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Dept/Year : AIDS/ 3rd

Topic : Create the Resource Group

Step 1 : Create Resource by adding resource group name & region.

The screenshot shows the Microsoft Azure portal with the URL portal.azure.com/#create/resource-group. The page title is "Create a resource group". The "Basics" tab is selected. In the "Project details" section, the subscription is set to "Azure for Students" and the resource group name is "AIDS". In the "Resource details" section, the region is set to "(Asia Pacific) Central India". At the bottom, there are buttons for "Review + create", "< Previous", and "Next : Tags >".

Step 2: then type Name and value in the tag option.

The screenshot shows the Microsoft Azure portal with the URL portal.azure.com/#create/resource-group. The page title is "Create a resource group". The "Tags" tab is selected. The instructions say "Apply tags to your Azure resources to logically organize them by categories. A tag consists of a key (name) and a value. Tag names are case-insensitive and tag values are case-sensitive." Below this, there is a table with two rows. The first row has "Name" as "CREATED BY" and "Value" as "RAJKUMAR". The second row has "Name" as "" and "Value" as "". At the bottom, there are buttons for "Review + create", "< Previous", and "Next : Review + create >".

Step 3 : click the create button.

The screenshot shows the 'Create a resource group' wizard in the Microsoft Azure portal. The 'Review + create' step is selected. A green success message at the top says 'Validation passed.' Below it, the 'Basics' tab is active, showing the following configuration:

- Subscription: Azure for Students
- Resource group: AIDS
- Region: Central India

The 'Tags' section shows a single tag: 'CREATED BY RAJKUMAR'. At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

Step 5: Resource had been created.

The screenshot shows the 'Resource groups' page in the Microsoft Azure portal. The 'AIDS' resource group is listed under 'Sri Manakula Vinayagar Engineering College (smvec.ac.in)'. The group has the following details:

- Subscription: Azure for Students
- Location: Central India

At the bottom, there are navigation buttons for '< Previous', 'Page', 'of 0', 'Next >', and a 'Give feedback' link.

Topic : Change the Subscription name

Step 1: click the key in the home page

The screenshot shows the Microsoft Azure Home page. In the 'Resources' section, under 'Recent', there are two items: 'AIDS' (Resource group) and 'Rajkumar.G' (Subscription). Below this is a 'See all' link. The 'Tools' section includes links to Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, and Cost Management.

Step 2: Then click the rename and change the name. It will be updated.

The screenshot shows the Microsoft Azure Subscription Overview page for 'Rajkumar.G'. The 'Overview' tab is selected. At the top, there are buttons for 'Upgrade', 'Cancel subscription', 'Rename', 'Change directory', 'Transfer billing ownership', and 'Feedback'. A warning message says 'To check your remaining credit, visit https://www.microsoftazuresponsorships.com'. The 'Essentials' section displays the following information:

Subscription ID	Subscription name
: 005e5670-4856-4565-a699-353f6e029d2d	: Rajkumar.G
Directory	: Sri Manakula Vinayagar Engineering College (smvec.ac.in)
My role	: Account admin
Office 365 license	: Standard O365

Below this, there is a modal window titled 'Updated service menu' with instructions to expand/collapse groups and mark favorite items. A 'Got it!' button is at the bottom right of the modal. To the right of the modal, there is an 'Azure Defender coverage' section with a status message: 'Azure Defender is not enabled for this subscription' and a 'Upgrade coverage' button.

TOPIC : Create the Role

Step 1 : Click the AIDS created resource.

The screenshot shows the Microsoft Azure portal interface. At the top, there are several tabs: 'www.office.com', 'Office 365 Education - Sign up', 'Home | Microsoft 365', 'Home - Microsoft Azure', and 'portal.azure.com/?Microsoft_Azure_Education_correlationId=9e5d07a7-dcca-4684-8b1f-afef465c7a08&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=005e56...'. Below the tabs, the 'Microsoft Azure' logo is visible. A search bar with the placeholder 'Search resources, services, and docs (G+)' is present. On the left, there's a sidebar with sections for 'Azure services' (Create a resource, Virtual machines, Resource groups, Subscriptions, Education, Quickstart Center, Azure AI services, Kubernetes services, App Services, More services), 'Resources' (Recent and Favorite), 'Navigate' (Subscriptions, Resource groups, All resources, Dashboard), and 'Tools' (Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, Cost Management). The main content area displays the 'AIDS' resource group under 'Recent' with a status of 'Resource group' and 'Last Viewed' 20 minutes ago. Other items listed include 'Rajkumar.G' (Subscription) and 'See all'.

Step 2: Go to access control(IAM).

The screenshot shows the Microsoft Azure portal interface, specifically the 'Access control (IAM)' section for the 'AIDS' resource group. The browser tab is 'AIDS - Microsoft Azure'. The left sidebar shows 'AIDS | Access control (IAM)' and other options like Overview, Activity log, Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help. The main content area has a header with 'Check access', 'Role assignments', 'Roles', 'Deny assignments', and 'Classic administrators'. Below this, there are sections for 'My access' (View my level of access to this resource), 'Check access' (Review the level of access a user, group, service principal, or managed identity has to this resource), 'Grant access to this resource' (Add role assignment), 'View access to this resource' (View), 'View deny assignments' (View), 'Create a custom role' (Create a custom role for Azure resources), and 'New! Permissions Management' (Discover, monitor and remediate unused permissions in your Azure environment with...). The URL in the address bar is 'portal.azure.com/?Microsoft_Azure_Education_correlationId=9e5d07a7-dcca-4684-8b1f-afef465c7a08&Microsoft_Azure_Education_newA4E=true&Microsoft_Azure_Education_asoSubGuid=005e56...'. The user's email 'btechaid22141@smvetc...', name 'SRI MANAKULA VINAYAGAR EN...', and profile picture are visible at the top right.

Step 3: In the Grant access to this resource click Add role assignment.

The screenshot shows the Microsoft Azure portal interface. The URL in the address bar is https://portal.azure.com/#Microsoft_Azure_Education_correlationId=9e5d07a7-dcca-4684-8b1f-afef465c7a08&Microsoft_Azure_Education_newAIE=true&Microsoft_Azure_Education_asoSubGuid=005e56.... The page title is "AIDS | Access control (IAM)". The left sidebar shows "Access control (IAM)" is selected. The main content area has tabs: "Check access" (selected), "Role assignments", "Roles", "Deny assignments", and "Classic administrators". Under "Check access", there are sections for "My access" (with a "View my access" button) and "Check access" (with a "Check access" button). Below these are four cards: "Grant access to this resource" (with a "Add role assignment" button), "View access to this resource" (with a "View" button), "View deny assignments" (with a "View" button), "Create a custom role" (with a "Create a custom role" button), and "New! Permissions Management" (with a "Discover, monitor and remediate unused permissions in your Azure environment with Microsoft Entra Permissions Management" link).

Step 4: Select the Classic Virtual Machine Contributor custom option.

The screenshot shows the "Add role assignment" blade. The URL in the address bar is https://portal.azure.com/#Microsoft_Azure_Education_correlationId=9e5d07a7-dcca-4684-8b1f-afef465c7a08&Microsoft_Azure_Education_newAIE=true&Microsoft_Azure_Education_asoSubGuid=005e56.... The page title is "Add role assignment - Microsoft Azure". The top navigation bar includes "Home > AIDS | Access control (IAM) > Add role assignment". The main content area has tabs: "Role" (selected), "Members", "Conditions", and "Review + assign". The "Job function roles" tab is selected, showing a list of roles: "Privileged administrator roles" (Reader, ACR Registry Catalog Lister, ACR Repository Contributor, ACR Repository Reader, ACR Repository Writer, AcrDelete, AcrImageSigner, AcrPull, AcrPush, AcrQuarantineReader) and "Grant access to Azure resources based on job function, such as the ability to create virtual machines." Below this is a search bar "Search by role name, description, permission, or ID" and filters "Type : All" and "Category : All". A table lists the roles with columns: Name, Description, Type, Category, and Details. At the bottom are buttons for "Review + assign", "Previous", "Next", and "Feedback".

Step 5 : Add the members and then role will created.

The screenshot shows the Microsoft Azure portal interface for adding a role assignment. The 'Members' tab is active. A search bar at the top right contains the text 'rajkuma'. A list of users is shown, with five entries visible: Hehma Gayatri.R Rajkumar, Jayanth Rajkumar.N, Maria Christina.R Rajkumar.N, Raj Kumar Kondepudi, and Rajkumar.M M. Below this list, a section titled 'Selected members:' shows two users: Sidharth Sreedhar and Rajkumar G. At the bottom of the page, there are navigation buttons for 'Review + assign', 'Previous', 'Next', and 'Select'.

Step 6: remove the member by select the member and then click delete option.

The screenshot shows the Microsoft Azure portal interface for managing role assignments. The 'Access control (IAM)' blade is open. A modal dialog box titled 'Remove role assignments' is displayed, asking 'Are you sure you want to remove the selected role assignments?'. Below the dialog, the main list shows four items under the 'All' tab, all assigned to 'Classic Virtual Machine Contributor'. The list includes users Rajkumar G, Sidharth Sreedhar, and others. The interface includes a search bar, filter buttons for Type, Role, Scope, and Group by, and a 'View assignments' link.

Topic : Create Virtual Machine

Step 1 : Click Create Virtual Machine

The screenshot shows the Microsoft Azure portal's 'Virtual machines' page. At the top, there are navigation links like 'Home', 'Virtual machines', and 'Create'. Below the navigation bar, there are several filter options: 'Subscription equals all', 'Type equals all', 'Resource group equals all', 'Location equals all', and a 'Add filter' button. A search bar at the top right contains the placeholder 'Search resources, services, and docs (G+)'. The main content area displays a message: 'No virtual machines to display. Create a virtual machine that runs Linux or Windows. Select an image from the marketplace or use your own customized image.' Below this message is a large blue 'Create' button with a '+' icon. There are also links to 'Learn more about Windows virtual machines' and 'Learn more about Linux virtual machines'. At the bottom right of the page, there is a 'Give feedback' link.

Step 2 : Then select see all image option (windows 11 Enterprise N,version 22H2-x64 Gen2) and also select Size (Standard_D2s_V3 – vcpus 8GiB memory)

The screenshot shows the 'Create a virtual machine' wizard, step 1: Set image. The page title is 'Create a virtual machine'. It includes a note: 'You can now select multiple zones. Selecting multiple zones will create one VM per zone. Learn more'. The 'Image' dropdown is set to 'Windows 11 Enterprise N, version 22H2 - x64 Gen2'. The 'VM architecture' dropdown is set to 'x64', with a note: 'Arm64 is not supported with the selected image.' Other visible fields include 'Security type' (set to 'Trusted launch virtual machines'), 'Run with Azure Spot discount' (unchecked), 'Size' (set to 'Standard_D2s_v3 - 2 vcpus, 8 GiB memory (\$6.376.87/month)'), and 'Enable Hibernation' (unchecked). At the bottom, there are buttons for 'Administrator account', 'Next: Disks >', and 'Review + create'.

Step 3: Select OS disk option and then click (256 GiB (P15)) and select delete with VM

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The current step is 'Disks'. The 'OS disk size' dropdown is set to '256 GiB (P15)'. The 'Delete with VM' checkbox is checked. A note indicates that some images are smaller than the selected size and provides a link to learn how to expand the disk partition. Below the disks section, there are tabs for 'Networking' and 'Review + create'.

Step 4: After this select Hosting Caching None.

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The current step is 'Disks'. The 'OS disk size' dropdown is set to '256 GiB (P15)'. The 'Delete with VM' checkbox is checked. The 'Key management' dropdown is set to 'Platform-managed key'. The 'Host caching' dropdown is set to 'None'. Below the disks section, there are tabs for 'Networking' and 'Review + create'.

Step 5 : Then Disable the boot diagnostics and go to advanced setting.

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The 'Monitoring' tab is selected. In the 'Diagnostics' section, the 'Boot diagnostics' option is set to 'Disable' (radio button selected). Other options include 'Enable with managed storage account (recommended)' and 'Enable with custom storage account'. The 'Advanced' tab is also visible in the navigation bar.

Step 6 : In advanced setting nothing to do go to Tags.

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, with the 'Advanced' tab selected. It includes sections for 'Extensions', 'VM applications', and 'Custom data'. The 'Review + create' button is highlighted at the bottom.

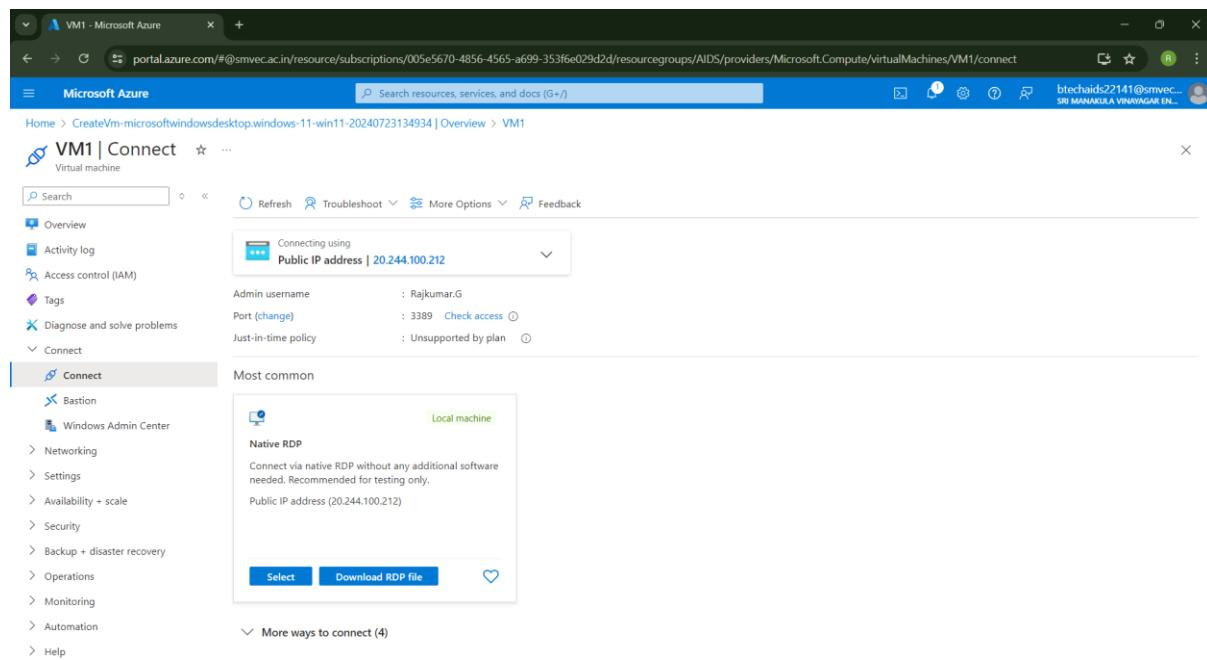
Step 6: It will deploy take few mintues.

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id%2Fsubscriptions%2F005e5670-4856-4565-a699-353f6e029d2d%2FresourceGroups%2FAlDS%2Fproviders%2FMicrosoft.Compute/virtualMachines/VM1/overview>. The page title is "CreateVm-microsoftwindowsdesktop.windows-11-win11-20240723134934 | Overview". The left sidebar shows "Deployment" with "Overview" selected. The main content area displays the deployment status: "Deployment is in progress". It lists resources and their status: VM1 (Created), vm1388_z1 (Created), VM1_DataDisk_0 (OK), VM1-nsg (OK), VM1-ip (OK), and VM1-vnet (OK). The right sidebar includes links for Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

Step 7: Go to connect option.

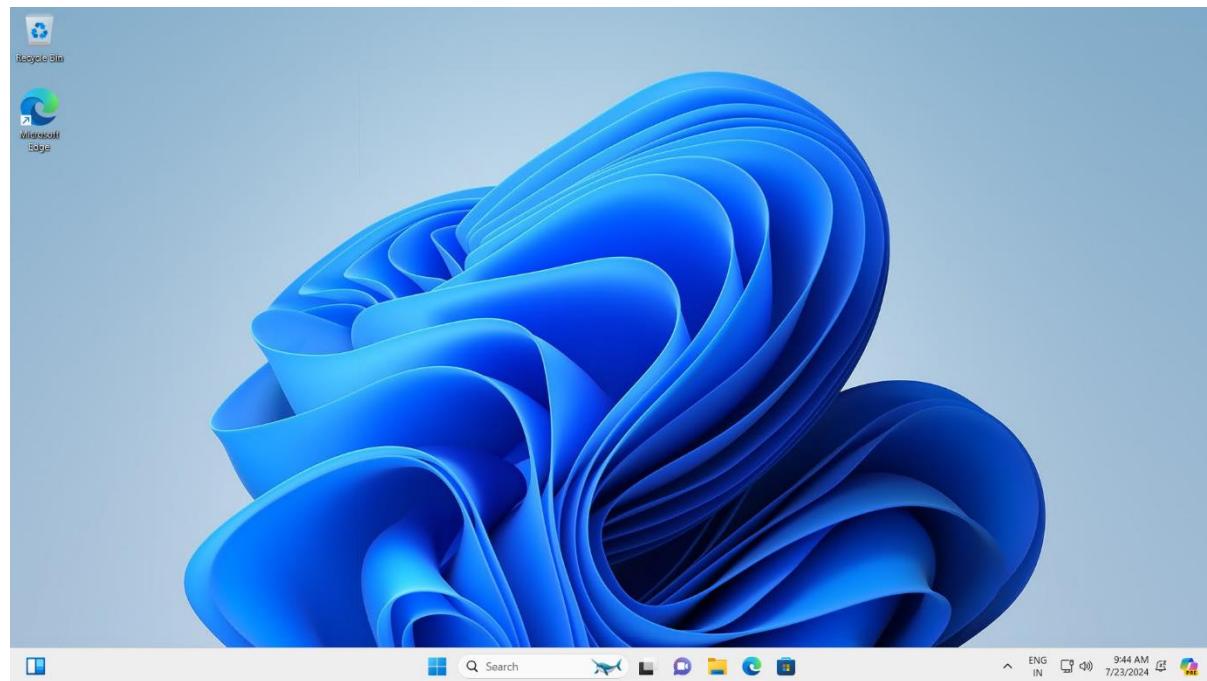
The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#@smvec.ac.in/resource/subscriptions/005e5670-4856-4565-a699-353f6e029d2d/resourcegroups/AlDS/providers/Microsoft.Compute/virtualMachines/VM1/overview>. The page title is "VM1 - Microsoft Azure". The left sidebar shows "Virtual machine" with "Overview" selected. The top navigation bar has a "Connect" button highlighted. The main content area shows the VM1 overview details, including its status as "Running", location "Central India (Zone 1)", and operating system "Windows (Windows 11 Enterprise N)". It also shows network information like public IP address "20.244.100.212" and virtual network "VM1-vnet/default". The right sidebar includes "JSON View", "Networking" (showing public and private IP addresses), and "Size".

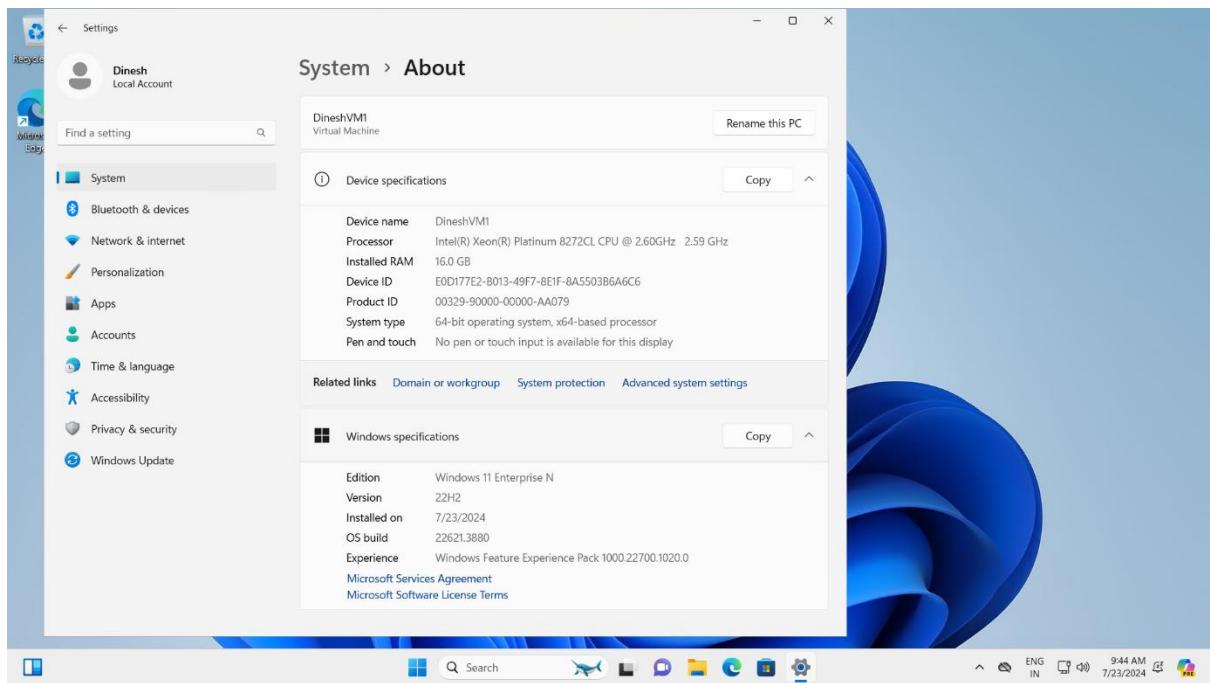
Step 8: And then download RDP & install it by putting (password of the virtual machine).



The screenshot shows the Microsoft Azure portal interface for a virtual machine named VM1. The left sidebar contains navigation links such as Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Connect, Bastion, Windows Admin Center, Networking, Settings, Availability + scale, Security, Backup + disaster recovery, Operations, Monitoring, Automation, and Help. The main content area is titled 'VM1 | Connect' and shows connection details: Admin username (Rajkumar.G), Port (3389), and Just-in-time policy (Unsupported by plan). Below this, there's a section for 'Native RDP' with a Public IP address (20.244.100.212) and buttons for 'Select' and 'Download RDP file'. At the bottom, there's a link to 'More ways to connect (4)'.

