing Calculator interface after saving the estimate. The "Licensing Programme" dropdown is now highlighted with a blue border, indicating it has been selected. A purple info bar at the bottom right states: "Microsoft Online Services Agreement pricing has been applied US\$367.97". The "Save" button is visible in the bottom left corner of the main content area.

Provide a name for the estimate:

The screenshot shows the Microsoft Azure Pricing Calculator interface. A modal dialog box titled "Save estimate" is open in the center. It contains a text input field labeled "Name of your estimate" with the value "demouser-estimate". Below the input field are two buttons: "Save" and "Cancel". In the background, the main calculator page displays estimated costs: "Estimated upfront cost" (US\$0.00) and "Estimated monthly cost" (US\$367.97). The currency dropdown shows "US Dollar (\$)".

The screenshot shows the Microsoft Azure Pricing Calculator interface again. This time, a modal dialog box titled "Save estimate" is open, displaying the message "Your estimate has been saved. Click on the Saved Estimates tab to view all your saved estimates." Below this message is a single "Done" button. The background shows the same estimated costs and currency settings as the previous screenshot.

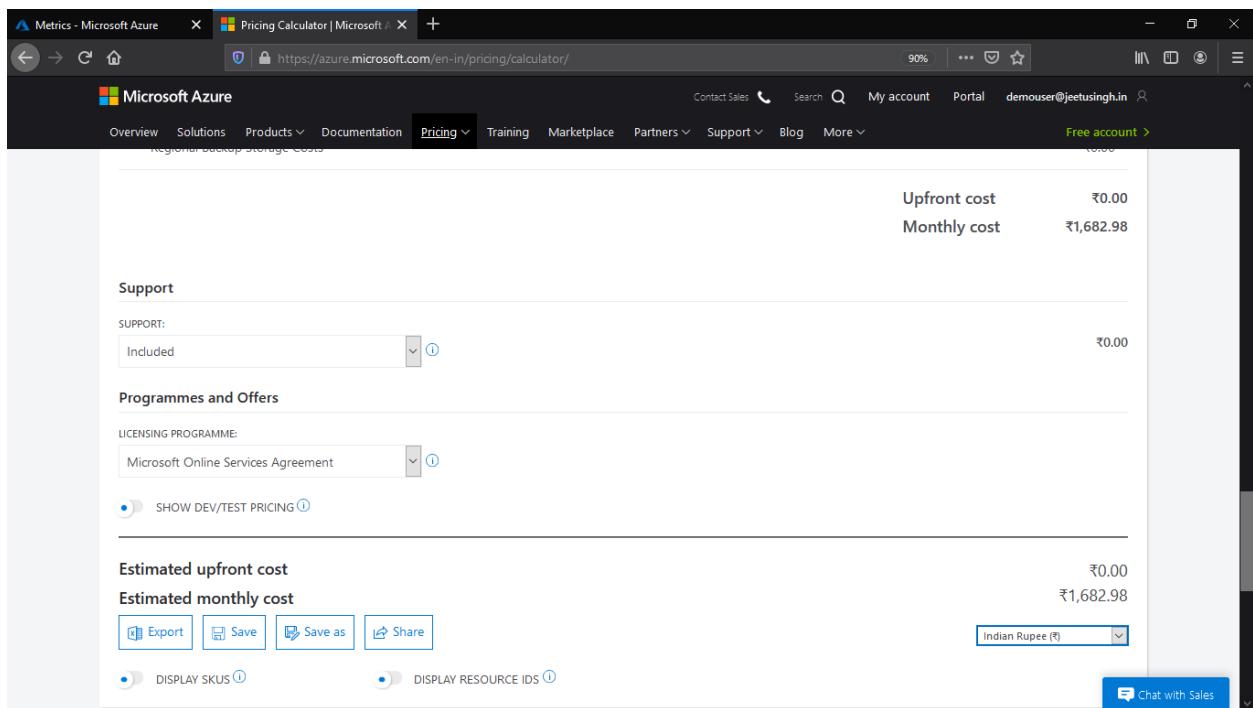
Similarly, search for any database option:

The screenshot shows the Microsoft Azure Pricing Calculator interface. On the left, there is a sidebar with a 'Search products' bar at the top and a list of service categories: Featured, Compute, Networking, Storage, Web, Mobile, Containers, Databases (which is selected), Analytics, AI + Machine Learning, Internet of Things, Integration, Identity, Security, and Developer Tools. Below the sidebar, there are several cards for different database services: Azure Cosmos DB, Azure SQL Database, Azure Database for MySQL, Azure Database for MariaDB, Azure Database for PostgreSQL, Azure Synapse Analytics, Azure Database Migration Service, Azure Cache for Redis, Azure API for FHIR, Azure SQL Managed Instance, and SQL Server Stretch Database. A green notification bar at the bottom right says 'Azure Cosmos DB added. View'. A 'Chat with Sales' button is also visible.

Make the changes according to your need & verify the cost(in USD):

The screenshot shows the Microsoft Azure Pricing Calculator for the Azure Cosmos DB service. At the top, it displays 'Azure Cosmos DB' and 'DATABASE OPERATIONS: Standard provisioned throughput (manual)' and 'WRITE REGIONS: Single Region Write (Single-Master)'. Below this, the 'Savings Options' section indicates savings up to 65% on pay-as-you-go prices with 1 year or 3 year Reserved Capacity options. It shows the selection of 'Pay as you go'. Under 'Request units per second (RU/s)', it lists '400 RU/s' and '730 Hours'. The 'Write Region' section shows 'East US' selected with '400 RU/s' and '730 Hours'. The total cost is calculated as 'US\$0.008 Per 100 RU/s per hour' equals 'US\$23.36'. A 'Chat with Sales' button is located at the bottom right.

Change the Cost currency in to INR:



The screenshot shows the Microsoft Azure Pricing Calculator interface. At the top, there are tabs for Metrics - Microsoft Azure, Pricing Calculator | Microsoft, and a plus sign for new tabs. The URL in the address bar is https://azure.microsoft.com/en-in/pricing/calculator/. The main navigation bar includes Contact Sales, Search, My account, Portal, and a user email demouser@jeetusingh.in. A Free account button is also present.

The calculator displays two main cost categories:

Cost Type	Value
Upfront cost	₹0.00
Monthly cost	₹1,682.98

Under the Support section, there is a dropdown menu set to "Included" with a value of ₹0.00.

In the Programmes and Offers section, the Licensing Programme is set to "Microsoft Online Services Agreement". There is an option to "SHOW DEV/TEST PRICING" which is currently selected.

At the bottom, there are several action buttons: Export, Save, Save as, Share, and a currency dropdown set to "Indian Rupee (₹)". There are also options to "DISPLAY SKUS" and "DISPLAY RESOURCE IDS". A "Chat with Sales" button is located in the bottom right corner.

Lab 13: - Create an Azure notification hub in the Azure portal that can be used to send notifications to any platform

Go to Azure portal & search for “Notification Hub” in the search option & click on it:

The screenshot shows the Microsoft Azure portal interface. In the top navigation bar, there is a search bar containing the text "notifi". Below the search bar, the main content area displays a search result for "Notification Hubs" under the "Services" category. To the right of the search results, there is a sidebar titled "Marketplace" which lists various Azure services like "KoçSistem Azure Notification Service Management" and "Notification Hub". Below the search results, there are sections for "Documentation" and "Resource Groups", both of which show "No results were found". At the bottom of the page, there are links for "Try searching in Activity Log" and "Try searching in Azure Active Directory". The URL in the browser address bar is <https://portal.azure.com/#blade/HubsExtension/BrowseResourceBlade/resourceType/Microsoft.NotificationHubs/namespaces/notificationHubs>.

Click on “Add” to create a new notification hub:

The screenshot shows the "Create an Azure notification hub" wizard in the Microsoft Azure portal. The title bar indicates the current step is "Create an Azure notification hub". The main form is titled "Notification Hub" and contains several configuration sections: "Basic Details" (Subscription: MSDN Platforms, Resource group: Create new), "Namespace Details" (Notification Hub Namespace: Enter new namespace name, Create new radio button selected), "Notification Hub Details" (Notification Hub: Enter notification hub name, Location: East US, Select pricing tier: Free), and "Tags" (Next: Tags >). At the bottom of the form are "Create" and "Cancel" buttons.