Step 9: The new virtual machine will open.(Go to setting and check it)





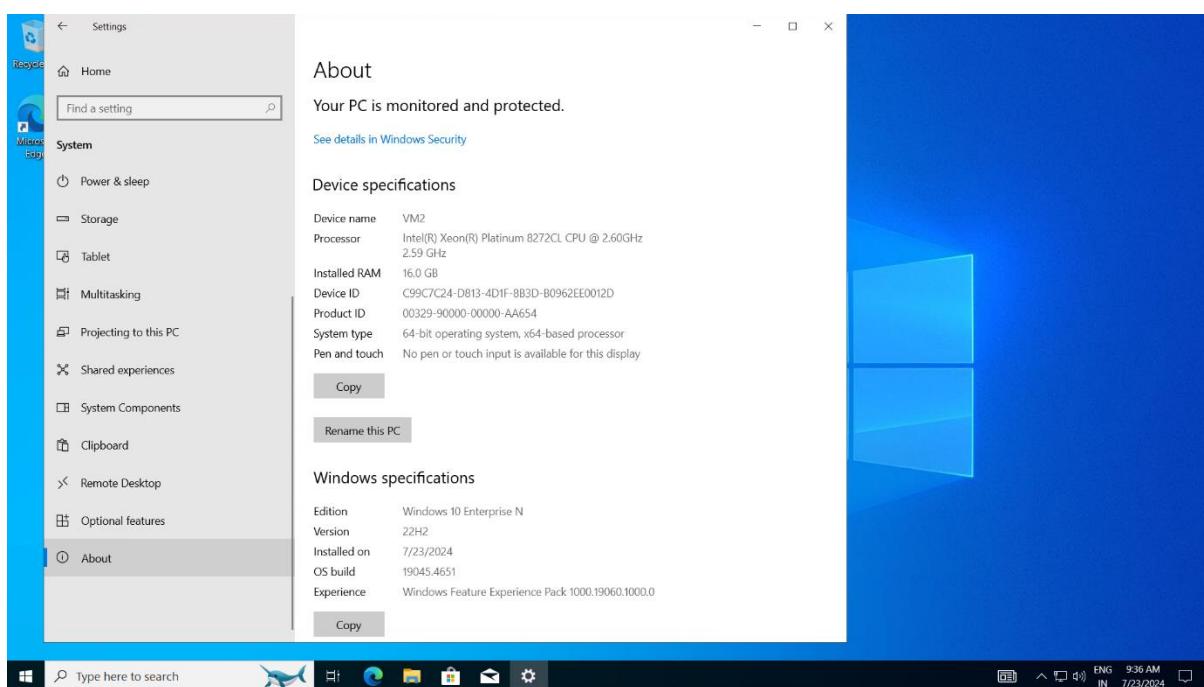
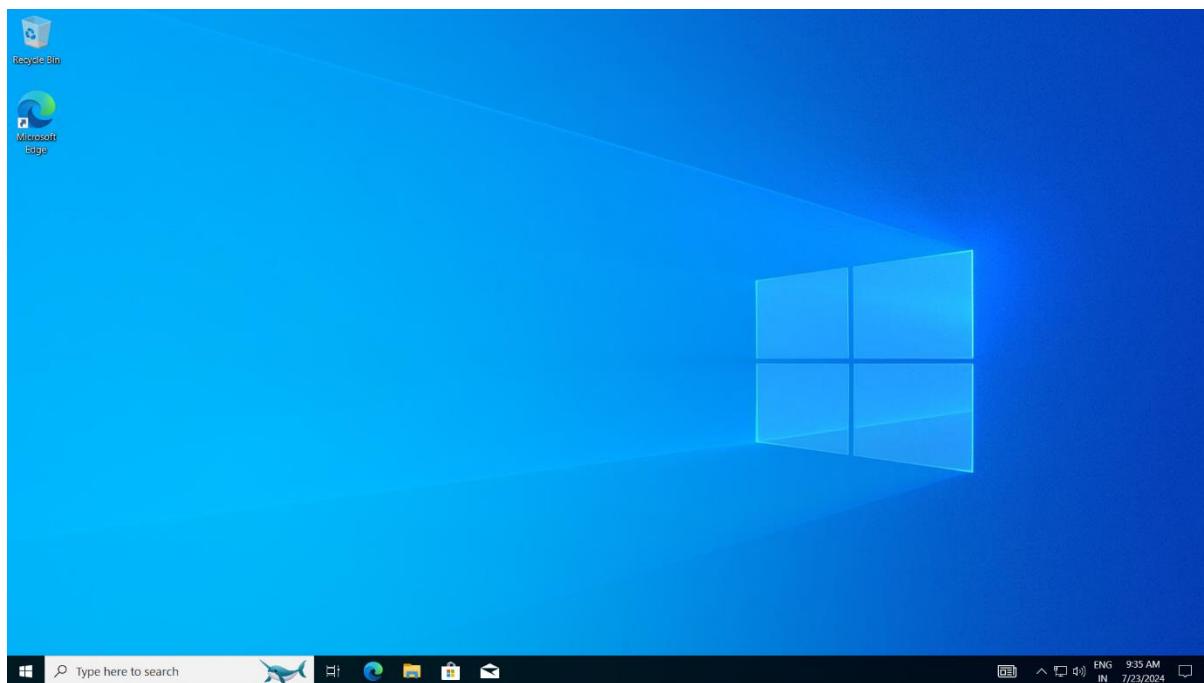
Step 11: If you want delete the virtual machine (select VM1 and click delete option).

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the URL "portal.azure.com/#view/HubsExtension/BrowseResource/resourceType/Microsoft.Compute%2FVirtualMachines", the Microsoft Azure logo, and a search bar. The main content area is titled "Virtual machines". It shows a list of virtual machines with the following details:

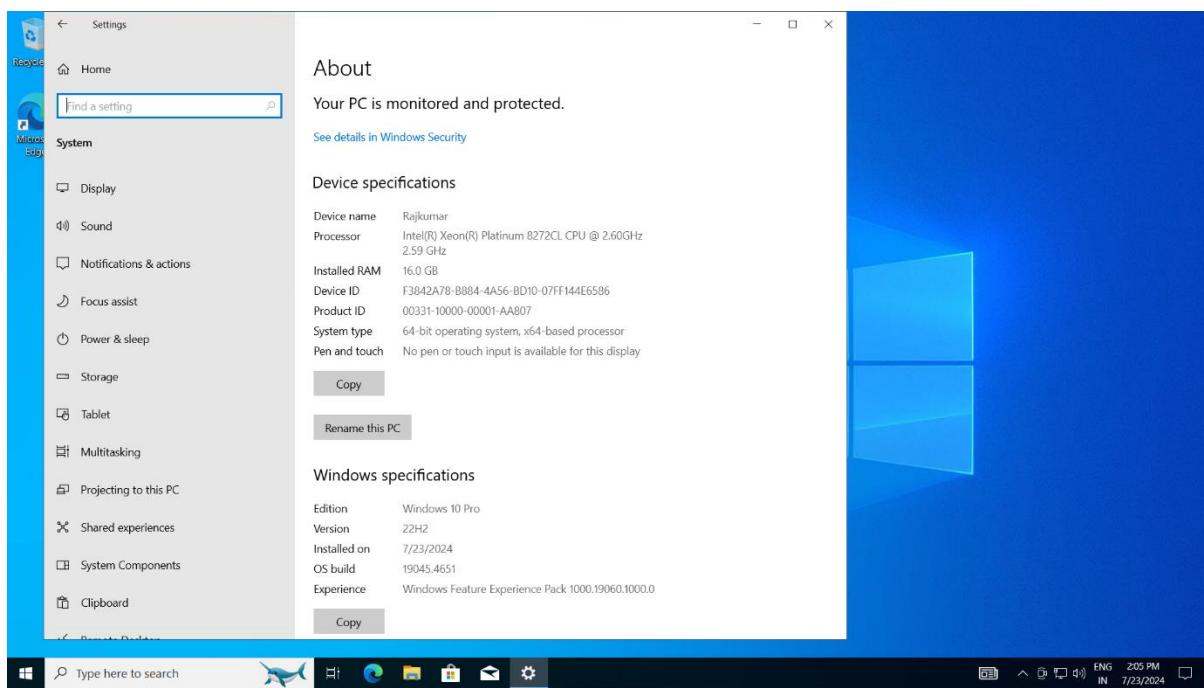
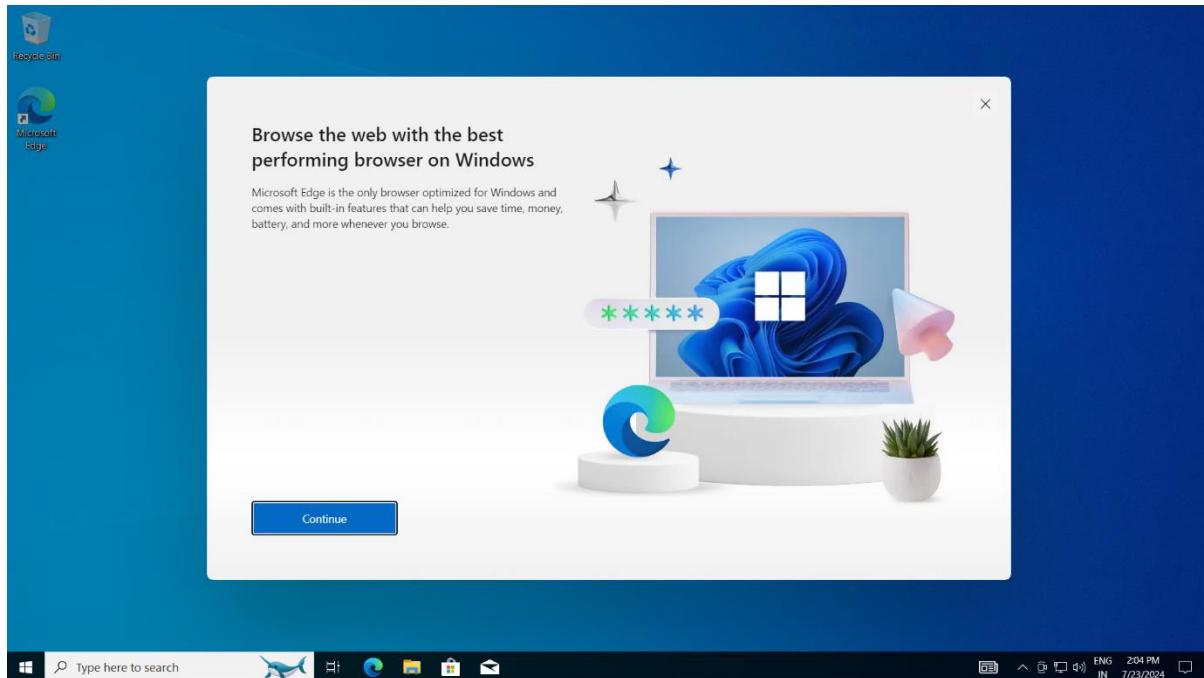
Name	Type	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address	Disks
VM1	Virtual machine	Rajkumar.G	AIDS	Central India	Running	Windows	Standard_D4s_v3	20.244.100.212	2

At the bottom of the list, there are pagination controls: '< Previous', 'Page 1 of 1', and 'Next >'. On the right side of the page, there are links for "Give feedback" and other account-related options.

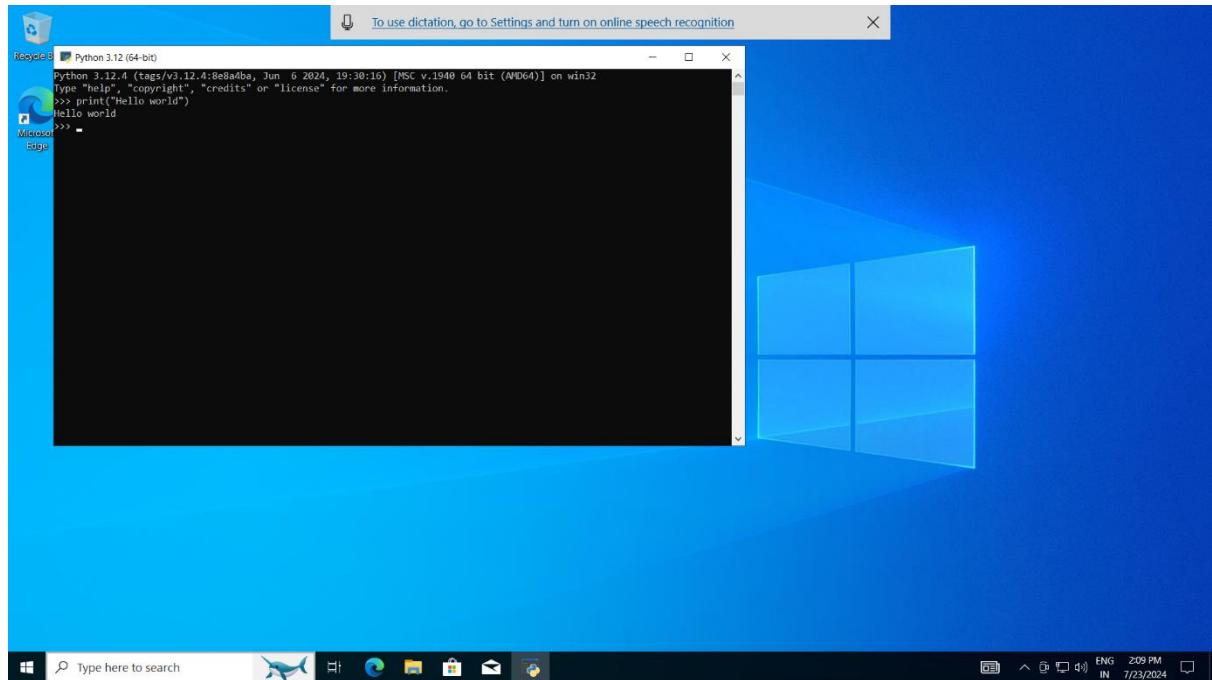
WORKOUT OF WINDOWS 10



WORKOUT OF WINDOWS 10 PRO



Python In Virtual Machine WINDOWS 10 PRO



Topic : Create Server

Step 1: To create the server give name and then image into Windows Server 2022 Datacenter: Azure Edition Hotpatch x64 Gen2 .

Region * (Asia Pacific) Central India

Availability options No infrastructure redundancy required

Security type Trusted launch virtual machines

Image * Windows Server 2022 Datacenter: Azure Edition Hotpatch - x64 Gen2

VM architecture x64

Run with Azure Spot discount

Size * Standard_D4s_v3 - 4 vcpus, 16 GiB memory (₹23,928.45/month)

Enable Hibernation

Administrator account Rajkumar.G

Step 2: Select the Select RDP (3389) in inbound ports.

Enable Hibernation

Inbound port rules

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

Public inbound ports * Allow selected ports

Select inbound ports * RDP (3389)

Step 3: Select the source type as none.

The screenshot shows the 'Create a new disk' page in the Microsoft Azure portal. The 'Name' field contains 'Sever_DataDisk_0'. The 'Source type' dropdown is set to 'None (empty disk)'. Other options shown in the dropdown include 'Snapshot' and 'Storage blob'. The 'Key management' dropdown is set to 'Platform-managed key'. The 'Enable shared disk' section has 'No' selected. The 'Delete disk with VM' checkbox is unchecked. At the bottom right are 'OK' and 'Give feedback' buttons.

Step 4: Select the option os disk size and change read type as none.

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal. The 'OS disk size' dropdown is set to 'Image default (127 GB)'. The 'OS disk type' dropdown is set to 'Premium SSD (locally-redundant storage)'. The 'Delete with VM' checkbox is checked. The 'Key management' dropdown is set to 'Platform-managed key'. The 'Enable Ultra Disk compatibility' checkbox is unchecked. Below this, the 'Data disks for Sever' section shows a table with one entry: LUN 0, Name 'Sever_DataDisk_0', Size (GB) 1024, Disk type 'Premium SSD LRS', Host caching 'None', and Delete with VM checked. At the bottom are buttons for 'Create and attach a new disk', 'Attach an existing disk', and navigation links like '< Previous', 'Next : Networking >', and 'Review + create'.

Step 5: Directly go the option monitoring.

Public inbound ports * None Allow selected ports
Select inbound ports *
⚠️ 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.

Delete public IP and NIC when VM is deleted

Enable accelerated networking

Load balancing
You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

Load balancing options None Azure load balancer Application gateway
Supports all TCP/UDP network traffic, port-forwarding, and outbound flows.
Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

< Previous Next : Management > Review + create Give feedback

Step 6: Disable Boot diagnostics.

Basics Disks Networking Management **Monitoring** Advanced Tags Review + create
Configure monitoring options for your VM.

Alerts
Enable recommended alert rules

Diagnostics
Boot diagnostics Enable with managed storage account (recommended) Enable with custom storage account Disable
Enable OS guest diagnostics
Enable application health monitoring

< Previous Next : Advanced > Review + create Give feedback

Step 7: Go directly to Tags create name and value.

The screenshot shows the Microsoft Azure portal interface for creating a virtual machine. The current step is 'Tags'. A table lists a single tag entry:

Name	Value	Resource
CREATED BY	RAJKUMAR	13 selected

A note below the table states: "Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated."

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

Step 8: Open the VM using RDP File.

The screenshot shows the Windows Server Manager dashboard. On the left, a sidebar shows 'Dashboard', 'Local Server', 'All Servers', 'File and Storage Services', and 'IIS'. The main area displays the 'WELCOME TO SERVER MANAGER' screen with the following content:

- QUICK START**:
 - 1 Configure this local server
 - 2 Add roles and features
 - 3 Add other servers to manage
 - 4 Create a server group
 - 5 Connect this server to cloud services
- WHAT'S NEW**
- LEARN MORE**

ROLES AND SERVER GROUPS
Roles: 2 | Server groups: 1 | Servers total: 1

Role/Group	Count
File and Storage Services	1
IIS	1
Local Server	1
All Servers	1

At the bottom, there is a search bar and system status icons.

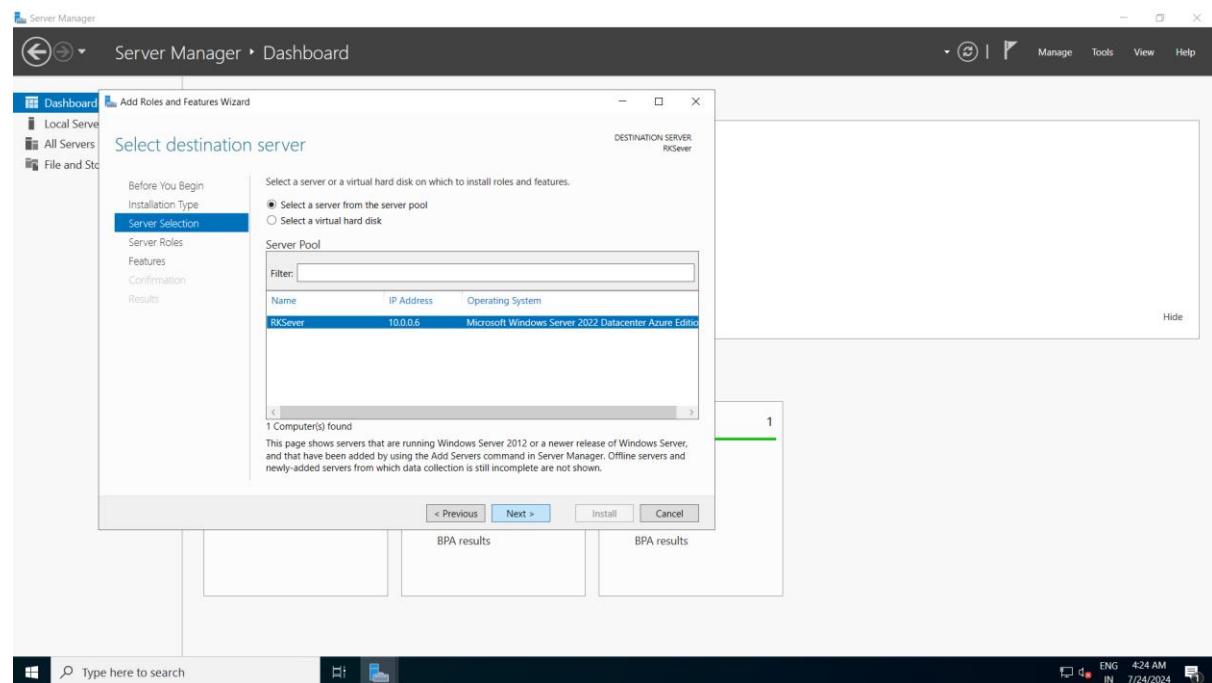
Step 9: Then off the IE Enhanced Security Configuration.

The screenshot shows the Windows Server Manager interface. On the left, the navigation pane is visible with 'Local Server' selected. The main area displays the 'PROPERTIES' tab for the server 'RKSever'. It shows basic information like computer name, workgroup, and system configuration. Below this is the 'EVENTS' section, which lists several system events, including errors related to the Microsoft-Windows-Service Control Manager and Application errors. At the bottom, there's a search bar and a taskbar with system status icons.

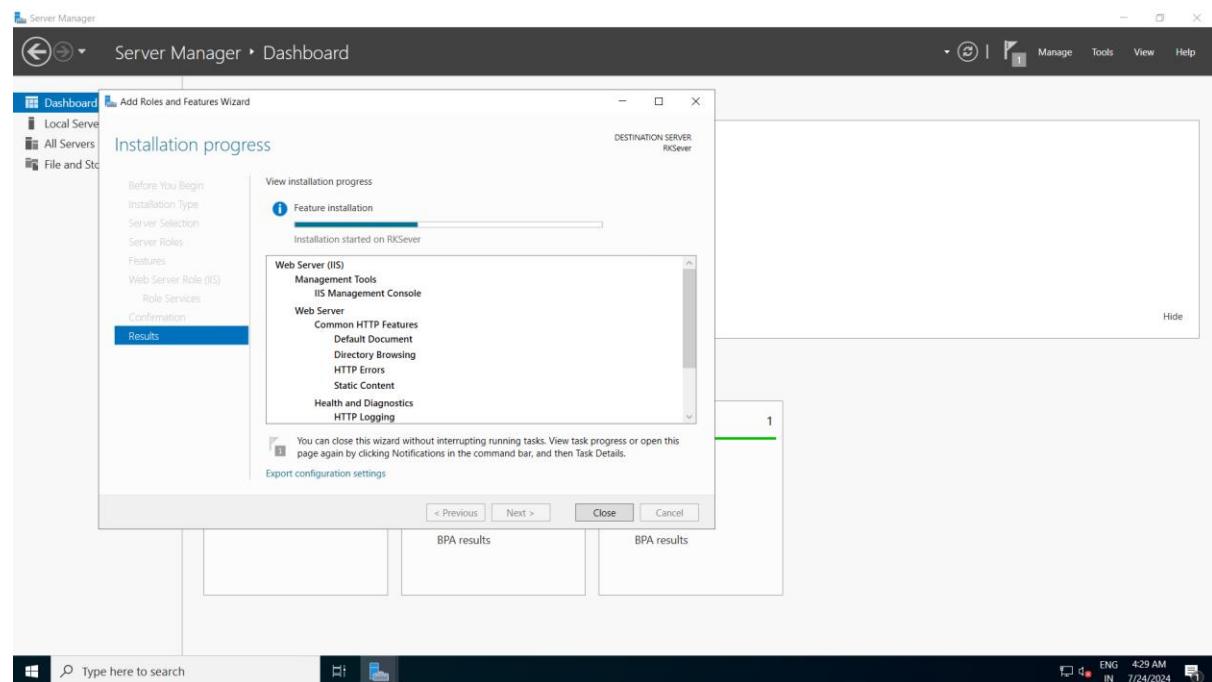
Step 10: Install role and features.