Fill the required details:

Notification Hub - Microsoft A Create an Azure notification hub

Microsoft Azure

Notification Hubs

jeetusingh (Default Directory)

Add Edit columns ...

Filter by name...

Name ↑

No notification hubs to display

Try changing your filters if you don't see what you're looking for.

Create notification hub

Notification Hub

Basics Tags Review + Create

Basic Details

Details of the subscription and the resource group to use.

Subscription * MSDN Platforms

Resource group * jeetu

Namespace Details

Details of the notification hub namespace.

Notification Hub Namespace * demouser-notificationhub-ns

Create new Select existing

Notification Hub Details

Details of the notification hub.

Notification Hub * demouser-notificationhub

Location * East US

Select pricing tier Free

Create < Previous Next: Tags >

And click on create

Notification Hub - Microsoft A Create an Azure notification hub

Microsoft Azure

Notification Hubs

jeetusingh (Default Directory)

Add Edit columns ...

Filter by name...

Name ↑

No notification hubs to display

Try changing your filters if you don't see what you're looking for.

Create notification hub

Notification Hub

Basics Tags Review + Create

Name Value Resource

Notification Hub

Submitting deployment... 4:01 PM

Submitting the deployment template for resource group 'jeetu'.

Validating... < Previous Next: Review + Create >

Once deployed, go to the resource:

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#blade/HubsExtension/DeploymentDetailsBlade/overview/id/%2Fsubscriptions%2F...>. The page title is "Deployment_349e6def-9852 | Overview". The main content area displays a green checkmark icon and the message "Your deployment is complete". Below this, it shows deployment details: Deployment name: Deployment_349e6def-9852, Subscription: MSDN Platforms, Resource group: jeetu. To the right, deployment statistics are listed: Start time: 3/27/2021, 4:01:26 PM, Correlation ID: d8d76f54-08ef-4a2f-889d-d1dca88b8fd4. A "Go to resource" button is present. On the right side, there are promotional links for Security Center, Microsoft tutorials, and Azure experts.

Search for “Access policies” under Manage blade:

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843a...>. The page title is "demouser-notificationhub (demouser-notificationhub-ns/demouser-notificationhub) | Access Policies". The left sidebar shows the "Manage" section with "Access Policies" selected. The main content area displays a table of access policies:

Policy Name	Permission	Connection String
DefaultListenSharedAccessSignature	Listen	Endpoint=sb://demouser-notificationhub-ns.servicebus.windows.net/;SharedAccessKeyName=...
DefaultFullSharedAccessSignature	Listen,Manage,Send	Endpoint=sb://demouser-notificationhub-ns.servicebus.windows.net/;SharedAccessKeyName=...

You can use any platform option (under Settings blade) to send notification to the platform.

The screenshot shows the Microsoft Azure portal interface. The left sidebar has a tree view with 'demouser-notificationhub' selected. The main content area is titled 'demouser-notificationhub (demouser-notificationhub-ns/demouser-notificationhub) | Windows (WNS)'. It contains two input fields: 'Package SID' with placeholder 'Enter the package SID...' and 'Security Key' with placeholder 'Enter the Security Key...'. On the far left, there's a vertical navigation bar with sections like 'Settings' (selected), 'Manage', 'Monitoring', and 'Automation'. A search bar at the top is empty. The top right shows the user 'jeetusingh' and a 'Save' button.

Lab 14: - Create & configure load balancer VMSS & configure autoscaling.

Switch to Azure portal & search for Azure Virtual Machine Scale Set (VMSS) & click on it:

The screenshot shows the Microsoft Azure portal interface. A search bar at the top contains the query "virtual machine scale sets". Below the search bar, the "Services" section is expanded, showing "Virtual machine scale sets" as the first item. Under "See all", there is a "Virtual machine scale set" option. Other service categories like "Virtual machines", "SQL virtual machines", and "Managed Services for Azure Virtual Machines" are also listed. To the right, a sidebar displays "Last Viewed" items such as "Azure Database fo...", "More services", and "Requirements for Azure Information Protection - AIP ...". At the bottom, there are links to "Microsoft Learn", "Azure Monitor", "Security Center", and "Cost Management".