The screenshot shows the 'Add Roles and Features Wizard' in progress. The 'Before you begin' step is displayed. It provides instructions for using the wizard to install roles, role services, or features based on organizational needs. It also lists prerequisites: a strong administrator password, static IP addresses, and up-to-date security updates. A note says to skip the page if prerequisites are met. At the bottom, there are buttons for 'Next >', 'Install', and 'Cancel'.

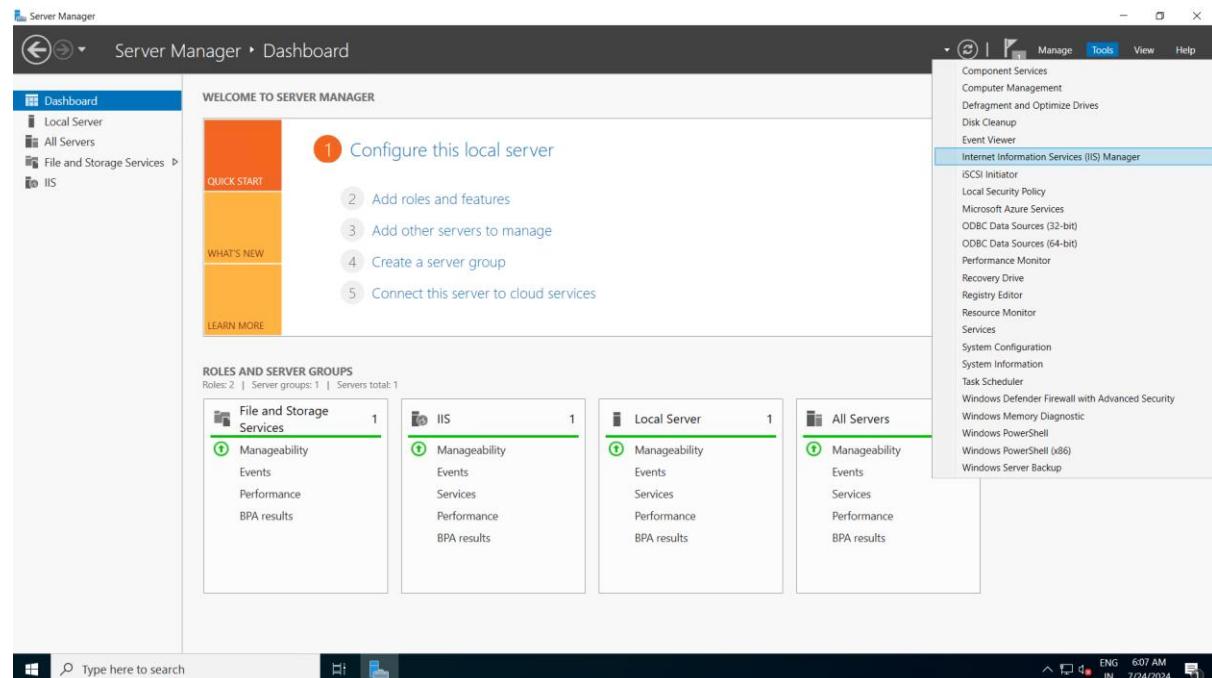
Step 11: click next button.



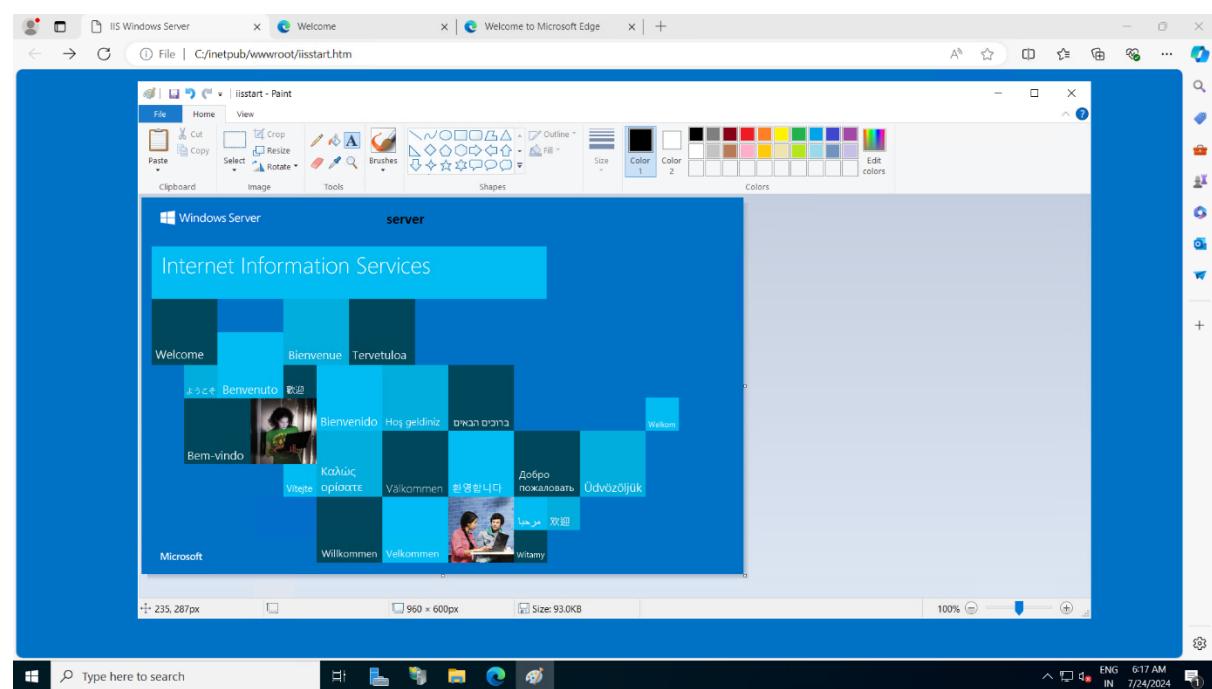
Step 12: Install it directly.



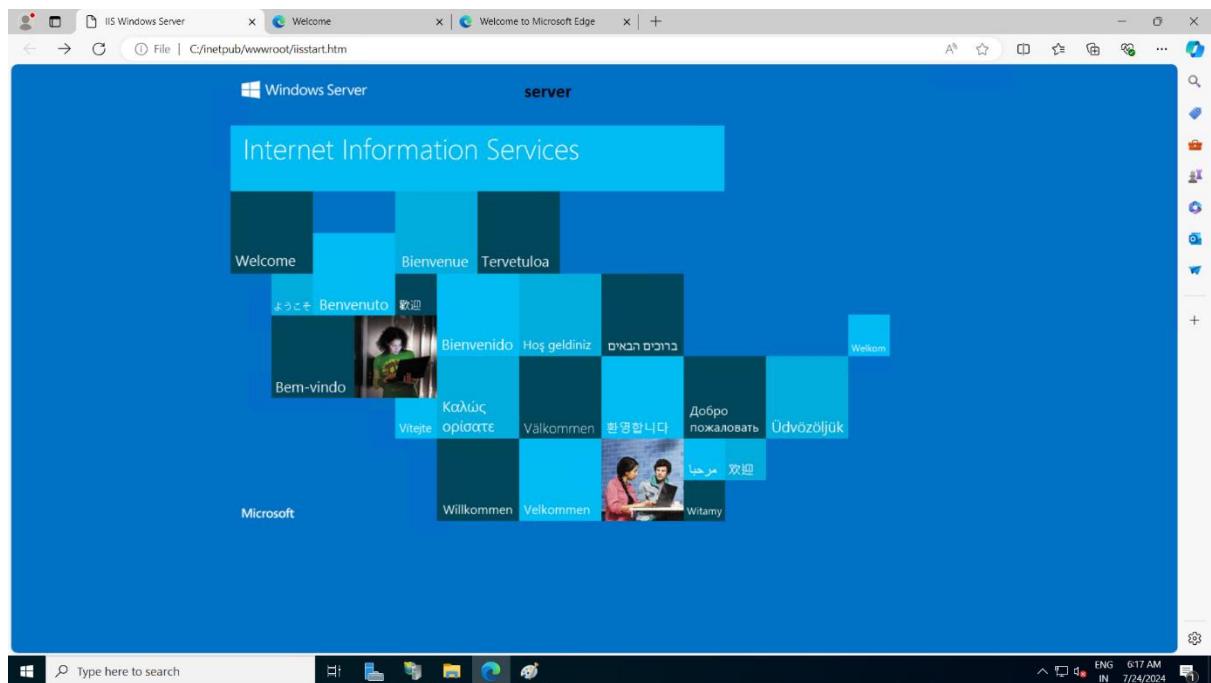
Step 13: Go to tools (IIS).



Step 14: Go to file explorer and edit the image if edit the image the server webpage will change.



Step 15: Can see the webpage in online by the file.



Step 16: Delete the virtual machine if you did not use it.

A screenshot of the Microsoft Azure portal. The URL in the address bar is 'portal.azure.com/#view/HubsExtension/BrowseResource/resourceType/Microsoft.Compute%2FVirtualMachines'. The page title is 'Virtual machines'. The user is Sri Manakula Vinayagar Engineering College. The interface shows a list of virtual machines. One entry is selected: 'RK-Sever' (Type: Virtual machine, Subscription: Rajkumar.G, Resource group: AIDS, Location: Central India, Status: Running, Operating system: Windows, Public IP address: Standard_D4s_v3, 4.247.157.170, Disks: 2). There are filters at the top and pagination controls at the bottom.

Topic : Create Scale sets

Step 1: create scaling configuration

The screenshot shows the Microsoft Azure portal interface for creating a scaling configuration. On the left, there's a sidebar with 'Scaling conditions' and a table showing one 'Default condition' with 'Autoscale' mode, '(2, 20, 2)' instance count, and '(80%, 20%)' CPU threshold. On the right, the main area is titled 'Add a scaling condition'. It has fields for 'Condition name' (set to 'Rajkumar'), 'Scale mode' (set to 'Autoscaling'), 'Initial instance count' (set to 1), 'Instance limit' (with 'Minimum' set to 1 and 'Maximum' set to 10), 'Scale out' (with 'CPU threshold greater than' set to 20), and 'Increase instance count by' (set to 1). At the bottom are 'Save' and 'Cancel' buttons.

Step 2: And also add a scaling condition.

This screenshot shows the same Azure portal interface as the previous one, but with a second scaling condition being added. The 'Scaling conditions' table now includes two rows: 'Default condition' and a new row for 'Condition name: Rajkumar'. The 'Add a scaling condition' dialog on the right is identical to the first one, with all settings (scale mode, instance counts, thresholds) remaining the same. The 'Save' button is visible at the bottom.

Step 3: Change the OS size into 128GB.

OS disk

OS disk size Image default (127 GB)

OS disk type Premium SSD (locally-redundant storage)

Key management Platform-managed key

Enable Ultra Disk compatibility

Ultra Disks can be used only with Virtual Machine Scale Sets in an Availability Zone.

Data disks

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

LUN	Name	Size (GiB)	IOPS	THRO...	Disk type	Host cachin

Create and attach a new disk

Advanced

< Previous Next : Networking > Review + create Give feedback

Step 4: Create and attach the a new disk.

Network interface

A network interface enables an Azure virtual machine to communicate with internet, Azure, and on-premises resources. A VM can have one or more network interfaces.

+ Create new nic	Delete
<input type="checkbox"/> NAME CREATE PUBLI... SUBNET NETWORK SECURI... ACCELERATED N...	
<input type="checkbox"/> AIDS-vnet-nic01 Yes default (10.1.0.0/20) Basic On	

2 public IP addresses are needed for this configuration, but only 0 (of 3) remain in your subscription 'Rajkumar.G'. To meet your quota, you can disable the public IP address from the new NIC(s) or reduce the number of VMSS instances requested on the Scaling tab to get below the limit.

Load balancing

You can place this virtual machine in the backend pool of an existing Azure load balancing solution. Learn more [\(opens in new tab\)](#)

Load balancing options None

Azure load balancer Supports all TCP/UDP network traffic, port-forwarding, and outbound flows.

Application gateway Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

< Previous Next : Management > Review + create Give feedback

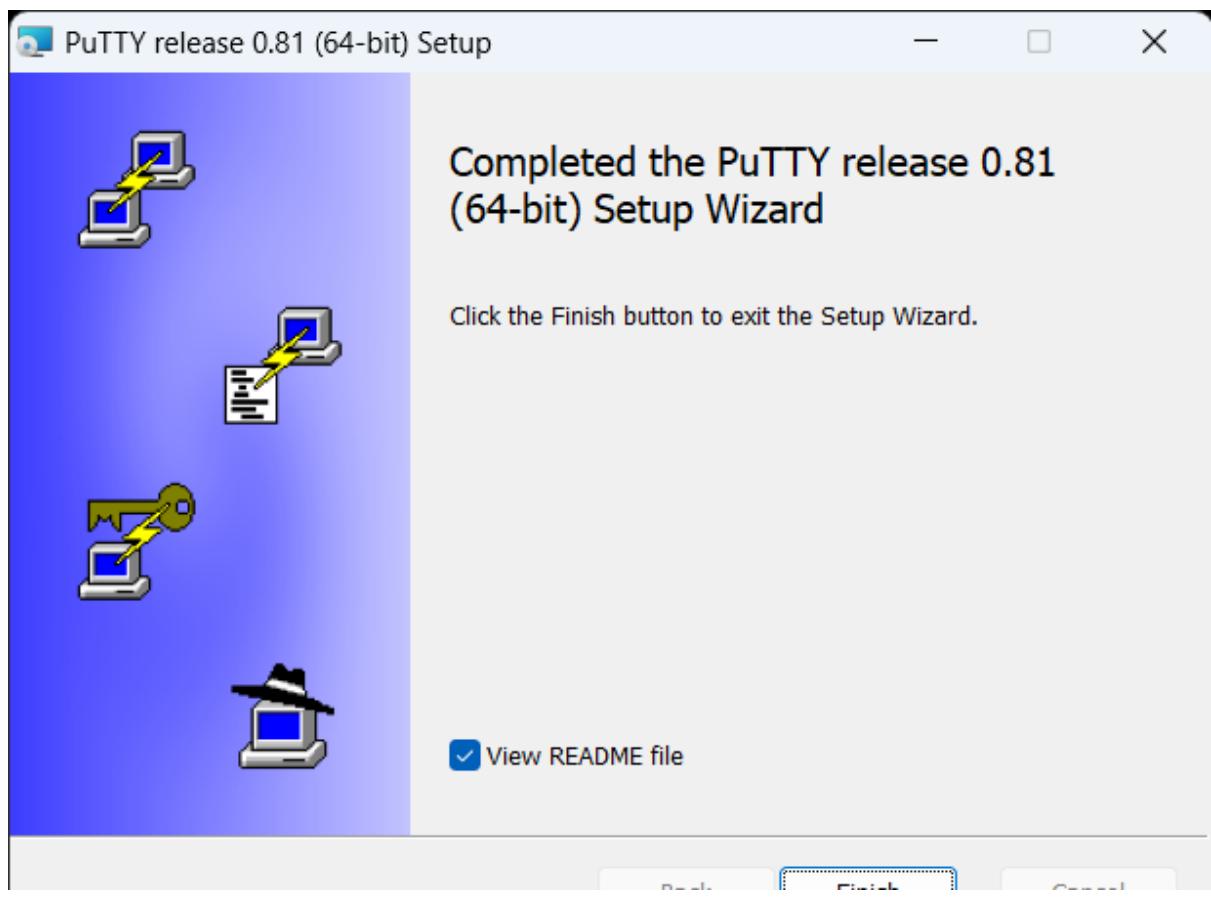
Step 5: Then disable the boot diagnostics.

The screenshot shows the Azure portal interface for creating a virtual machine scale set. The 'Management' tab is active. In the 'Monitoring' section, the 'Boot diagnostics' setting is set to 'Disable'. Other monitoring options like 'Enable notifications for instance termination' and 'Enable notifications for OS image upgrades or re-image' are available but not selected. The 'Review + create' button is visible at the bottom.

Step 6: In the network interface click the basic option on it.

The screenshot shows the 'Edit network interface' page. The 'Basic' option is selected for the 'NIC network security group'. The 'Public inbound ports' section shows 'None' selected. A note at the bottom states: 'All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.' The 'OK' button is visible at the bottom.

Step 7: After this download and install putty.



Step 8: Then put login database and type some code check the information.

A screenshot of a terminal window titled "Rajkumar@VM:~". The session shows a successful login as "Rajkumar" and prompts for the password. It then provides instructions to activate the web console and register with Red Hat Insights. The command "[Rajkumar@VM ~] \$" is visible at the bottom.

Step 9: Then type ifconfig.

```
Rajkumar@VM:~  
[P] login as: Rajkumar  
[P] Rajkumar@74.225.169.205's password:  
Activate the web console with: systemctl enable --now cockpit.socket  
  
Register this system with Red Hat Insights: insights-client --register  
Create an account or view all your systems at https://red.ht/insights-dashboard  
[Rajkumar@VM ~]$ ifconfig  
enP1354s1: flags=6211<UP,BROADCAST,RUNNING,SLAVE,MULTICAST> mtu 1500  
      ether 7c:1e:52:0f:3f:c3 txqueuelen 1000 (Ethernet)  
        RX packets 111257 bytes 165368612 (157.7 MiB)  
        RX errors 0 dropped 0 overruns 0 frame 0  
        TX packets 13111 bytes 2825586 (2.6 MiB)  
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
      inet 10.0.0.6 netmask 255.255.255.0 broadcast 10.0.0.255  
        inet6 fe80::7e1e:52ff:fe0f:3fc3 prefixlen 64 scopeid 0x20<link>  
          ether 7c:1e:52:0f:3f:c3 txqueuelen 1000 (Ethernet)  
            RX packets 14009 bytes 161702103 (154.2 MiB)  
            RX errors 0 dropped 0 overruns 0 frame 0  
            TX packets 12565 bytes 2789334 (2.6 MiB)  
            TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Step 9: Type the users for the user information and echo \$path to detect the path where we used.

```
Rajkumar@VM:~  
[Rajkumar@VM ~]$ users  
Rajkumar  
[Rajkumar@VM ~]$ df -h  
Filesystem           Size   Used  Avail Use% Mounted on  
devtmpfs              7.7G    0    7.7G  0% /dev  
tmpfs                 7.8G    0    7.8G  0% /dev/shm  
tmpfs                 7.8G   8.6M  7.7G  1% /run  
tmpfs                 7.8G    0    7.8G  0% /sys/fs/cgroup  
/dev/mapper/rootvg-rootlv  2.0G   74M  2.0G  4% /  
/dev/mapper/rootvg-usrlv   10G   1.8G  8.3G 18% /usr  
/dev/mapper/rootvg-homelv 1014M   40M  975M  4% /home  
/dev/mapper/rootvg-tmplv   2.0G   47M  2.0G  3% /tmp  
/dev/sda1                496M  106M  390M 22% /boot  
/dev/mapper/rootvg-varlv   8.0G  608M  7.4G  8% /var  
/dev/sda15                495M  5.8M  489M  2% /boot/efi  
/dev/sdb1                 32G   28K   30G  1% /mnt  
tmpfs                  1.6G    0   1.6G  0% /run/user/1000  
[Rajkumar@VM ~]$ du -h  
0      ./ssh  
12K     .  
[Rajkumar@VM ~]$ echo $PATH  
/home/Rajkumar/.local/bin:/home/Rajkumar/bin:/usr/local/bin:/usr/bin:/usr/local/
```

Topic : Atomatic Delete of virtual machine

Step 1: Create a virtual machine and select the Availability options :- Availability zone and the Availability zone :- Zone 1.

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

Subscription * Rajkumar.G

Resource group * AIDS

Virtual machine name * scaleset

Region * (Asia Pacific) Central India

Availability options * Availability zone

Zone options * Self-selected zone
Choose up to 3 availability zones, one VM per zone.
Azure-selected zone (Preview)
Let Azure assign the best zone for your needs.
Using an Azure-selected zone is not supported in region 'Central India'.

Availability zone * Zone 1
You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

< Previous Next : Disks > Review + create Give feedback

Step 2: Select inbound ports HTTP (80), HTTPS (443), RDP (3389)

Public IP * (new) VM1-ip

NIC network security group * None Basic Advanced

Public inbound ports * HTTP (80), HTTPS (443), RDP (3389)

⚠️ 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.

Delete public IP and NIC when VM is deleted

Enable accelerated networking

Load balancing
You can place this virtual machine in the backend pool of an existing Azure load balancing solution. [Learn more](#)

< Previous Next : Management > Review + create Give feedback

Step 3: Then deploy it.

The screenshot shows the Microsoft Azure portal interface for a virtual machine named VM1. The left sidebar has a 'Connect' section selected. A central panel titled 'Connecting using' shows 'Public IP address | 98.70.72.78'. Below this, connection details are listed: Admin username (Rajkumar), Port (3389), and Just-in-time policy (Unsupported by plan). A 'Native RDP' section is shown with a 'Select' button and a 'Download RDP file' link. At the bottom, there's a link to 'More ways to connect (4)'. The top navigation bar shows the URL as portal.azure.com/#@smvec.ac.in/resource/subscriptions/005e5670-4856-4565-a699-353f6e029d2d/resourcegroups/Rajkumar_group/providers/Microsoft.Compute/virtualMachines/VM1... Overview > VM1.

Step 4: Create the virtual machine scale set.

The screenshot shows the Microsoft Azure portal interface for a virtual machine scale set named Rajkumar. The left sidebar has an 'Overview' section selected. The main panel displays essential information: Resource group (Rajkumar_group), Status (2 out of 2 succeeded), Location (Central India (Zone 1)), Subscription (Rajkumar.G), and Subscription ID (005e5670-4856-4565-a699-353f6e029d2d). It also shows Tags (created by :Rajkumar). Below this, tabs for Properties, Monitoring, Capabilities (6), Recommendations, and Tutorials are visible. Under Properties, sections include Virtual machine profile (Operating system: Windows, Capacity reservation group: -, Hibernation: Disabled), Networking (Public IP address: -, Public IP address (IPv6): -, Virtual network/subnet: Rajkumar_group-vnet/default), Availability + scaling (Availability zone: 1, Proximity placement group: -, Colocation status: -, Host group: -), and Size (Size: Standard_D2s_v3, vCPUs: 2, RAM: 8 GiB).

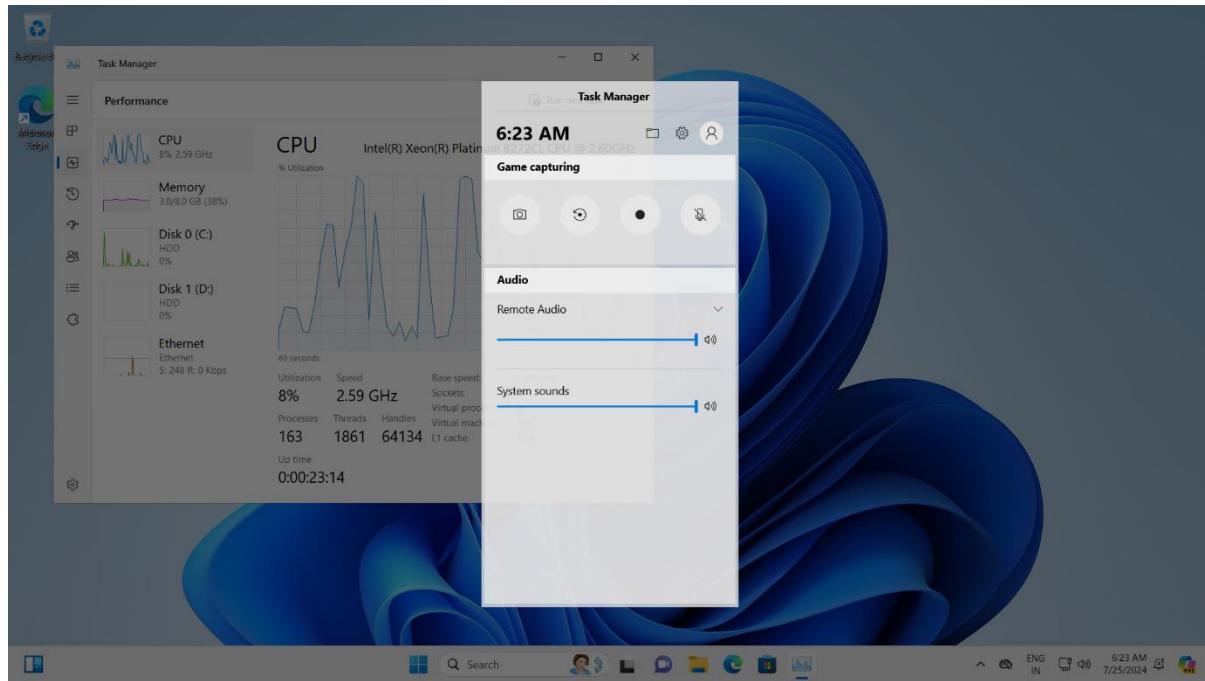
Step 5: Go to the instance option and any virtual machine like Rajkumar_998cb48d.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Azure logo, a search bar, and user information. Below the navigation bar, the URL is https://portal.azure.com/#@smvec.ac.in/resource/subscriptions/005e5670-4856-4565-a699-353f6e029d2d/resourceGroups/Rajkumar_group/providers/Microsoft.Compute/virtualMachineScaleSets/Rajkumar_instances/. The main content area is titled "Rajkumar | Instances" and displays a table of virtual machines. The table has columns: Name, Computer name, Status, Type, and Provisioning state. There are two entries: "Rajkumar_998cb48d" and "Rajkumar_d6cc2169", both marked as "Running" and "VM". The provisioning state is "Succeeded" for both. The left sidebar shows navigation links for Networking, Settings, Availability + scale, Security, Operations, Monitoring, Automation, and Help. At the bottom, there are pagination controls ("Page 1 of 1") and a "Give feedback" link.

Step 6: Download and install RDP.

The screenshot shows the Microsoft Azure portal interface, specifically the "Connect" section for the virtual machine "Rajkumar_998cb48d". The top navigation bar includes the Azure logo, a search bar, and user information. Below the navigation bar, the URL is https://portal.azure.com/#@smvec.ac.in/resource/subscriptions/005e5670-4856-4565-a699-353f6e029d2d/resourceGroups/Rajkumar_group/providers/Microsoft.Compute/virtualMachines/Rajkumar_998cb48d/. The main content area is titled "Rajkumar_998cb48d | Connect" and displays connection details. It shows the public IP address "20.244.101.138", admin username "Rajkumar.G", port "3389", and a note about unsupported Just-in-time policy. Below this, there is a section titled "Most common" with a "Native RDP" option. This option includes a note about connecting via native RDP without additional software, the public IP address, and two buttons: "Select" and "Download RDP file". A link "More ways to connect (4)" is also present.

Step 7: The instance will share the memory and it will automatic delete the virtual machine.

A screenshot of the Microsoft Azure portal. The URL in the address bar is "portal.azure.com/#browse/Microsoft.Compute%2FVirtualMachines". The page title is "Virtual machines". The main content area displays a table of virtual machines. The columns are: Name, Type, Subscription, Resource group, Location, Status, Operating system, Size, Public IP address, and Disks. Two virtual machines are listed:

Name	Type	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address	Disks
Rajkumar_998cb48d	Virtual machine	Rajkumar.G	Rajkumar_group	Central India	Running	Windows	Standard_D2s_v3	20.244.101.138	1
Rajkumar_d6cc2169	Virtual machine	Rajkumar.G	Rajkumar_group	Central India	Running	Windows	Standard_D2s_v3	20.244.101.149	1

At the bottom of the page, there are navigation links for < Previous, Page 1 of 1, and Next >, along with a "Give feedback" link.

Topic : Create Network Memory

Step 1: First create one virtual network and select the region as central india.

The screenshot shows the 'Create virtual network' wizard in the Microsoft Azure portal. The current step is 'Basics'. The 'Project details' section shows a subscription named 'Rajkumar.G' and a resource group named 'AIDS'. The 'Instance details' section shows a virtual network name 'aitel' and a region '(Asia Pacific) Central India'. At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons.

Step 2: Then also ip address as (/24).

The screenshot shows the 'Create virtual network' wizard in the Microsoft Azure portal. The current step is 'IP addresses'. It shows an IPv4 address space configuration with a range of 10.0.0.0/24, which provides 256 addresses. A subnet named 'default' is listed with the same IP range and size. At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons.

Step 3: Then tags the name and value.

The screenshot shows the 'Create virtual network' wizard in the Microsoft Azure portal. The 'Tags' tab is selected. Two tags are defined:

Name	Value	Resource
created by	Rajkumar	All resources selected
		All resources selected

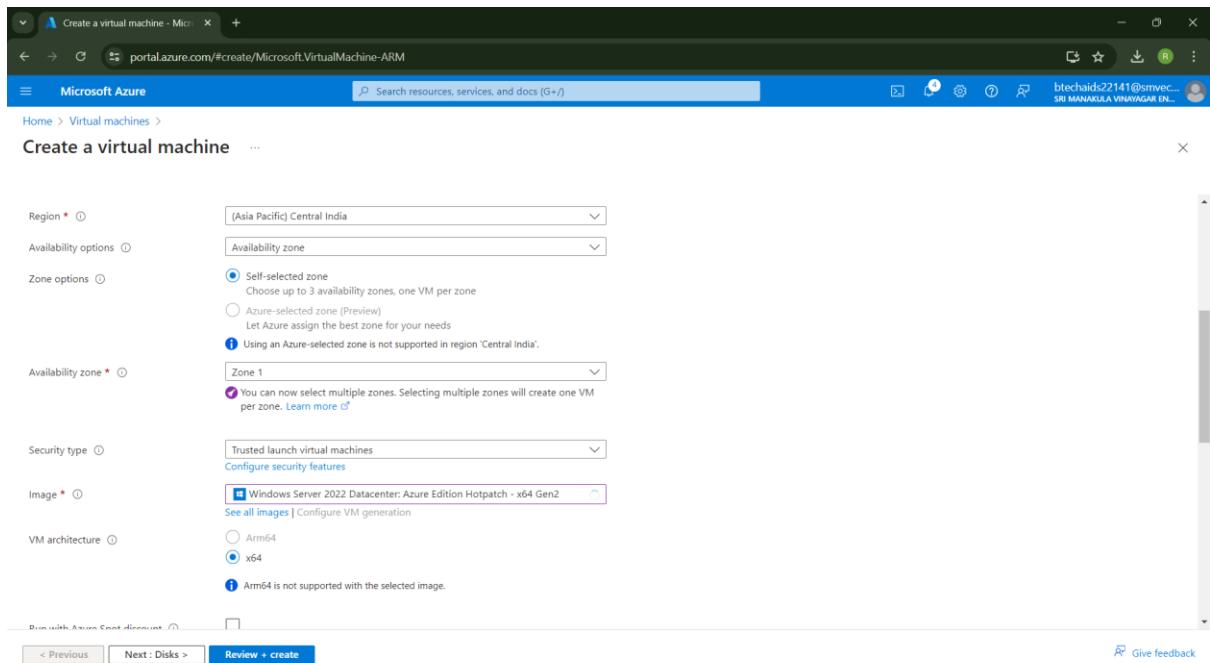
Below the tags, there are 'Previous' and 'Next' buttons, and a 'Review + create' button.

Step 4: Create the visual machine and select the same region in the virtual network.

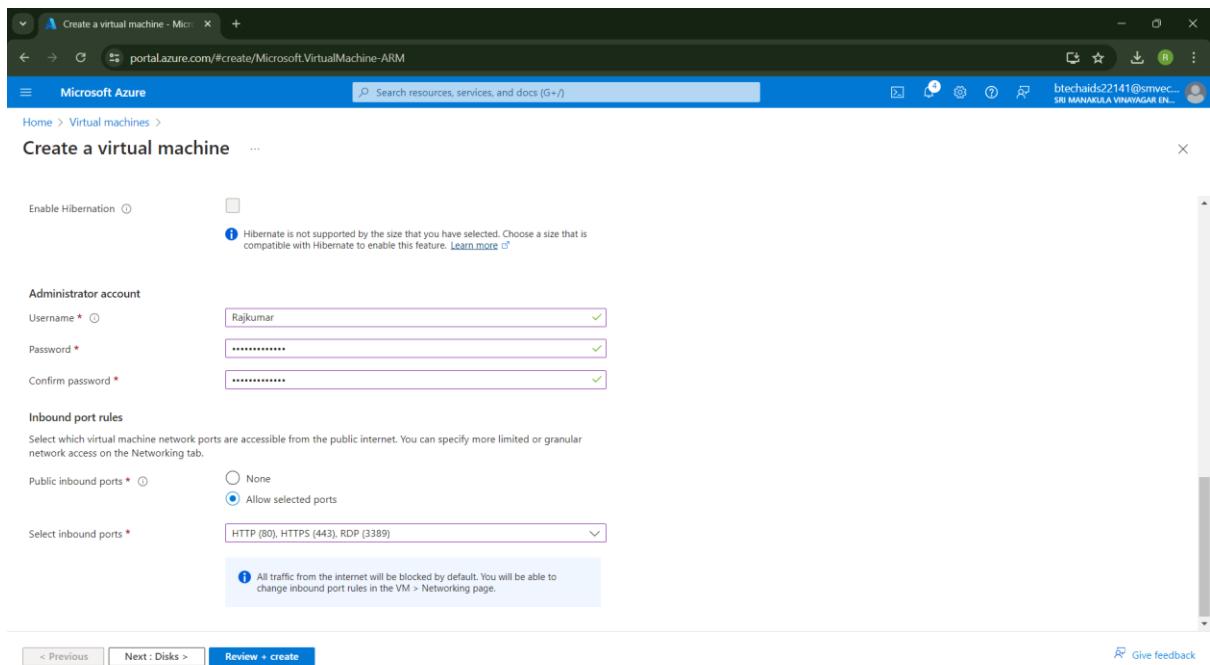
The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal. The 'Basics' tab is selected. The subscription is set to 'Rajkumar.G' and the resource group is 'Rajkumar_group'. Under 'Instance details', the virtual machine name is 'RK', the region is '(Asia Pacific) Central India', and the availability options are set to 'Availability zone'. The 'Zone options' dropdown shows 'Self-selected zone'.

Below the form, there are '< Previous' and 'Next : Disks >' buttons, and a 'Review + create' button.