Click add to create a new VMSS:

The screenshot shows the "Create a virtual machine scale set" wizard. The title bar says "Create a virtual machine scale set". The main area has a "Create a virtual machine scale set" heading. Below it are several tabs: Basics, Disks, Networking, Scaling, Management, Health, Advanced, Tags, and Review + create. The Basics tab is currently selected. The "Project details" section contains fields for "Subscription" (set to "MSDN Platforms") and "Resource group" (set to "(New) Resource group"). The "Scale set details" section includes fields for "Virtual machine scale set name" (empty), "Region" (set to "(US) East US"), and "Availability zone" (set to "None"). The "Orchestration" section contains a note about the "scale set model". At the bottom, there are navigation buttons: "Review + create", "< Previous", and "Next : Disks >".

Fill the details for the VMSS:

The screenshot shows the 'Create a virtual machine scale set' wizard in the Azure portal. The 'Basics' tab is selected. The 'Subscription' dropdown is set to 'MSDN Platforms'. The 'Resource group' dropdown is set to 'jeetu'. The 'Virtual machine scale set name' input field contains 'demouser-vmss'. The 'Region' dropdown is set to '(US) East US'. The 'Availability zone' dropdown is set to 'None'. At the bottom, there are 'Review + create' and 'Next : Disks >' buttons.

Select the instance name, username, password or SSH Click on “Disk”:

The screenshot shows the 'Create a virtual machine scale set' wizard in the Azure portal. The 'Instance details' section is visible. The 'Image' dropdown is set to 'Ubuntu Server 18.04 LTS - Gen1'. The 'Size' dropdown is set to 'Standard_B1s - 1 vcpu, 1 GiB memory (₹546.97/month)'. Under 'Administrator account', 'Authentication type' is set to 'Password' (radio button selected). The 'Username' input field contains 'jeetu'. The 'Password' and 'Confirm password' input fields both contain masked text. At the bottom, there are 'Review + create' and 'Next : Disks >' buttons.

Select any disk of your choice

The screenshot shows the Azure portal interface for creating a virtual machine scale set. The current step is 'Disks'. Key details include:

- Disk options:**
 - OS disk type: Standard HDD (selected)
 - Encryption type: (Default) Encryption at-rest with a platform-managed key
- Data disks:** A table for adding additional data disks.
- Buttons:** Review + create, < Previous, Next : Networking >

Click on “Networking”:

Provide the required networking details.

The screenshot shows the Azure portal interface for creating a virtual machine scale set. The current step is 'Networking'. Key details include:

- Virtual network configuration:**
 - Virtual network: (New) jeetuvnet462 (recommended)
- Network interface:** A table for defining network interfaces.
- Load balancing:** An option to place the VMSS in the backend pool of an existing Azure load balancing solution.
- Buttons:** Review + create, < Previous, Next : Scaling >

Ensure that you have selected “Use a Load Balancer” option & fill the details:

The screenshot shows the 'Create a virtual machine scale set' wizard in the Azure portal. On the 'Networking' step, there is a table for network interfaces. One interface, 'jeetuvnet462-nic01', is listed with 'CREATE PUBLIC IP' set to 'No', 'SUBNET' as 'default (10.0.2.0/24)', 'NETWORK SECURITY GROUP' as 'Basic', and 'ACCELERATED NETWORKING' as 'Off'. Below the table, under 'Load balancing', it says 'You can place this virtual machine scale set in the backend pool of an existing Azure load balancing solution.' A link 'Learn more' is provided. The 'Use a load balancer' checkbox is checked. Under 'Load balancing settings', there are three bullet points: 'Application Gateway' (HTTP/HTTPS web traffic load balancer with URL-based routing, SSL termination, session persistence, and web application firewall), 'Azure Load Balancer' (supports all TCP/UDP network traffic, port-forwarding, and outbound flows), and 'about Azure Load Balancer'. The 'Load balancing options' dropdown is set to 'Azure load balancer'. The 'Select a load balancer' dropdown shows '(new) demouser-vmss-lb' and 'Create new'. The 'Select a backend pool' dropdown shows '(new) bepool' and 'Create new'. At the bottom, there are 'Review + create' and 'Next : Scaling >' buttons.