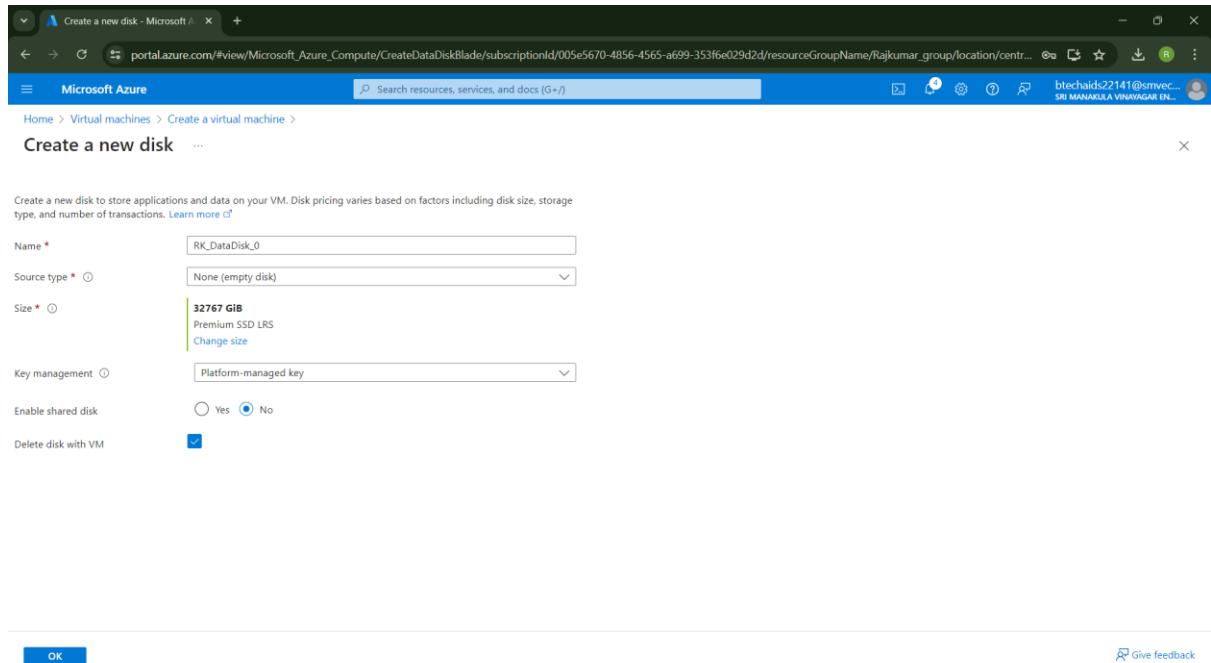
Step 5: Select the image in the (Windows Server 2022 Datacenter: Azure Edition Hotpatch - Gen2)



Step 6: Select HTTP (80), HTTPS (443), RDP (3389) in the inbound ports.

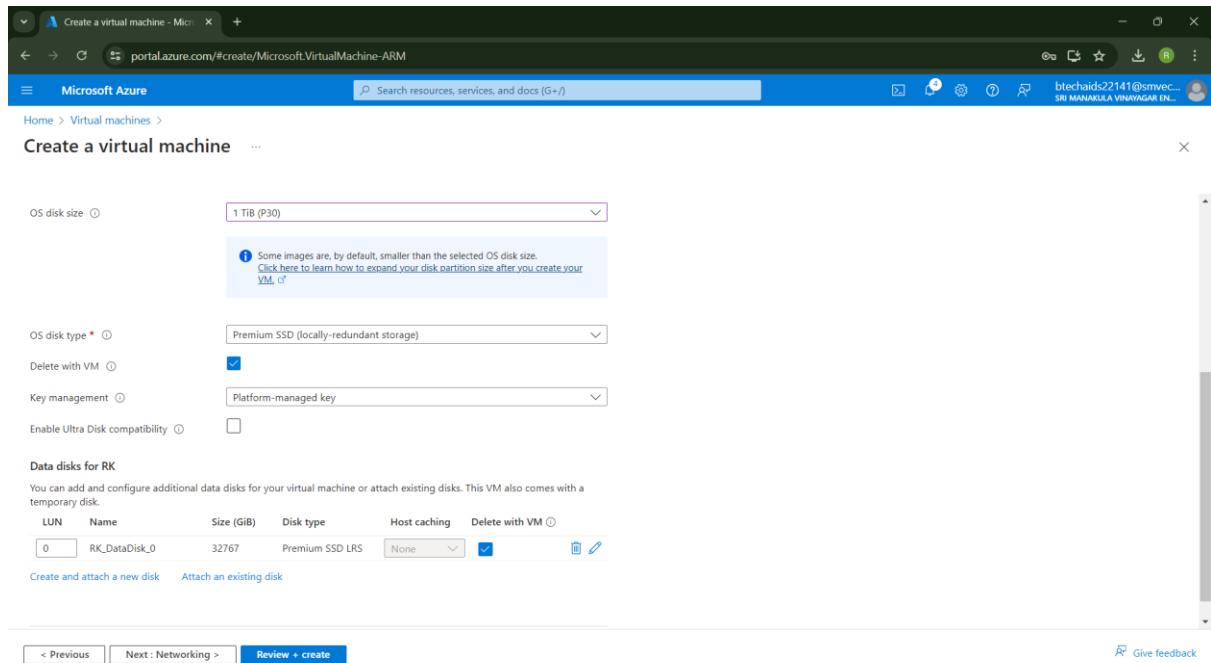


Step 7: Change the size to 32767 GiB.



The screenshot shows the 'Create a new disk' dialog box in the Microsoft Azure portal. The 'Name' field is set to 'RK_DataDisk_0'. The 'Source type' dropdown is set to 'None (empty disk)'. The 'Size' field is highlighted and set to '32767 GiB'. Below it, 'Premium SSD LRS' is listed with a 'Change size' link. The 'Key management' dropdown is set to 'Platform-managed key'. Under 'Enable shared disk', the 'No' radio button is selected. The 'Delete disk with VM' checkbox is checked. At the bottom right, there is an 'OK' button and a 'Give feedback' link.

Step 8: Change the os size into 1 Tib (P30).



The screenshot shows the 'Create a virtual machine' dialog box in the Microsoft Azure portal. The 'OS disk size' dropdown is set to '1 TiB (P30)'. A tooltip message states: 'Some images are, by default, smaller than the selected OS disk size. Click here to learn how to expand your disk partition size after you create your VM.' The 'OS disk type' dropdown is set to 'Premium SSD (locally-redundant storage)'. The 'Delete with VM' checkbox is checked. The 'Key management' dropdown is set to 'Platform-managed key'. The 'Enable Ultra Disk compatibility' checkbox is unchecked. In the 'Data disks for RK' section, there is a table showing one data disk entry: LUN 0, Name RK_DataDisk_0, Size 32767 GiB, Disk type Premium SSD LRS, Host caching None, and Delete with VM checked. At the bottom, there are buttons for 'Create and attach a new disk' and 'Attach an existing disk'. Navigation buttons include '< Previous', 'Next : Networking >', and 'Review + create'.

Step 9: Then deploy it.

The screenshot shows the Microsoft Azure portal with a completed VM deployment. The main title is "CreateVm-MicrosoftWindowsServer.WindowsServer-202-20240725135058 | Overview". Key details include:

- Deployment name: CreateVm-MicrosoftWindowsServer.WindowsServer-202-20240725135058
- Subscription: Rajkumar.G
- Resource group: Rajkumar_group
- Start time: 7/25/2024, 2:11:02 PM
- Correlation ID: 3c4f9c63-1aa0-4b5a-b99b-5f688003fce5

On the right side, there are promotional cards for Cost Management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

Step 10: Create storage account and select the same region.

The screenshot shows the Microsoft Azure portal for creating a storage account. The page title is "Create a storage account". Key fields filled in include:

- Subscription: Rajkumar.G
- Resource group: Rajkumar_group
- Storage account name: rajkumar57
- Region: (Asia Pacific) Central India
- Performance: Standard (selected)
- Redundancy: Locally-redundant storage (LRS)

At the bottom, there are navigation buttons: Previous, Next, Review + create, and Give feedback.

Step 11: Select the access tier as cool.

The screenshot shows the 'Create a storage account' wizard on the Microsoft Azure portal. In the 'Access tier' section, the 'Cool' option is selected, indicating it is optimized for infrequently accessed data and backup scenarios. Other options like 'Hot' (optimized for frequently accessed data) and 'Archive' (optimized for long-term data storage) are also shown but not selected.

Step 12: Select the Enable public access from all networks in Network access.

The screenshot shows the 'Create a storage account' wizard on the Microsoft Azure portal. In the 'Network access' section, the 'Enable public access from all networks' option is selected. A note below explains that enabling public access from all networks might make the resource available publicly unless it's required. Other options like 'Selected virtual networks and IP addresses' and 'Disable public access and use private access' are also listed.

Step 13: Data protection days into 1 day.

Recovery

Protect your data from accidental or erroneous deletion or modification.

Enable point-in-time restore for containers
Use point-in-time restore to restore one or more containers to an earlier state. If point-in-time restore is enabled, then versioning, change feed, and blob soft delete must also be enabled. [Learn more](#)

Enable soft delete for blobs
Soft delete enables you to recover blobs that were previously marked for deletion, including blobs that were overwritten. [Learn more](#)

Days to retain deleted blobs: 1

Enable soft delete for containers
Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)

Days to retain deleted containers: 1

Enable soft delete for file shares
Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Days to retain deleted file shares: 1

Tracking

Previous Next Review + create Give feedback

Step 14: Then review and create the storage account.

View automation template

Basics

Subscription	Rajkumar.G
Resource group	Rajkumar_group
Location	Central India
Storage account name	rajkumar57
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace	Disabled
Enable SFTP	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Cool
Enable large file shares	Enabled

Security

Previous Next Create Give feedback

Step 15: Create the container in Blob container (like unstructureddata).

The screenshot shows the Microsoft Azure Storage browser interface for the storage account 'rajkumar57'. The left sidebar has 'Storage browser' selected. The main area shows 'Blob containers' with two items: '\$logs' and 'unstructureddata'. A table below lists these containers with columns for Name, Last modified, Anonymous access level, and Lease state.

Name	Last modified	Anonymous access level	Lease state
\$logs	7/25/2024, 2:26:39 PM	Private	Available
unstructureddata	7/25/2024, 2:31:44 PM	Private	Available

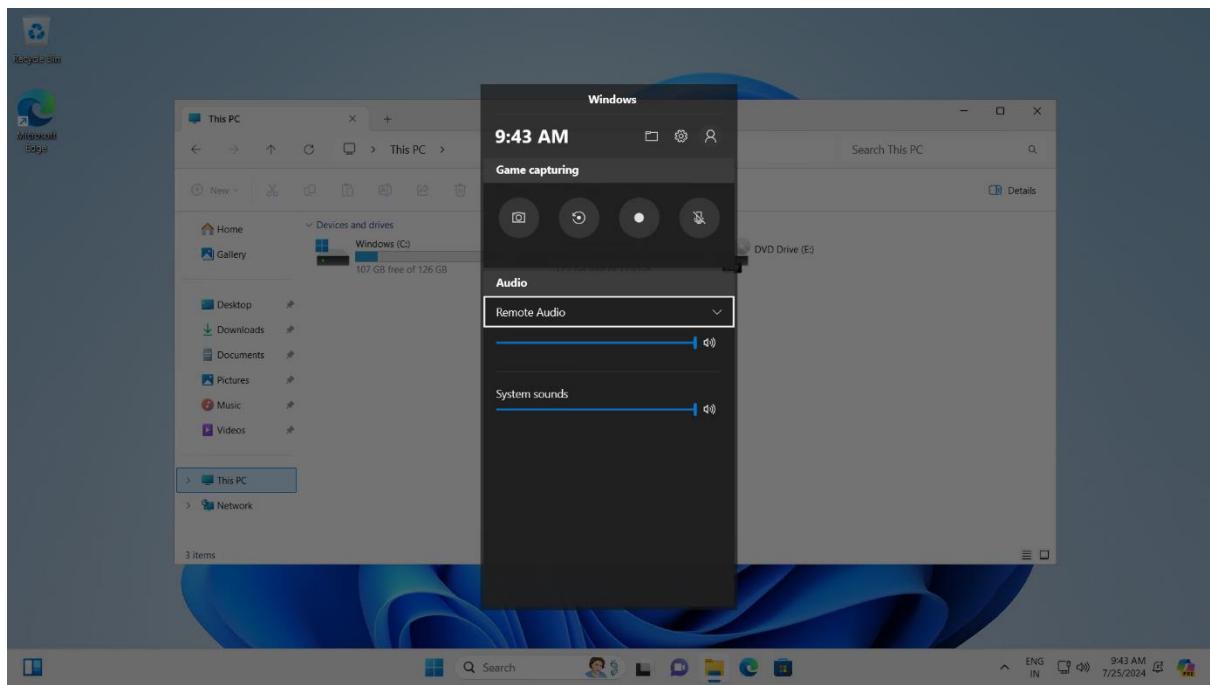
Step 16: Go to file share.

The screenshot shows the Microsoft Azure Storage accounts interface for the storage account 'rajkumar57'. The left sidebar has 'Storage browser' selected. On the right, there's a section titled 'Storage account metrics' with a note about data being regularly updated. Below it are three boxes: 'Blob containers', 'File shares', and 'Tables', each displaying summary statistics like 'Number of containers', 'Number of blobs', etc.

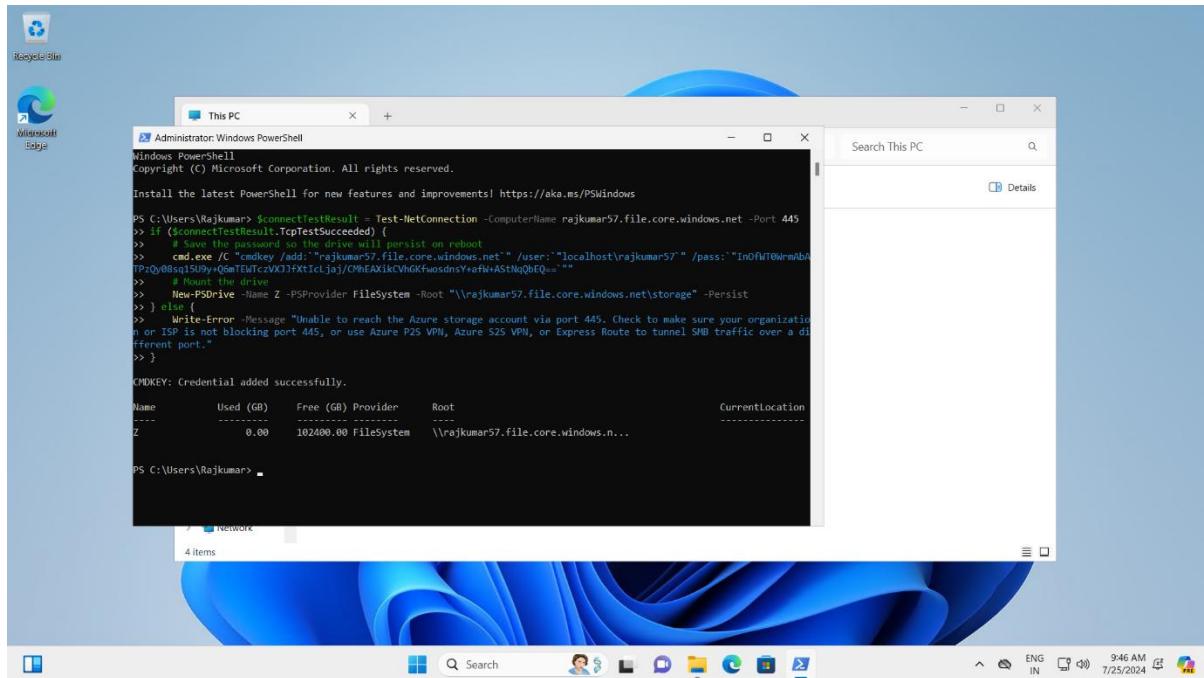
Step 17: And create the file sharing storage and name it and copy the script.

The screenshot shows the Microsoft Azure Storage browser interface. On the left, the navigation pane includes options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser (which is selected), Storage Mover, Partner solutions, Data storage, Security + networking, Data management, Settings, Monitoring, Monitoring (classic), Automation, and Help. The main content area displays a list of file shares under the 'rajkumar57' storage account. A 'Connect' panel on the right provides instructions for connecting to the file share from Windows, Linux, or macOS. It includes fields for 'Drive letter' (set to 'R'), 'Authentication method' (set to 'Storage account key'), and a 'Show Script' button. A note at the bottom states: "This script will check to see if this storage account is accessible via TCP port 445, which is the port SMB uses. If port 445 is available, your Azure file share will be persistently mounted. Your organization or internet service provider (ISP) may block this traffic." There is also a 'Give feedback' link.

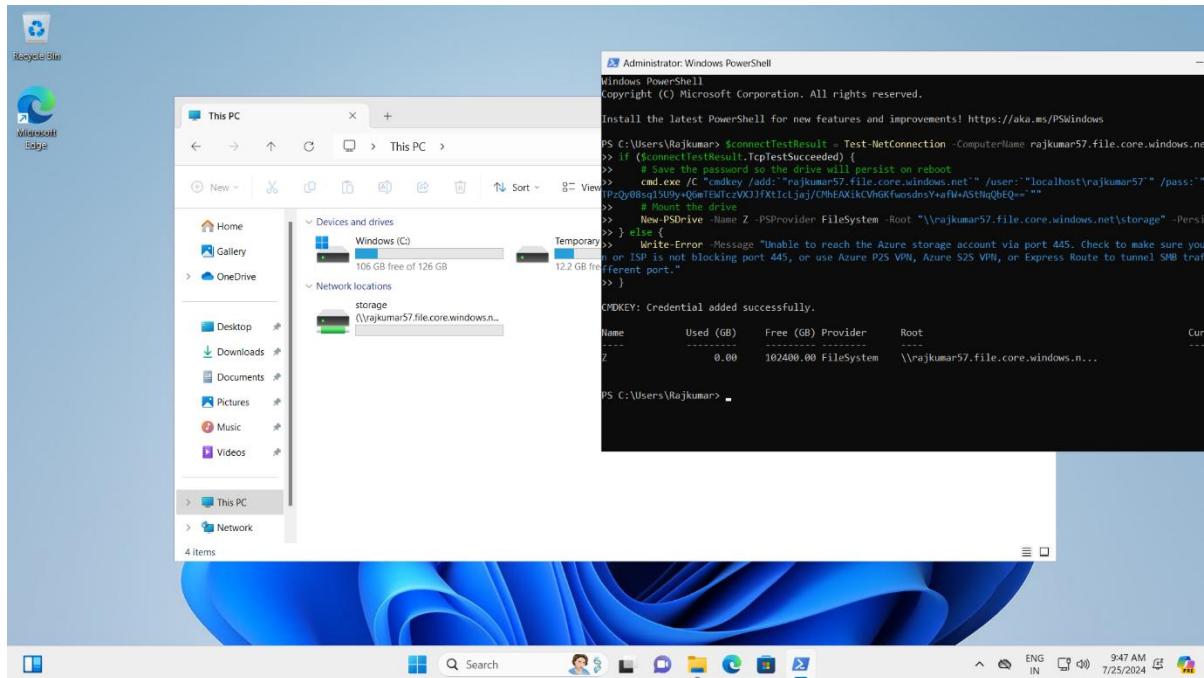
Step 18: Open the virtual machine and open power shell.



Step 19: Paste the script it will automatic connect the network storage.



Step 20: It has been connected.



Step 21: If want delete all first delete the storage and then network and machine.

The screenshot shows the Microsoft Azure Storage accounts page. The URL is <https://portal.azure.com/#view/HubsExtension/BrowseResource/resourceType/Microsoft.Storage%2FStorageAccounts>. The page title is "Storage accounts". There is a search bar and a user profile at the top right. Below the title, there are buttons for "+ Create", "Restore", "Manage view", "Refresh", "Export to CSV", "Open query", "Assign tags", and "Delete". A filter bar shows "Subscription equals all", "Resource group equals all", and "Location equals all". The main table has columns: Name, Type, Kind, Resource group, Location, and Subscription. One record is listed: "rajkumar57" (Storage account, StorageV2, Rajkumar_group, Central India, Rajkumar.G). At the bottom, there are navigation buttons for < Previous, Page 1 of 1, and Next >, and a "Give feedback" link.

The screenshot shows the Microsoft Azure Virtual networks page. The URL is <https://portal.azure.com/#view/HubsExtension/BrowseResource/resourceType/Microsoft.Network%2FvirtualNetworks>. The page title is "Virtual networks". There is a search bar and a user profile at the top right. Below the title, there are buttons for "+ Create", "Manage view", "Refresh", "Export to CSV", "Open query", and "Assign tags". A filter bar shows "Subscription equals all", "Resource group equals all", and "Location equals all". The main table has columns: Name, Resource group, Location, and Subscription. Two records are listed: "aitel" (AIDS, Central India, Rajkumar.G) and "Rk-vnet" (Rajkumar_group, Central India, Rajkumar.G). At the bottom, there are navigation buttons for < Previous, Page 1 of 1, and Next >, and a "Give feedback" link.

Topic : Create storage account and store

Step 1: Go to the storage account and click create the storage account.

The screenshot shows the Microsoft Azure portal interface for managing storage accounts. The title bar includes tabs for 'Create Your Azure Free Account' and 'Storage accounts - Microsoft Azure'. The main content area is titled 'Storage accounts' and shows a message 'No storage accounts to display'. Below this, there is a brief description of what a storage account is and a 'Create storage account' button. The bottom right corner has a 'Give feedback' link.

Step 2: Type the name and select enable public access from all networks.

The screenshot shows the 'Create a storage account' wizard on step 1. The title bar includes tabs for 'Create Your Azure Free Account' and 'Create a storage account - Microsoft Azure'. The main content area is titled 'Create a storage account'. Under 'Network access', the 'Enable public access from all networks' option is selected. A note explains that enabling public access from all networks might make the resource available publicly unless specific access is required. There are sections for 'IP Addresses' (allowing selection of public internet IP addresses) and 'Network routing' (determining how traffic routes from source to endpoint). At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons, along with a 'Give feedback' link.

Step 3: In the Enable support for customer-managed keys select all service type.

Encryption type * Microsoft-managed keys (MMK) Customer-managed keys (CMK)

Enable support for customer-managed keys Blobs and files only All service types (blobs, files, tables, and queues)
⚠ This option cannot be changed after this storage account is created.

Enable infrastructure encryption

Previous Next Review + create Give feedback

Step 4: Data protection decrease to 1 day.

Recovery
Protect your data from accidental or erroneous deletion or modification.

Enable point-in-time restore for containers
Use point-in-time restore to restore one or more containers to an earlier state. If point-in-time restore is enabled, then versioning, change feed, and blob soft delete must also be enabled. [Learn more](#)

Enable soft delete for blobs
Soft delete enables you to recover blobs that were previously marked for deletion, including blobs that were overwritten. [Learn more](#)

Days to retain deleted blobs

Enable soft delete for containers
Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)

Days to retain deleted containers

Enable soft delete for file shares
Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Days to retain deleted file shares

Tracking

Previous Next Review + create Give feedback

Step 5: Then create and deploy it.

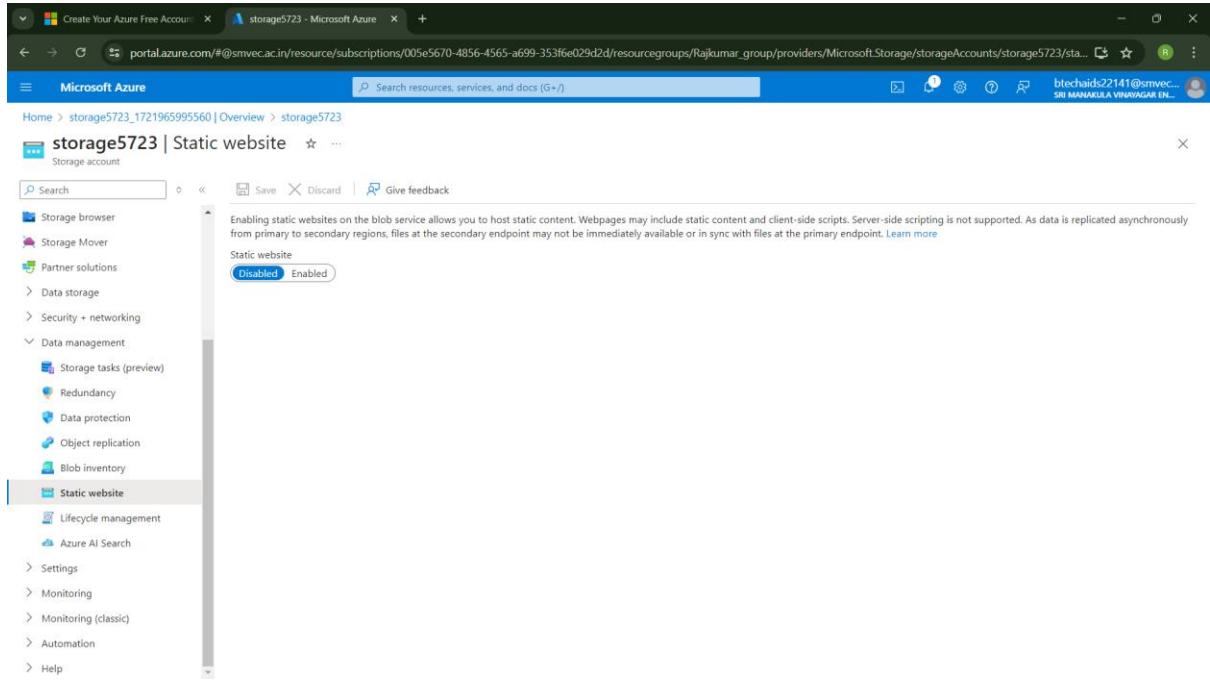
The screenshot shows the Microsoft Azure portal interface. The main title bar says "Create Your Azure Free Account" and "storage5723_1721965995560". The search bar at the top right contains the placeholder "Search resources, services, and docs (G+)". The user's name "btechaid22141@smvec.ac.in" and profile picture are visible in the top right corner. The main content area is titled "storage5723_1721965995560 | Overview". A sidebar on the left has sections for "Overview", "Inputs", "Outputs", and "Template". The "Overview" section is expanded, showing a green checkmark icon and the message "Your deployment is complete". It provides deployment details: Deployment name: storage5723_1721965995560, Subscription: Rajkumar.G, Resource group: Rajkumar_group. It also shows the start time: 7/26/2024, 9:23:28 AM and Correlation ID: e40440eb-b7f0-4340-8c91-66d5cb138d90. Below this, there are sections for "Deployment details" and "Next steps", with a "Go to resource" button. At the bottom, there are links to "Give feedback" and "Tell us about your experience with deployment". To the right of the main content, there are several promotional cards: "Cost Management" (Get notified to stay within your budget and prevent unexpected charges on your bill. Set up cost alerts >), "Microsoft Defender for Cloud" (Secure your apps and infrastructure. Go to Microsoft Defender for Cloud >), "Free Microsoft tutorials" (Start learning today >), and "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 >).

Step 6: Afterwards go to Resources.

The screenshot shows the Microsoft Azure portal interface, specifically the "storage5723 - Microsoft Azure" page. The title bar includes "Create Your Azure Free Account" and "storage5723 - Microsoft Azure". The search bar at the top right contains the placeholder "Search resources, services, and docs (G+)". The user's name "btechaid22141@smvec.ac.in" and profile picture are visible in the top right corner. The main content area is titled "storage5723_1721965995560 | Overview >". The left sidebar lists various management options: "Storage account", "Upload", "Open in Explorer", "Delete", "Move", "Refresh", "Open in mobile", "CLI / PS", "Feedback", "Activity log", "Tags", "Diagnose and solve problems", "Access Control (IAM)", "Data migration", "Events", "Storage browser", "Storage Mover", "Partner solutions", "Data storage", "Security + networking", "Data management", "Settings", "Monitoring", "Monitoring (classic)", "Automation", "Help". The "Overview" section is expanded, showing resource group (Rajkumar_group), location (centralindia), primary/secondary location (Primary: Central India, Secondary: South India), subscription (Rajkumar.G), subscription ID (005e5670-4856-4565-a699-353f6e029d2d), disk state (Primary: Available, Secondary: Available), and tags (created by: Rajkumar). Below this, there are tabs for "Properties", "Monitoring", "Capabilities (7)", "Recommendations (0)", "Tutorials", and "Tools + SDKs". Under "Properties", there are sections for "Blob service" (Hierarchical namespace: Disabled, Default access tier: Hot, Blob anonymous access: Disabled, Blob soft delete: Enabled (1 days), Container soft delete: Enabled (1 days), Versioning: Disabled, Change feed: Disabled, NFS v3: Disabled, Allow cross-tenant replication: Disabled) and "Security" (Require secure transfer for REST API operations: Enabled, Storage account key access: Enabled, Minimum TLS version: Version 1.2, Infrastructure encryption: Disabled). Under "Networking", there are settings for "Allow access from": All networks, "Number of private endpoint connections": 0, and "Network routing": Microsoft network routing.

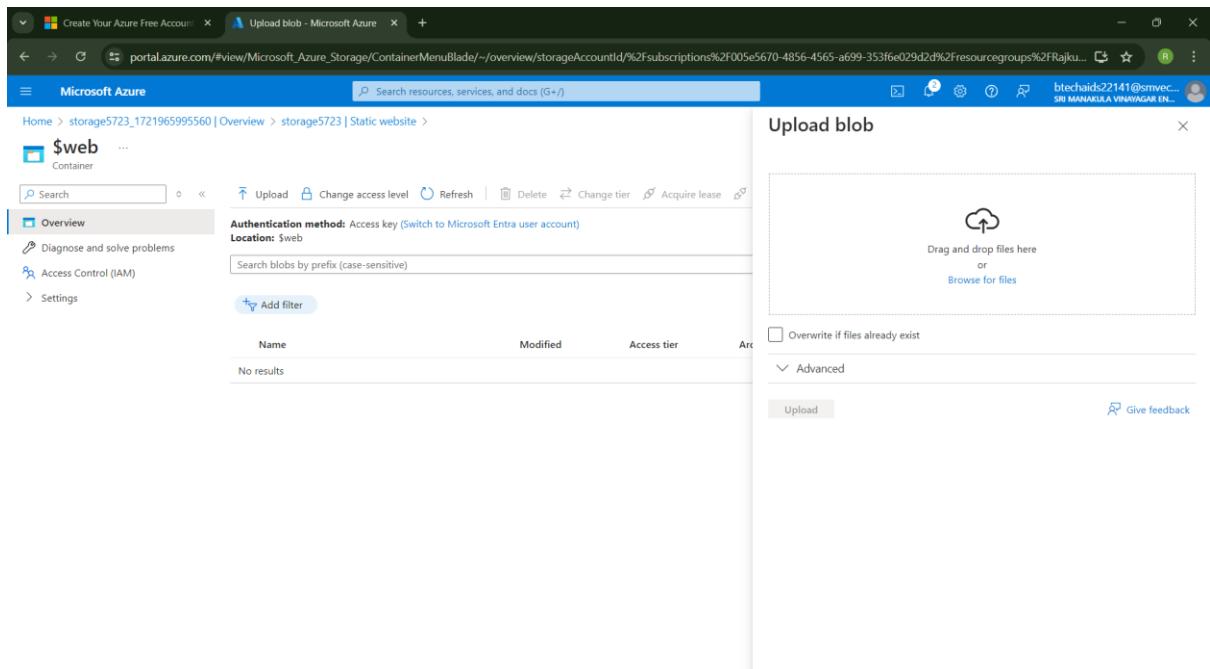
Topic : Static Website

Step 7: First go to static website and then enable it.



The screenshot shows the Microsoft Azure portal interface. The left sidebar is expanded, showing various storage services like Storage browser, Storage Mover, Partner solutions, Data storage, Security + networking, Data management, and Static website. Under Static website, there are sub-options for Lifecycle management, Azure AI Search, Settings, Monitoring, Monitoring (classic), Automation, and Help. The main content area displays the 'storage5723 | Static website' page. At the top, there are 'Save' and 'Discard' buttons, and a 'Give feedback' link. Below these are instructions about enabling static websites on the blob service. A prominent 'Static website' section has a toggle switch that is currently set to 'Enabled'. Other options shown include 'Disabled' and 'Learn more'.

Step 8: Then click upload and drag & drop the file .



The screenshot shows the Microsoft Azure portal with the 'Upload blob' dialog box open. The dialog box has a title 'Upload blob' and contains a central area with a cloud icon and the text 'Drag and drop files here or Browse for files'. Below this are two checkboxes: 'Overwrite if files already exist' and 'Advanced'. At the bottom right is a large 'Upload' button and a 'Give feedback' link. On the left side of the dialog, there is a sidebar with 'Authentication method: Access key (Switch to Microsoft Entra user account)' and 'Location: \$web'. The main pane shows a table with columns 'Name', 'Modified', and 'Access tier', which is currently empty with the message 'No results'.

Step 9: Then static website has been created.

The screenshot shows the Microsoft Azure portal interface for a storage account named '\$web'. The left sidebar shows the 'Overview' tab is selected. The main content area displays a table of blobs. There is one blob named 'index.html' with the following details:

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
index.html	7/26/2024, 9:36:51 AM	Hot (Inferred)		Block blob	172 B	Available