In the Scaling option, select “Custom” & fill the other details:

The screenshot shows the 'Create a virtual machine scale set' wizard in the Azure portal. On the 'Scaling' step, the 'Scaling' tab is selected. It displays information about scaling: 'An Azure virtual machine scale set can automatically increase or decrease the number of VM instances that run your application. This automated and elastic behavior reduces the management overhead to monitor and optimize the performance of your application.' A link 'Learn more about VMSS scaling' is provided. Under 'Instance', the 'Initial instance count' is set to '3'. Under 'Scaling', the 'Scaling policy' is set to 'Custom'. The 'Minimum number of instances' is '1' and the 'Maximum number of instances' is '10'. Under 'Scale out', the 'CPU threshold (%)' is '75', 'Duration in minutes' is '10', and 'Number of instances to increase by' is '1'. At the bottom, there are 'Review + create' and 'Next : Management >' buttons.

Create a virtual machine scale set

Maximum number of instances * 10

Scale out

CPU threshold (%) * 75

Duration in minutes * 10

Number of instances to increase by * 1

Scale in

CPU threshold (%) * 25

Number of instances to decrease by * 1

Diagnostic logs

Collect diagnostic logs from Autoscale

Scale-in policy

Configure the order in which virtual machines are selected for deletion during a scale-in operation.
[Learn more about scale-in policies.](#)

Scale-in policy Default - Balance across availability zones and fault domains, then delet...

Review + create < Previous Next : Management >

Click on “Management” & select all default:

Create a virtual machine scale set

Monitoring

Boot diagnostics Enable with managed storage account (recommended) Enable with custom storage account Disable

Identity

System assigned managed identity

Overprovisioning

With overprovisioning turned on, the scale set actually spins up more VMs than you asked for, then deletes the extra VMs once the requested number of VMs are successfully provisioned. Overprovisioning improves provisioning success rates and reduces deployment time. You are not billed for the extra VMs, and they do not count toward your quota limits.
[Learn more about overprovisioning](#)

Enable overprovisioning

Automatic OS upgrades

Enable automatic OS upgrades

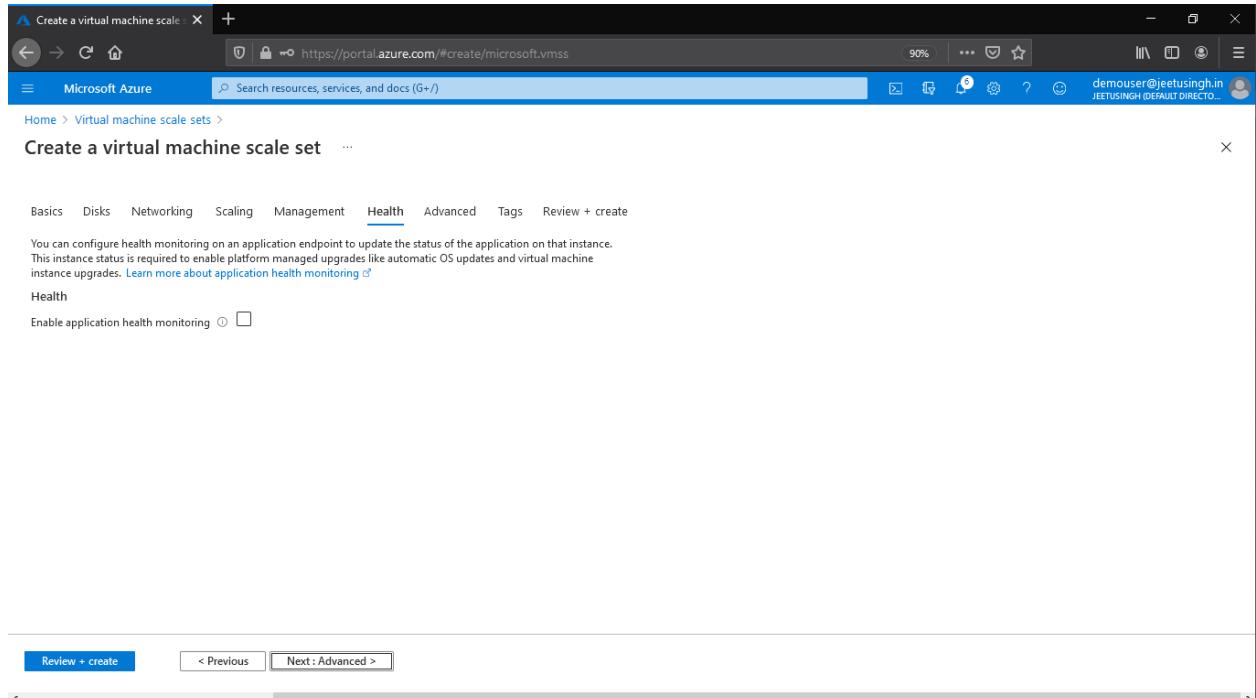
Instance termination

Enable instance termination notification

Review + create < Previous Next : Health >

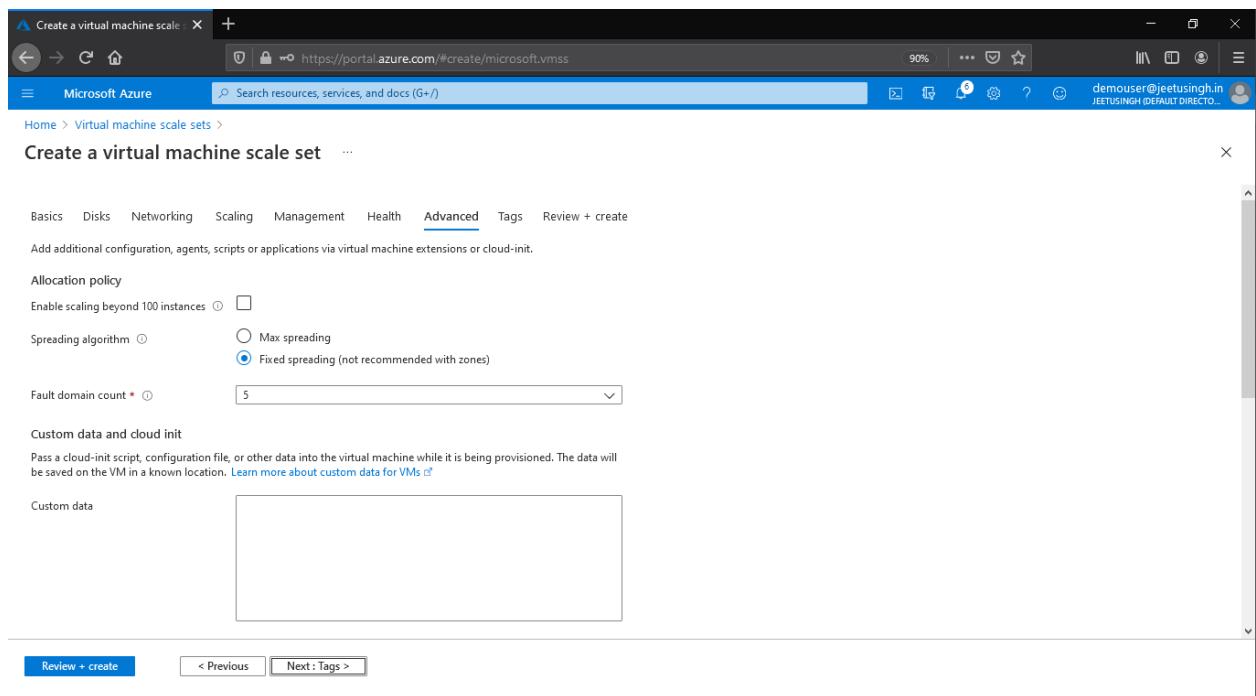
& click on “Health”

If you which to enable health monitoring of the application, then click on the check box (additional charges applied). I am not checking it.



& click on "Advanced"

Fill the details (I selected all default):



& click on "Review + Create".