Step 10: copy the primary endpoint.

The screenshot shows the 'Static website' configuration page for the '\$web' container. The 'Enabled' button is highlighted. The 'Primary endpoint' field contains the URL 'https://storage5723.z29.web.core.windows.net/'. A 'Copy to clipboard' button is visible next to the endpoint field. Other settings shown include 'Secondary endpoint' (set to 'https://storage5723-secondary.z29.web.core.windows.net/'), 'Index document name' (set to 'index.html'), and 'Error document path' (empty).

Step 11: paste it on the another tab.



Hello World

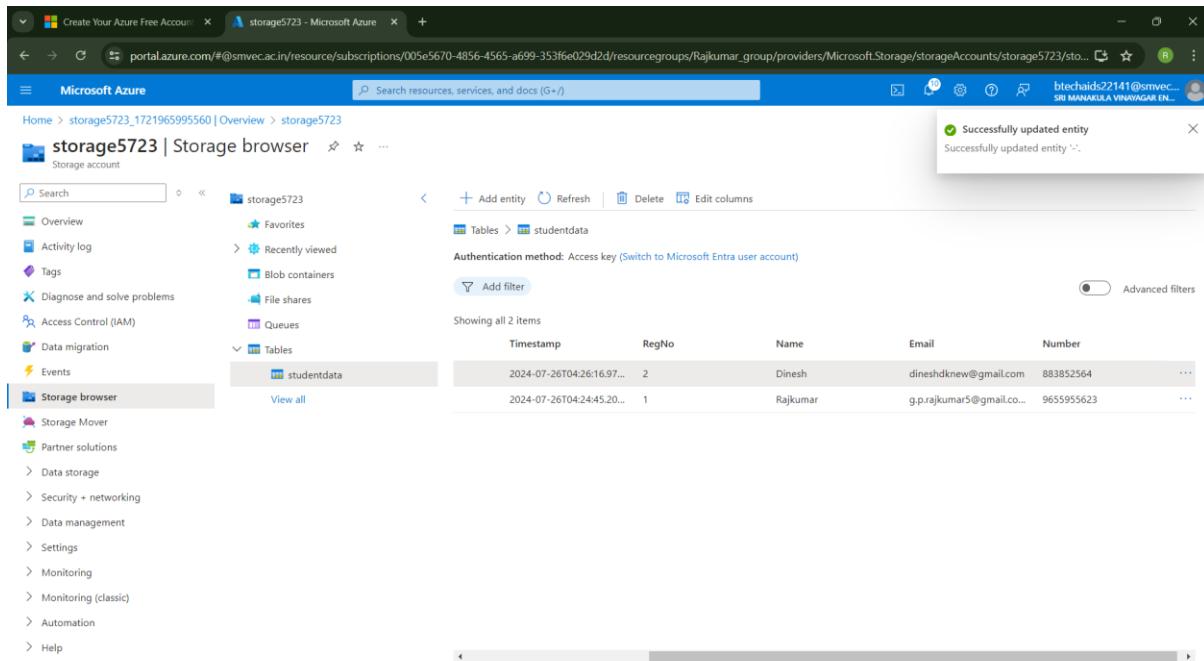
Welcome to my first webpage!

Topic : Create Table

Step 12: Go to table option and then click new table create it.

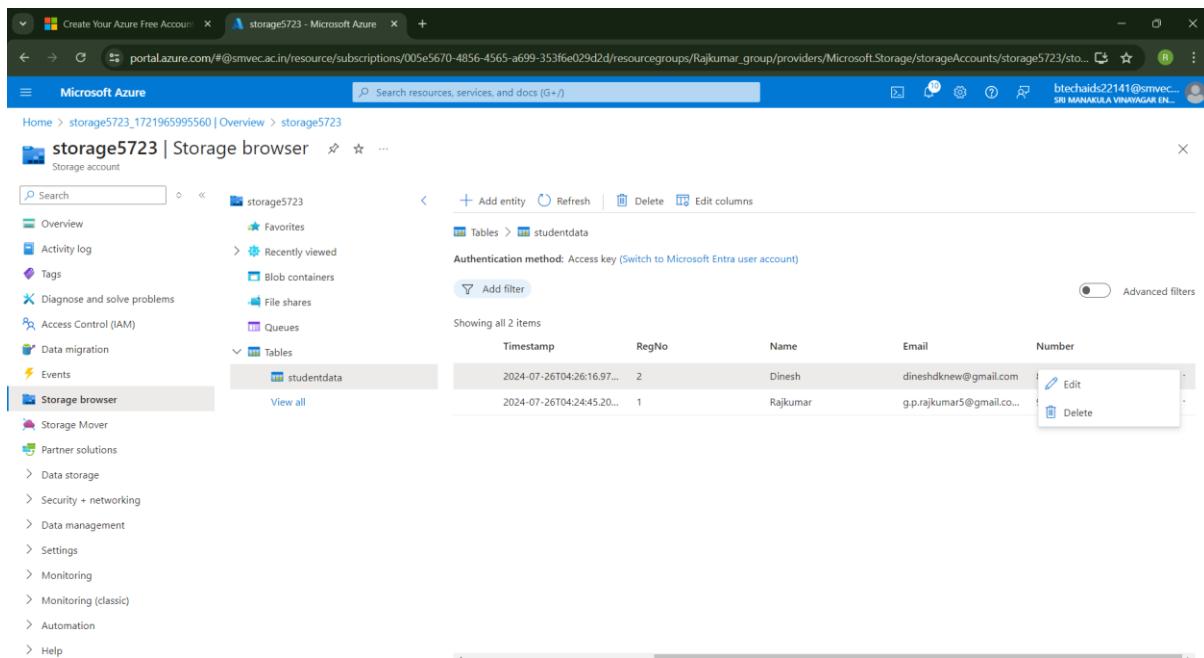
A screenshot of the Microsoft Azure Storage browser interface. The left sidebar shows options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser (which is selected and highlighted in blue), Storage Mover, Partner solutions, Data storage, Security + networking, Data management, Settings, Monitoring, Monitoring (classic), Automation, and Help. The main content area is titled 'storage5723 | Storage browser' and shows the 'Tables' section. It includes a search bar for 'Search tables by prefix', a checkbox for 'Name', and a 'Url' column. A message at the top right says 'Authentication method: Access key (Switch to Microsoft Entra user account)'. Below the search bar, it says 'Showing all 0 items' and 'No items found'.

Step 13: Add entity by adding option.



The screenshot shows the Microsoft Azure Storage browser interface for a storage account named 'storage5723'. On the left, there's a navigation sidebar with various options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, and Storage browser (which is currently selected). The main area displays a table titled 'studentdata' with two rows of data. The columns are Timestamp, RegNo, Name, Email, and Number. The first row has a timestamp of 2024-07-26T04:26:16.97..., RegNo 2, Name Dinesh, Email dineshdknew@gmail.com, and Number 883852564. The second row has a timestamp of 2024-07-26T04:24:45.20..., RegNo 1, Name Rajkumar, Email g.p.rajkumar5@gmail.co..., and Number 9655955623. At the top right, a success message box is displayed: 'Successfully updated entity' and 'Successfully updated entity "..."'. The status bar at the bottom right shows the user's email: btechails22141@smvec...

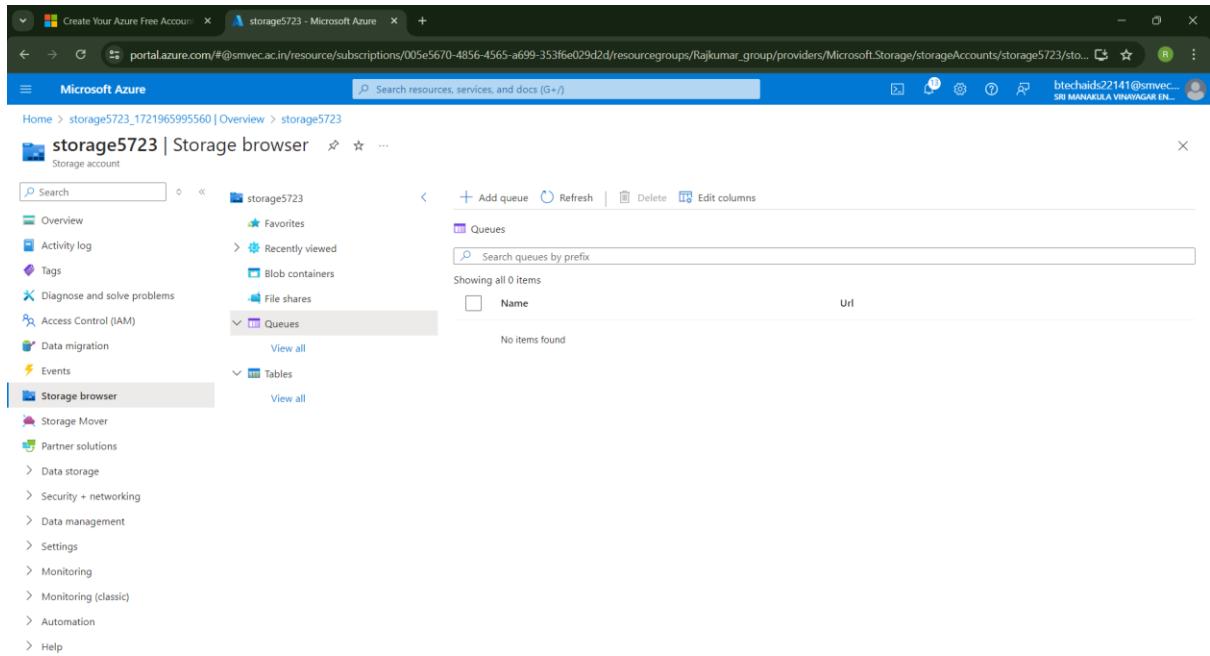
Step 14: The data in the table we can edit or delete.



This screenshot is similar to the previous one, showing the Microsoft Azure Storage browser for the 'storage5723' account. The 'Storage browser' option is selected in the sidebar. In the main table view, the first row of data (Timestamp: 2024-07-26T04:26:16.97..., RegNo: 2, Name: Dinesh, Email: dineshdknew@gmail.com, Number: 883852564) has a context menu open over it. The menu items visible are 'Edit' (represented by a pencil icon) and 'Delete' (represented by a trash bin icon). The status bar at the bottom right shows the user's email: btechails22141@smvec...

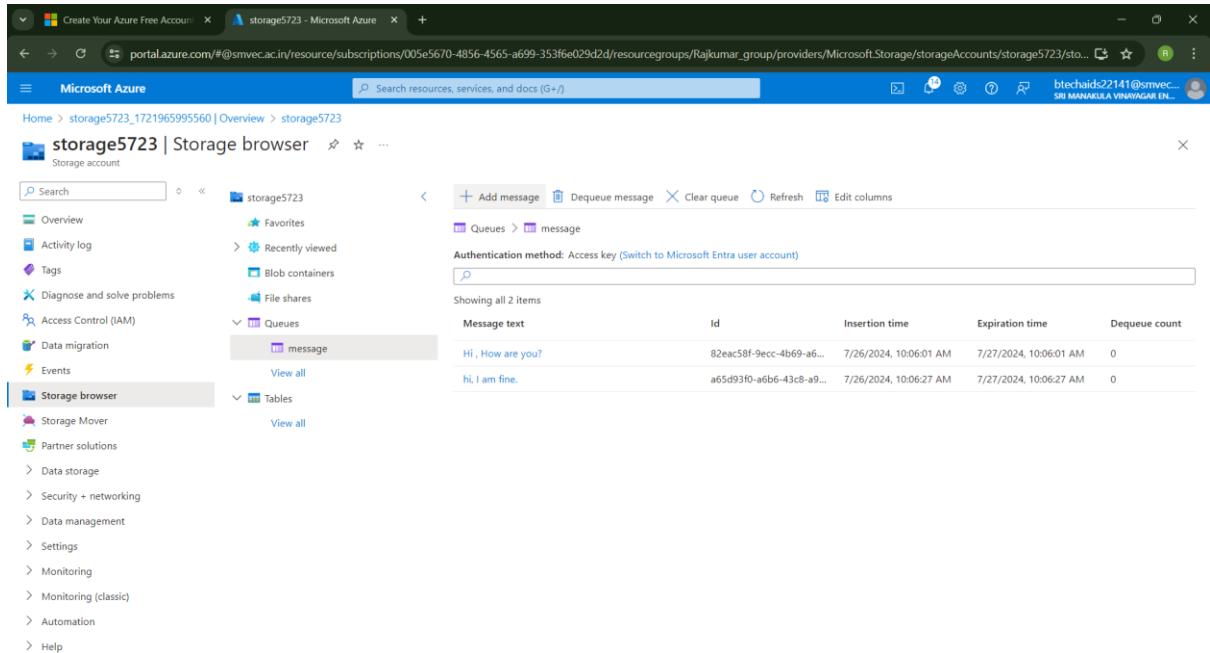
Topic : Create the message

Step 15: Go to the queue



The screenshot shows the Microsoft Azure Storage browser interface for the storage5723 account. The left sidebar has 'Storage browser' selected. The main area shows the 'Queues' blade with a table header: 'Name' and 'Url'. A search bar at the top right says 'Showing all 0 items'.

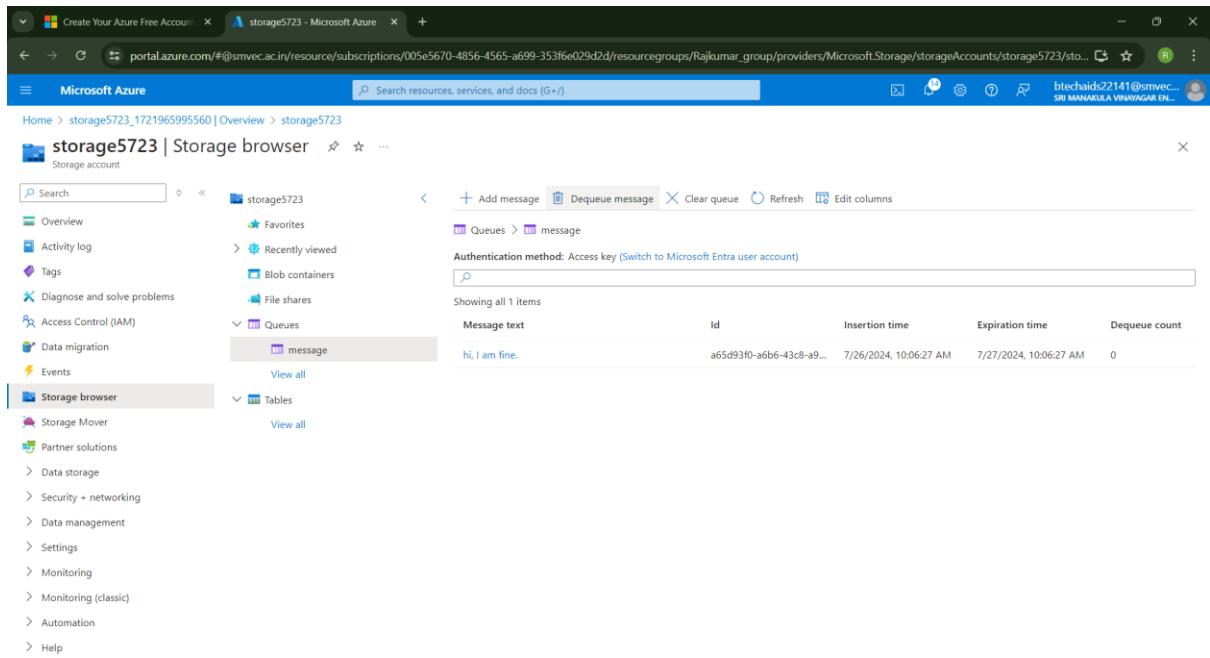
Step 16: Then create the message.



The screenshot shows the Microsoft Azure Storage browser interface for the storage5723 account. The left sidebar has 'Storage browser' selected. The main area shows the 'message' blade under the 'Queues' section. It includes buttons for '+ Add message', 'Dequeue message', 'Clear queue', 'Refresh', and 'Edit columns'. A table displays two messages:

Message text	Id	Insertion time	Expiration time	Dequeue count
Hi , How are you?	82eac58f-9ecc-4b69-a6...	7/26/2024, 10:06:01 AM	7/27/2024, 10:06:01 AM	0
hi, I am fine.	a65d93f0-a6b6-43c8-a9...	7/26/2024, 10:06:27 AM	7/27/2024, 10:06:27 AM	0

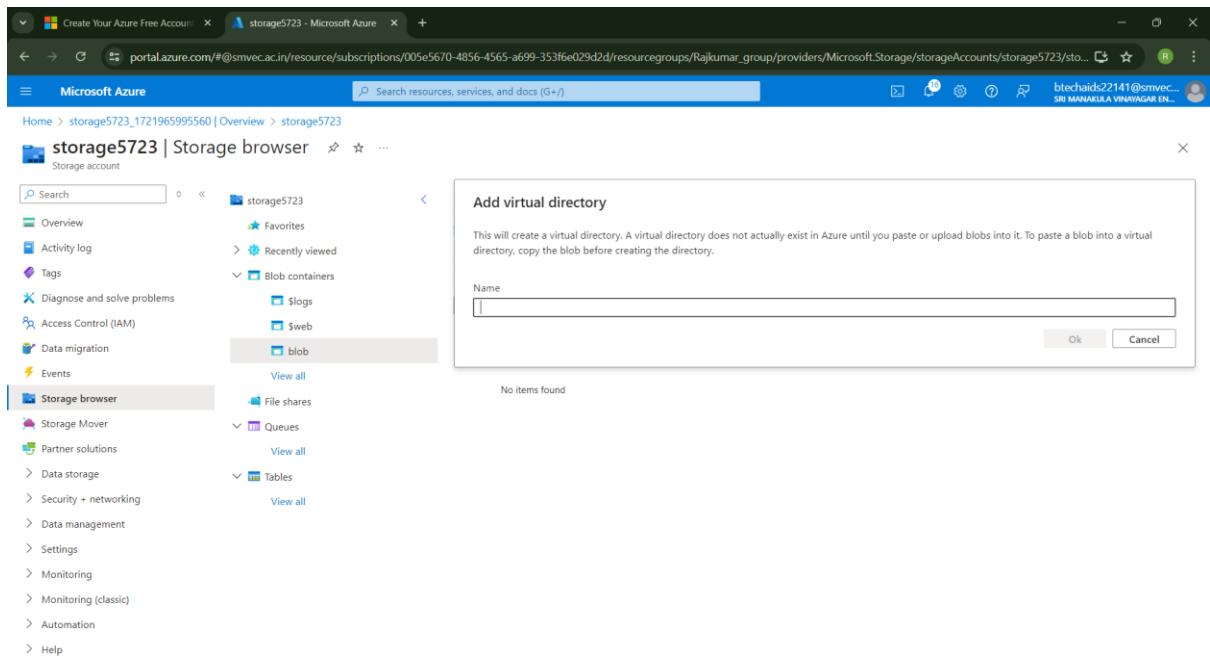
Step 17: If we dequeue the message (the first message has been deleted)



The screenshot shows the Microsoft Azure Storage browser interface for a storage account named 'storage5723'. On the left, the navigation menu is expanded, showing options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser (which is selected and highlighted in blue), Storage Mover, Partner solutions, Data storage, Security + networking, Data management, Settings, Monitoring, Monitoring (classic), Automation, and Help. In the center, there's a search bar and a toolbar with buttons for Add message, Dequeue message, Clear queue, Refresh, and Edit columns. Below the toolbar, a breadcrumb trail shows Home > storage5723_1721965995560 | Overview > storage5723. A message list table is displayed with one item: 'hi, I am fine.' with ID a65d93f0-a6b6-43c8-a9... and other details like Insertion time (7/26/2024, 10:06:27 AM) and Expiration time (7/27/2024, 10:06:27 AM). The status column shows a value of 0.

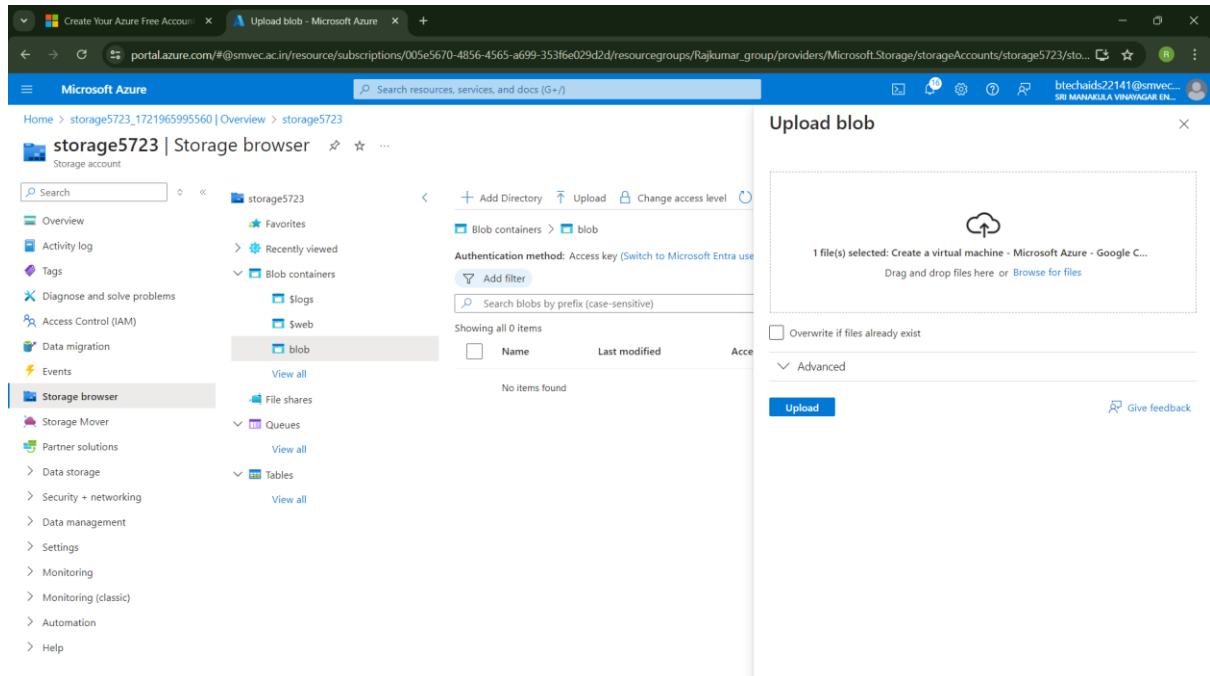
Topic : Create virtual directory

Step 18: Go to Blob container and create virtual directory.

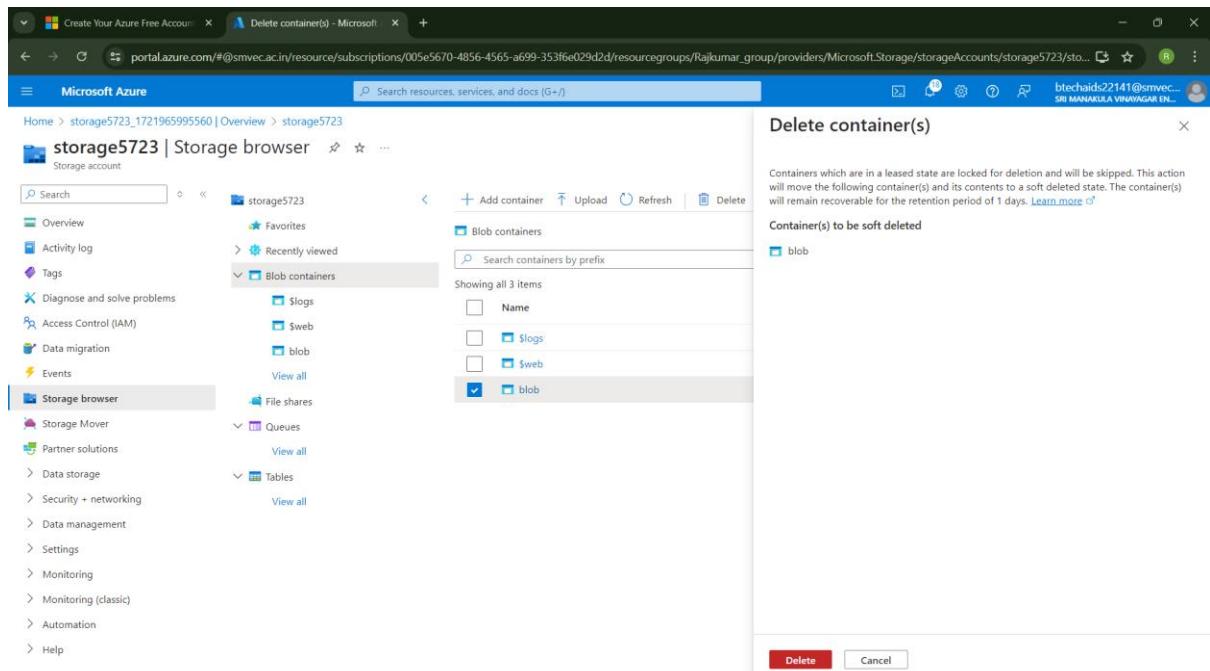


The screenshot shows the Microsoft Azure Storage browser interface for a storage account named 'storage5723'. The navigation menu is identical to the previous screenshot. In the center, the 'blob' container is selected in the navigation pane. A modal dialog box titled 'Add virtual directory' is open. It contains instructions: 'This will create a virtual directory. A virtual directory does not actually exist in Azure until you paste or upload blobs into it. To paste a blob into a virtual directory, copy the blob before creating the directory.' Below this is a 'Name' input field with a placeholder '(empty)' and an 'Ok' button. At the bottom of the dialog, it says 'No items found'.

Step 19: We can upload the blob.



Step 20: Afterwards delete the containers.



Step 22: And also we want delete the storage account.

The screenshot shows the Microsoft Azure portal interface. On the left, the 'Storage accounts' blade is open, displaying a single record for 'storage5723'. This record includes columns for Name (storage5723), Type (Storage account), Kind (StorageV2), and Resource group (Rajkumar_g). Below the table, there are navigation links for '< Previous', 'Page 1 of 1', and 'Next >'. On the right, a modal window titled 'Delete Resources' is displayed. It contains a message about permanent deletion and a table titled 'Resources to be deleted (1)'. The table lists the selected resource: 'storage5723' (Storage account, Resource type). A text input field at the bottom contains the word 'delete', and there are 'Delete' and 'Cancel' buttons.

Topic : IOT message sending

Step 1: Go to IOT Hub and click create.

The screenshot shows the Microsoft Azure portal interface. On the left, the 'IoT Hub' blade is open, showing a message 'No IoT hub to display'. Below this, there is a call-to-action: 'Create an IoT hub to help you connect, monitor, and manage billions of your IoT assets.' A prominent blue 'Create IoT hub' button is centered. At the bottom of the page, there are links for 'Learn more about IoT Hub' and 'Quickstart: send telemetry from device'. The bottom right corner features a 'Give feedback' link.

Step 2: Then create by hub name and select the region.

The screenshot shows the Microsoft Azure IoT Hub creation wizard. The 'Basics' tab is selected. Under 'Project details', the subscription is set to 'Rajkumar.G' and the resource group is 'Rajkumar_group'. In 'Instance details', the IoT hub name is 'IOTHUBAIDS', the region is 'Central India', the tier is 'Standard (most popular)', and the daily message limit is '400,000 (₹2,911.81/month)'. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next: Networking >'.

Step 3: Then create and deploy it.

The screenshot shows the Microsoft Azure IoT Hub deployment progress page for deployment ID 'IOTHUBAIDS-72610462'. The status is 'Deployment is in progress'. Deployment details include the name 'IOTHUBAIDS-72610462', subscription 'Rajkumar.G', and resource group 'Rajkumar_group'. The deployment started at 7/26/2024, 10:46:03 AM with correlation ID '70ca7b24-b120-464d-8114-efb124b6229b'. A sidebar on the right provides links to Microsoft Defender for Cloud, free tutorials, and expert work opportunities.

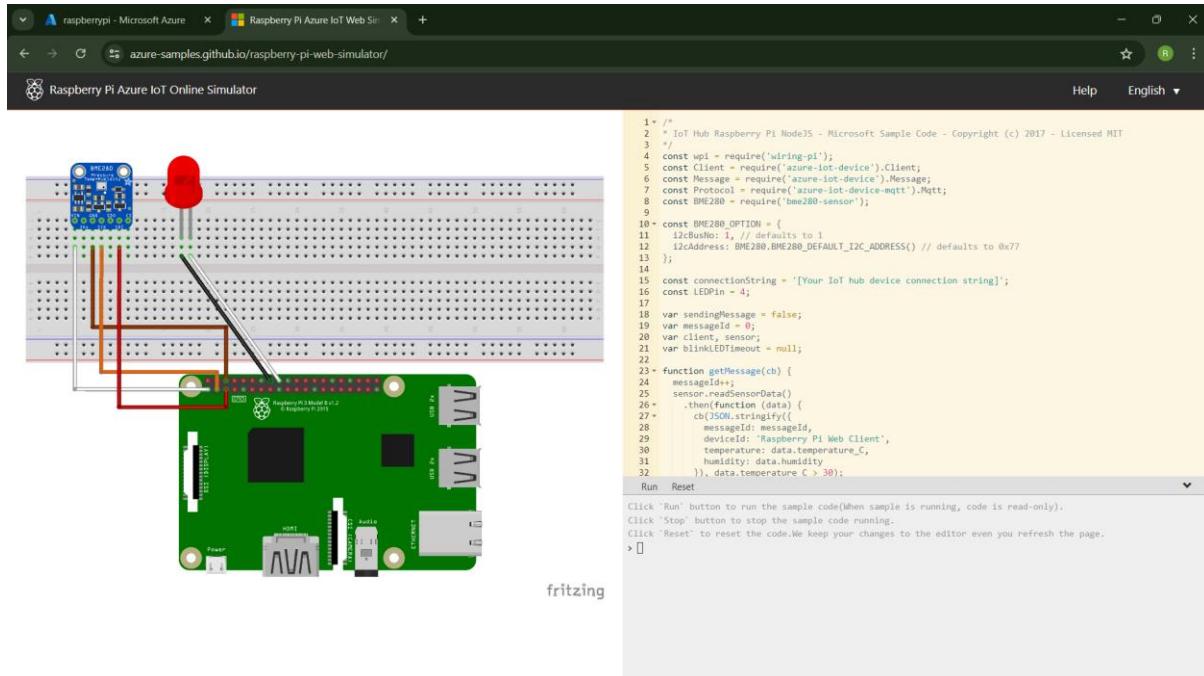
Step 4: Go to device option.

The screenshot shows the Microsoft Azure IoT Hub Device Management interface. The left sidebar menu is expanded, showing the 'Device management' section with 'Devices' selected. Other options like 'IoT Edge', 'Configurations + Deployments', 'Updates', and 'Queries' are also listed. The main content area is currently empty, indicating no devices have been added yet.