Once validation passed, click on "Create"

Create a virtual machine scale set

Validation passed

Basics Disks Networking Scaling Management Health Advanced Tags Review + create

Subscription MSDN Platforms
Resource group jeetu
Virtual machine scale set name demouser-vmss
Region East US
Availability zone None
Image Ubuntu Server 18.04 LTS - Gen1
Size Standard B1s (1 vcpu, 1 GiB memory)
Authentication type Password
Username jeetu
Azure Spot No

Instance
Initial instance count: 3

Disks

Create < Previous Next > Download a template for automation

Wait until the deployment is over:

CreateVmss-Canonical.UbuntuServer-18.04-LTS-20210327160938 | Overview

Deployment

Search (Ctrl+ /) Delete Cancel Redeploy Refresh

We'd love your feedback! →

Deployment is in progress

Deployment name: CreateVmss-Canonical.UbuntuServer-18.04-LTS-20210327160938 Start time: 3/27/2021, 4:21:26 PM
Subscription: MSDN Platforms Correlation ID: 89d77a26-9b3e-4922-9185-25a98593db78
Resource group: jeetu

Deployment details (Download)

Resource	Type	Status	Operation details
demouser-vmss	Microsoft.Compute/virtualMach...	Created	Operation details
demouser-vmss-lb	Microsoft.Network/loadBalancers	Created	Operation details
jeetuvnet462	Microsoft.Network/virtualNetwo...	OK	Operation details
basicNsgeetuvnet462-nic01	Microsoft.Network/networkSecu...	OK	Operation details
demouser-vmss-ip	Microsoft.Network/publicIPAddr...	OK	Operation details

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Once done, click on Go to resource:

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#blade/HubsExtension/DeploymentDetailsBlade/overview/id/%2Fsubscriptions%2F...>. The page title is "CreateVmss-Canonical.UbuntuServer-18.04-LTS-20210327160938 | Overview". The main content area displays a green checkmark icon and the message "Your deployment is complete". Below this, it shows deployment details: Deployment name: CreateVmss-Canonical.UbuntuServer-18.04-LTS-20210327160938, Subscription: MSDN Platforms, Resource group: jeetu, Start time: 3/27/2021, 4:21:26 PM, Correlation ID: 89d77a26-9b3e-4922-9185-25a98593db78. There are sections for "Deployment details" and "Next steps", with a prominent blue "Go to resource" button. To the right, there are links to Security Center, Microsoft tutorials, and Azure experts.

Click on the “Instances” under the Settings blade & verify the number of instances running:

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#@jeetusingh.in/resource/subscriptions/b89f4c7e-5ae4-47aa-97cf-5ceee3d843...>. The page title is "demouser-vmss - Microsoft Azure". The left sidebar shows "demouser-vmss | Instances" under "Virtual machine scale set". The main content area shows a table of virtual machine instances:

Name	Computer name	Status	Health state	Provisioning state	Protection policy	Latest model
demouser-vmss_2	demouser-000002	Running	Green	Succeeded	Yes	
demouser-vmss_3	demouser-000003	Running	Green	Succeeded	Yes	
demouser-vmss_5	demouser-000005	Running	Green	Succeeded	Yes	

The left sidebar also includes sections for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, and Settings (with sub-options like Instances, Networking, Scaling, Disks, Operating system, Security, Size, Extensions, Continuous delivery, Configuration, Upgrade policy, and Health and repair).

On left hand side, select the Load Balancer option:

The screenshot shows the Azure portal interface. On the left sidebar, under the 'Load balancers' category, there is a 'Create' button and a 'View' link. A tooltip for 'Load balancers' states: 'With built-in load balancing for cloud services and virtual machines, you can...'. The main content area displays a table with one row, showing a resource group named 'jeetu', located in 'East US', and associated with 'MSDN Platforms'.

And select your load balancer:

The screenshot shows the detailed view of a load balancer named 'demouser-vmss-lb'. The left sidebar lists various settings like 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Settings' (including 'Frontend IP configuration', 'Backend pools', 'Health probes', 'Load balancing rules', 'Inbound NAT rules', 'Outbound rules', 'Properties', and 'Locks'), 'Monitoring' (with 'Diagnostic settings', 'Logs', and 'Alerts'). The main pane displays the 'Essentials' section with details such as Resource group ('jeetu'), Location ('East US'), Subscription ('MSDN Platforms'), and Backend pool ('beppool'). It also shows a 'Configure high availability and scalability for your applications' section with links to 'Balance IPv4 and IPv6 addresses' and 'Build highly reliable applications'.

Copy the load balancer public IP address & paste it in the web browser, if the VMs are configured with apache/nginx web server, then you would find the web page on the browser.