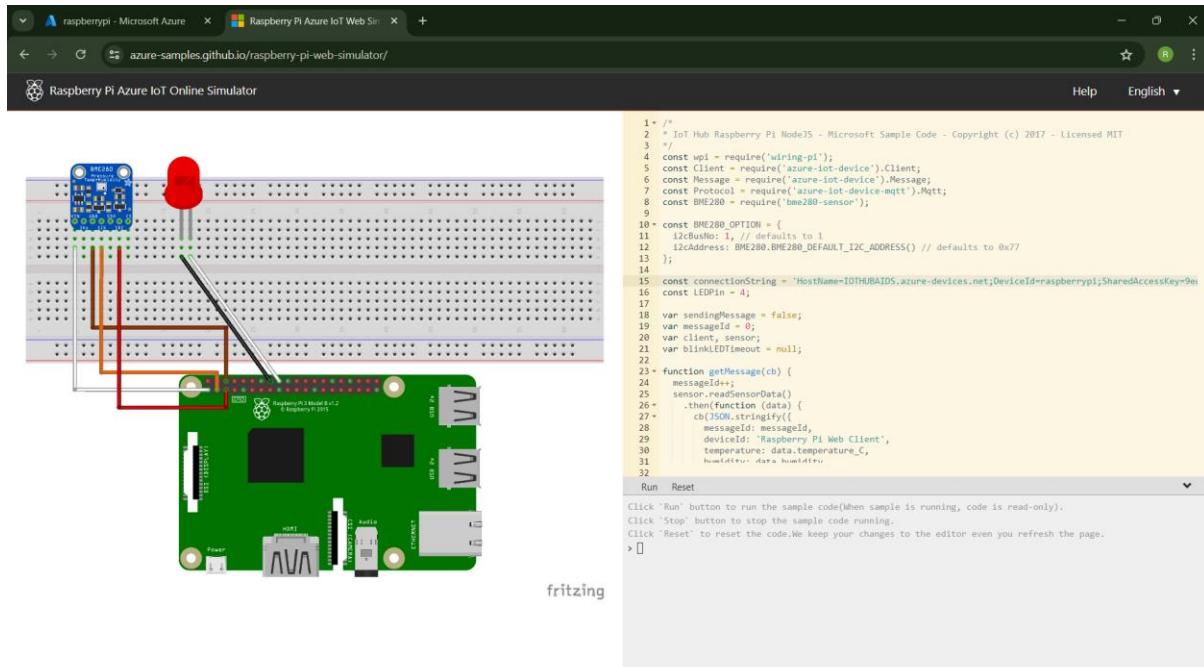
Step 5: Download and install raspberry pi online simulator.

The screenshot shows a Google search results page for 'raspberry pi online simulator'. The top result is a link to the 'Raspberry Pi Azure IoT Web Simulator', which is described as a web simulator for Raspberry Pi as client and Azure IoT Hub as service. Below it, there are several other links related to Raspberry Pi simulators, including 'Raspberry Pi Forums' and 'Learn Microsoft' pages. The search bar at the top contains the query 'raspberry pi online simulator'.

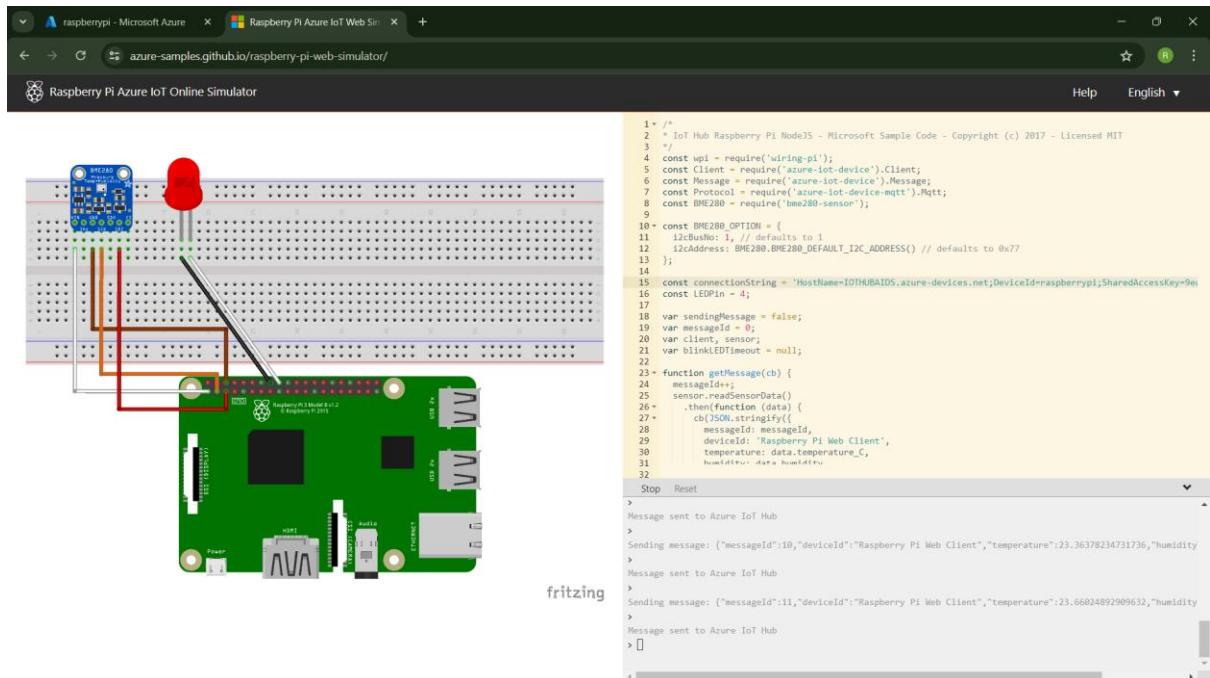
Step 6: Then paste the IOT hub connecting string .



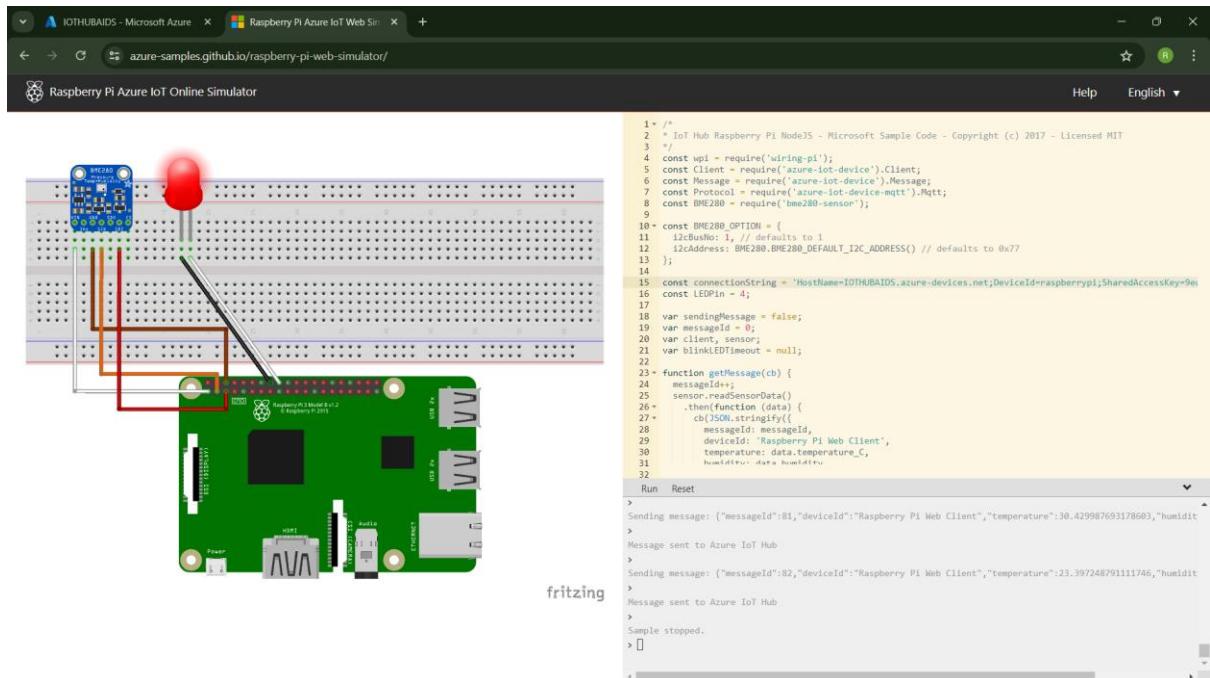
Step 7: Afterwards run the program to get the message.



Step 8: We want run the program.



Step 9: Afterwards we want to stop it.



Step 10: Check usage on IOT Hub.

The screenshot shows the Microsoft Azure IoT Hub Overview page for the resource group IOTHUBAIDS. The left sidebar contains navigation links for Activity log, Access control (IAM), Tags, Diagnose and solve problems, Events, Device management (Devices, IoT Edge, Configurations + Deployments, Updates, Queries), Hub settings, Security settings, Defender for IoT, Monitoring, Automation, and Help. The main content area has tabs for Overview, IoT Hub Usage, Device to cloud messages, and Connected Devices. The IoT Hub Usage tab is selected, showing a chart titled 'Number of messages used' with data for today (81 messages) and a daily quota of 400,000. Below the chart, it says 'Total number of messages used (Max), ioth... | 0'. The Device to cloud messages and Connected Devices sections show minimal activity.

Step 11: Delete IOT Hub.

The screenshot shows the Microsoft Azure search results for IoT Hubs. The search term is 'IOTHUBAIDS'. The results table lists one record: IOTHUBAIDS, which is an IoT Hub of type Microsoft.Devices/IoTHubs, located in Rajkumar_group, Central India, and associated with the subscription Rajkumar.G. A modal window titled 'Delete IOTHUBAIDS' is open, stating 'Deleting your IoT hub.' At the bottom of the page, there are navigation links for < Previous, Page 1, Next >, and a 'Give feedback' link.

Topic : Create Load Balancing

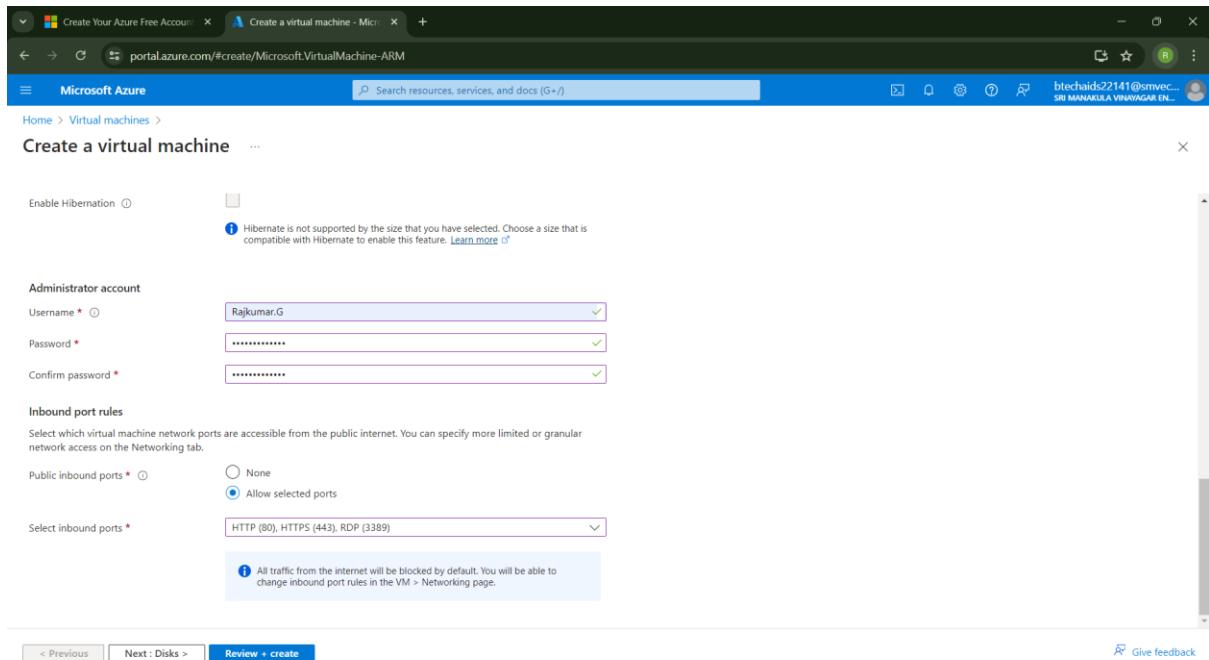
Step 1: Create Virtual Network and then deploy it.

The screenshot shows the Microsoft Azure portal's Deployment Overview page for a deployment named "jio-1721981727585". The status is "Deployment succeeded". The deployment was created on 7/26/2024 at 1:45:29 PM with a Correlation ID of 4ba4d926-86c5-4648-b0c2-f4c35ac611f8. It was deployed to the "AIDS" resource group under the "Subscription : Rajkumar.G". The page includes sections for "Deployment details", "Next steps" (with a "Go to resource" button), and "Give feedback". On the right side, there are promotional cards for "Cost management", "Microsoft Defender for Cloud", "Free Microsoft tutorials", and "Work with an expert".

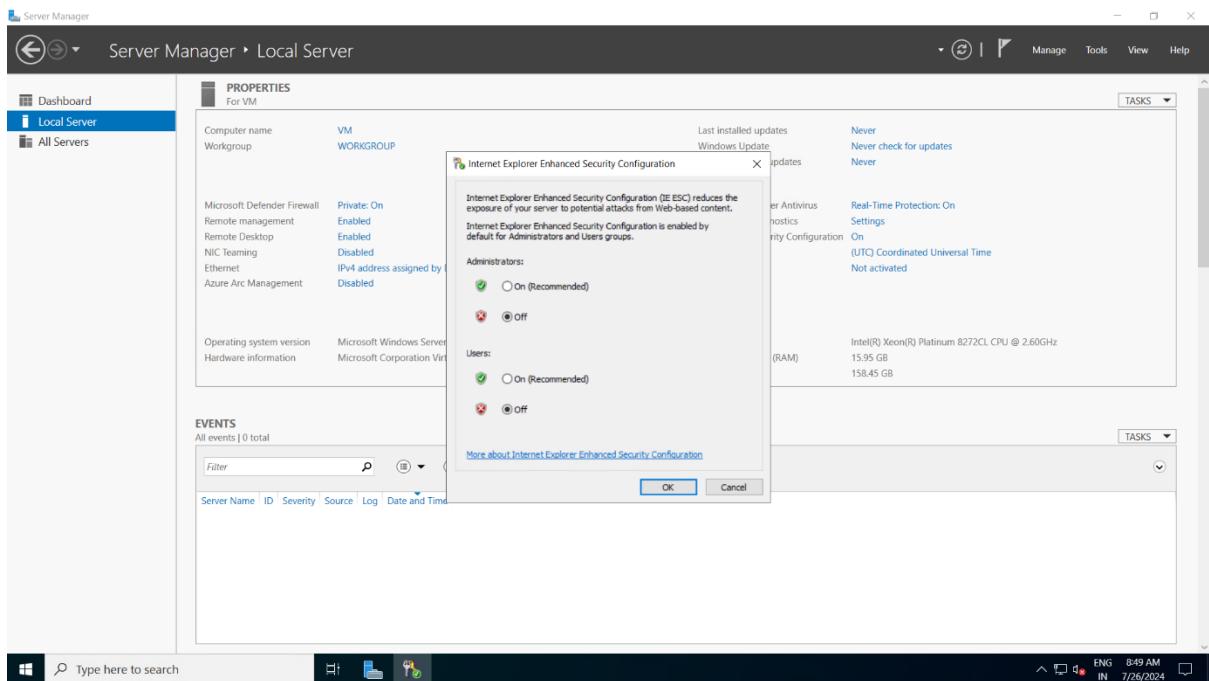
Step 2: Afterwards we create the virtual machine.

The screenshot shows the Microsoft Azure portal's "Create a virtual machine" wizard. The "Basics" tab is selected. The user has chosen the "Rajkumar.G" subscription and the "AIDS" resource group. In the "Project details" section, the "Virtual machine name" is set to "VM1", the "Region" is "(Asia Pacific) Central India", and the "Availability options" are set to "Availability zone". Under "Zone options", the "Self-selected zone" option is selected. At the bottom of the screen, there are navigation buttons: "< Previous", "Next : Disks >", "Review + create", and "Give feedback".

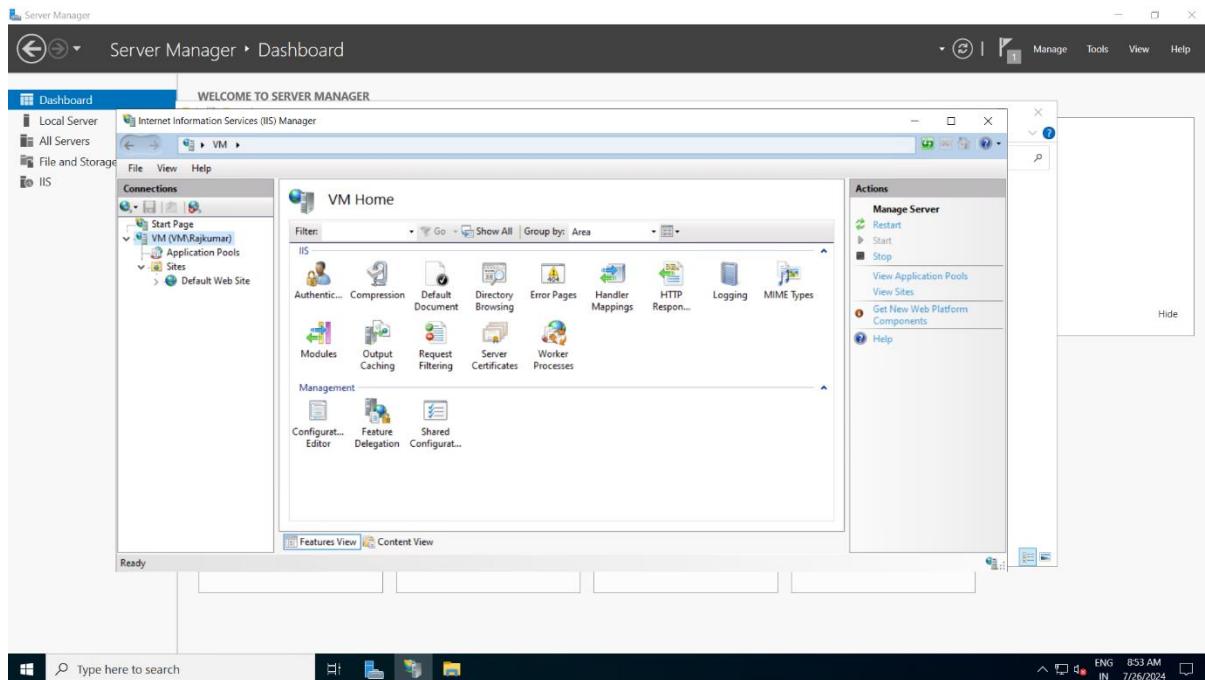
Step 3: In that Select inbound ports HTTP (80), HTTPS (443), RDP (3389)



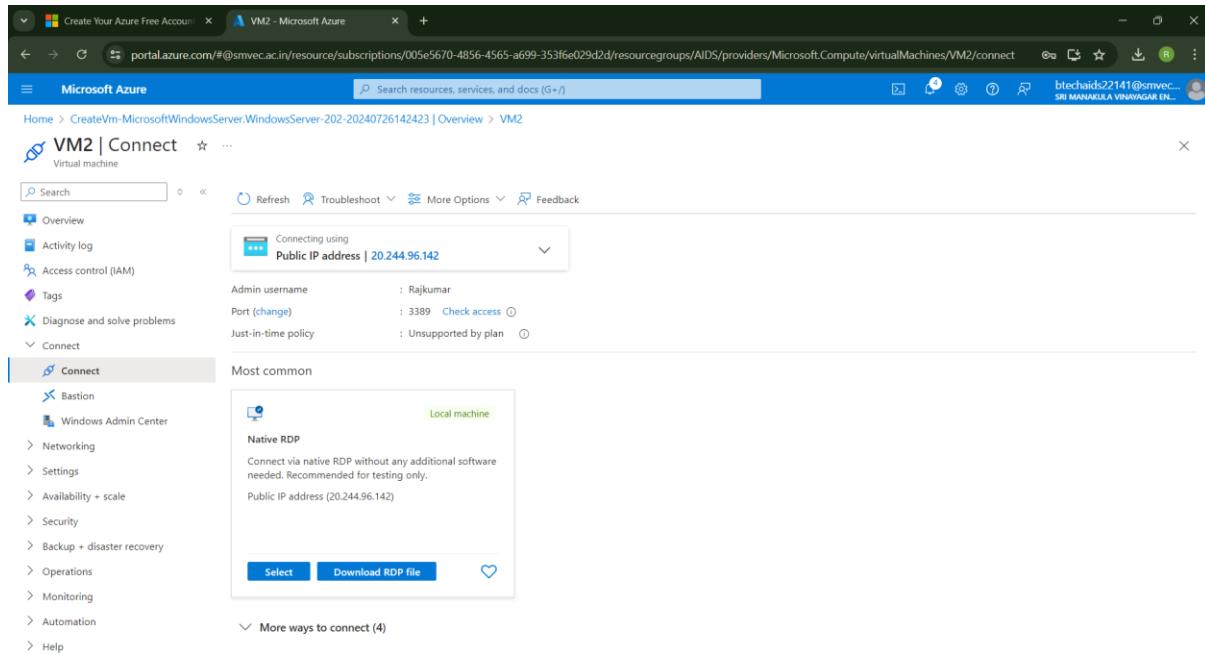
Step 4: Download and install the RDP file and then off the internet explorer security.



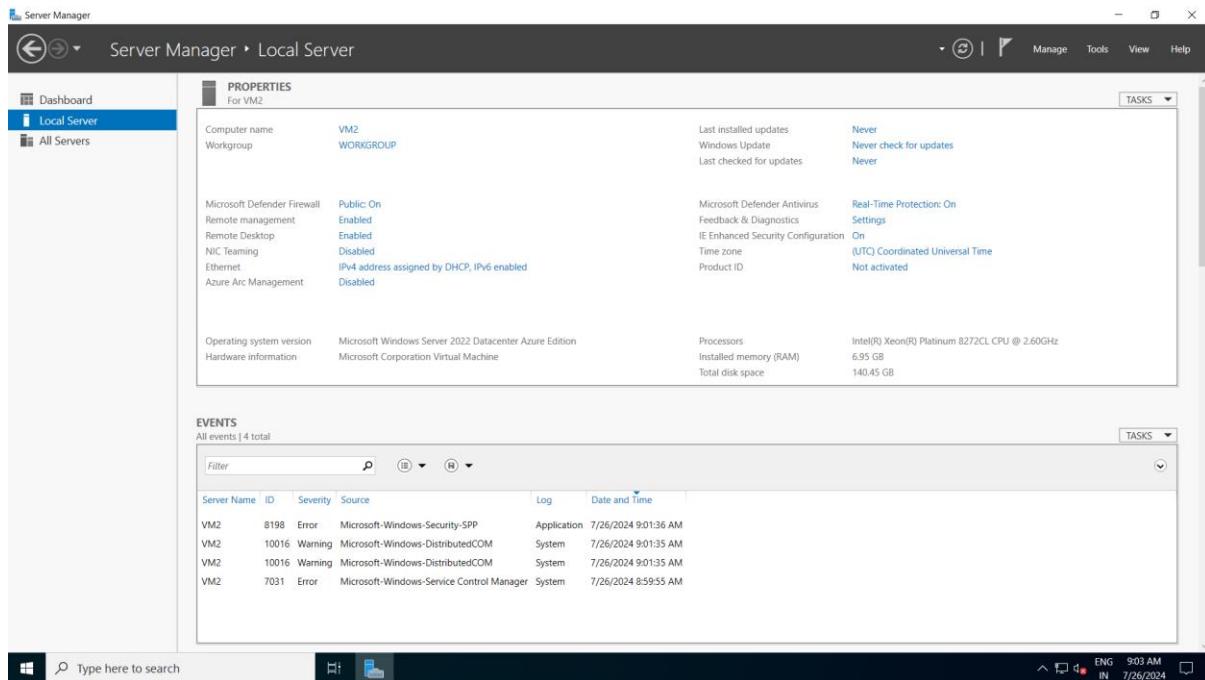
Step 5: Go to tolls IIS and then default website.



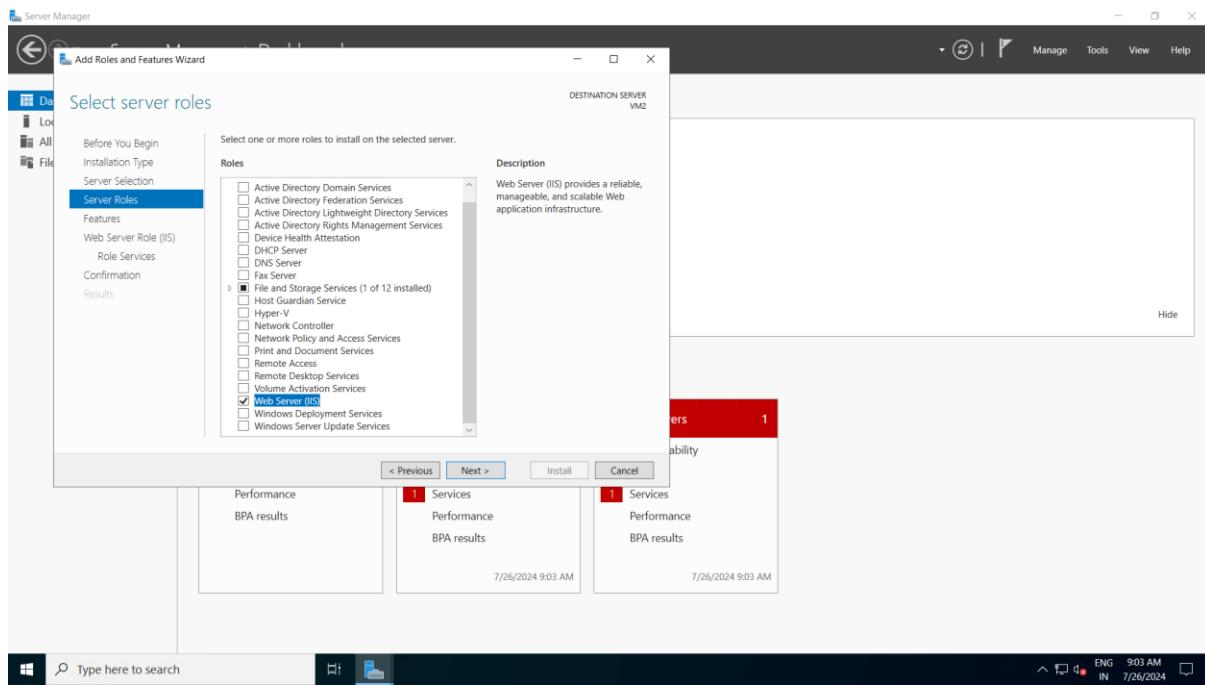
Step 6: As same like create the virtual machine and with same virtual network.



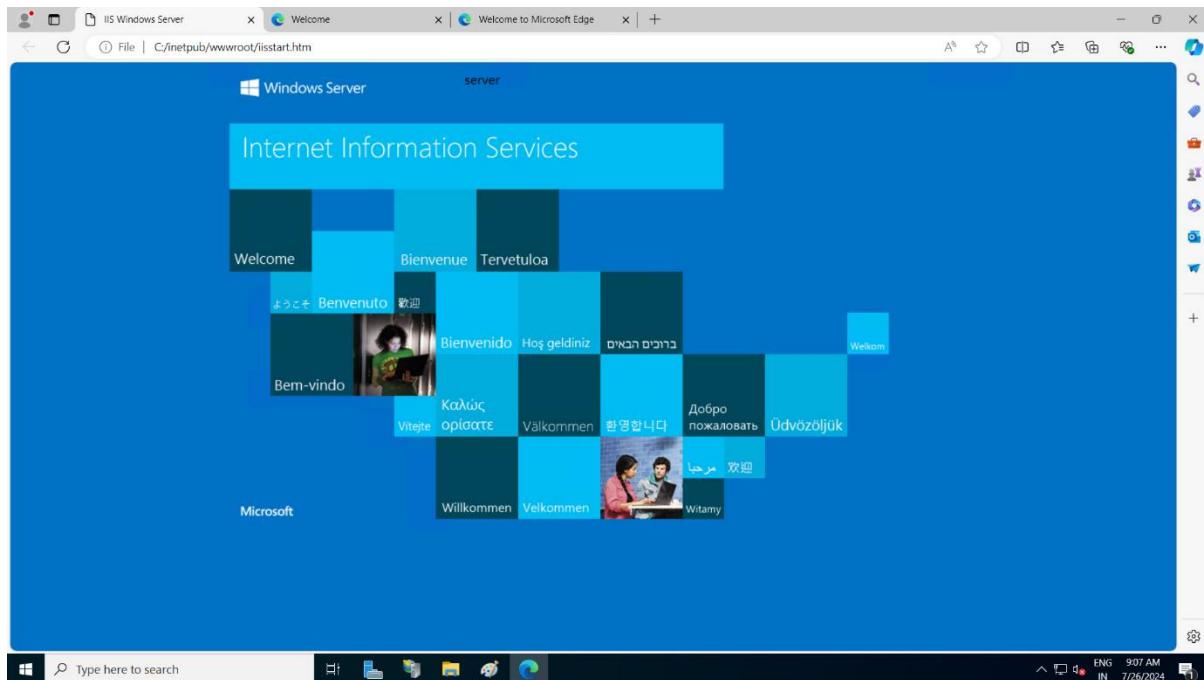
Step 7: As the same process for the local server.



Step 8: And also select role and install it.



Step 9: Afterwards open the file explorer.



Step 10: Create the load balancer.

A screenshot of the Microsoft Azure portal. The user is in the 'Create load balancer' wizard. In the 'Project details' section, 'Subscription' is set to 'Rajkumar.G' and 'Resource group' is set to 'AIDS'. Under 'Instance details', the 'Name' is 'LB', 'Region' is 'Central India', 'SKU' is 'Standard (Recommended)', 'Type' is 'Public', and 'Tier' is 'Regional'. At the bottom of the screen, there are navigation buttons: 'Review + create', '< Previous', 'Next : Frontend IP configuration >', 'Download a template for automation', and 'Give feedback'.

Step 11: Add backend pool with virtual network.

The screenshot shows the 'Add backend pool' page in the Microsoft Azure portal. At the top, there are tabs for 'Create Your Azure Free Account' and 'Add backend pool - Microsoft'. The main title is 'Add backend pool'. Below the title, there are two input fields: 'Backend pool name' containing 'BL' and 'Virtual network' containing 'jio (AIDS)'. At the bottom of the page are three buttons: 'Save' (blue), 'Cancel' (white), and 'Give feedback' (gray).

Step 12: Also Add IP configurations to backend pool by selecting and save it.

The screenshot shows the 'Add IP configurations to backend pool' page in the Microsoft Azure portal. On the left, there's a sidebar with 'Name' (BL), 'Virtual network' (jio (AIDS)), and 'Backend Pool Configuration' (NIC selected). Under 'IP configurations', it says 'IP configurations associated to virtual machines and virtual machine scale sets must be in same location as the load balancer and be in the same virtual network.' There are buttons for '+ Add' and 'Remove'. On the right, the main area is titled 'Add IP configurations to backend pool'. It shows a table with two rows for 'Virtual machine (2)'. The columns are 'Resource Name', 'Resource group', 'Type', 'IP config...', 'IP Addr...', 'Availability', and 'Tags'. The first row has 'VM' in 'Resource Name', 'AIDS' in 'Resource group', 'Virtual ...' in 'Type', 'ipconfig1' in 'IP config...', '10.1.0.4' in 'IP Addr...', '-' in 'Availability', and a 'Tags' field with '["CREATED BY":"RAJKUMAR"]'. The second row has 'VM2' in 'Resource Name', 'AIDS' in 'Resource group', 'Virtual ...' in 'Type', 'ipconfig1' in 'IP config...', '10.1.0.5' in 'IP Addr...', '-' in 'Availability', and a 'Tags' field with '["CREATED BY":"RAJKUMAR"]'. At the bottom are buttons for 'Save' (blue), 'Cancel' (white), and 'Give feedback' (gray).

Step 13: After insert it then go to Inbound.

A screenshot of the Microsoft Azure portal showing the 'Create load balancer' wizard. The current step is 'Backend pools'. The interface shows a table of backend pool resources. There are two entries under the 'BL' category:

Name	Virtual network	Resource Name	Network interface	IP address	Availability zone	Admin state
BL	jio	VM	vm767_z1	10.1.0.4	1	None
BL	jio	VM2	vm2869_z1	10.1.0.5	1	None

At the bottom, there are buttons for 'Review + create', '< Previous', 'Next : Inbound rules >', 'Download a template for automation', and 'Give feedback'.

Step 14: In the Inbound create Add load balancing rule.

A screenshot of the Microsoft Azure portal showing the 'Create load balancer' wizard on the 'Inbound rules' step. A modal window titled 'Add load balancing rule' is open, showing the configuration for a new rule:

- Protocol: TCP (selected)
- Port: 80
- Backend port: 80
- Health probe: No existing probes (Create new)

The main page shows the following sections:

- Load balancing rule:** Describes how traffic is distributed across backend pool instances.
- Inbound NAT rule:** Describes how incoming traffic is forwarded to a specific virtual machine.
- Table of existing rules:** Shows columns for Name, Frontend IP configuration, Backend pool, and Health probe.

At the bottom, there are buttons for 'Review + create', '< Previous', 'Next : Outbound rule >', 'Download a template for automation', and 'Give feedback'.

Step 15: Then create and deploy it.

The screenshot shows the Azure Load Balancer Overview page. Key details include:

- Resource group: AID5
- Location: Central India
- Subscription: Rajkumar.G
- Subscription ID: 005e5670-4856-4565-a699-353f6e029d2d
- SKU: Standard
- Backend pool: BL (2 virtual machines)
- Load balancing rule: RULE1 (Tcp:80)
- Health probe: HP (Tcp:80)
- NAT rules: 0 inbound
- Tier: Regional

Below the configuration, there's a section titled "Configure high availability and scalability for your applications" with three main options:

- Balance IPv4 and IPv6 addresses
- Build highly reliable applications
- Secure your networks

Each option has a "View [sub-module] configuration" button.

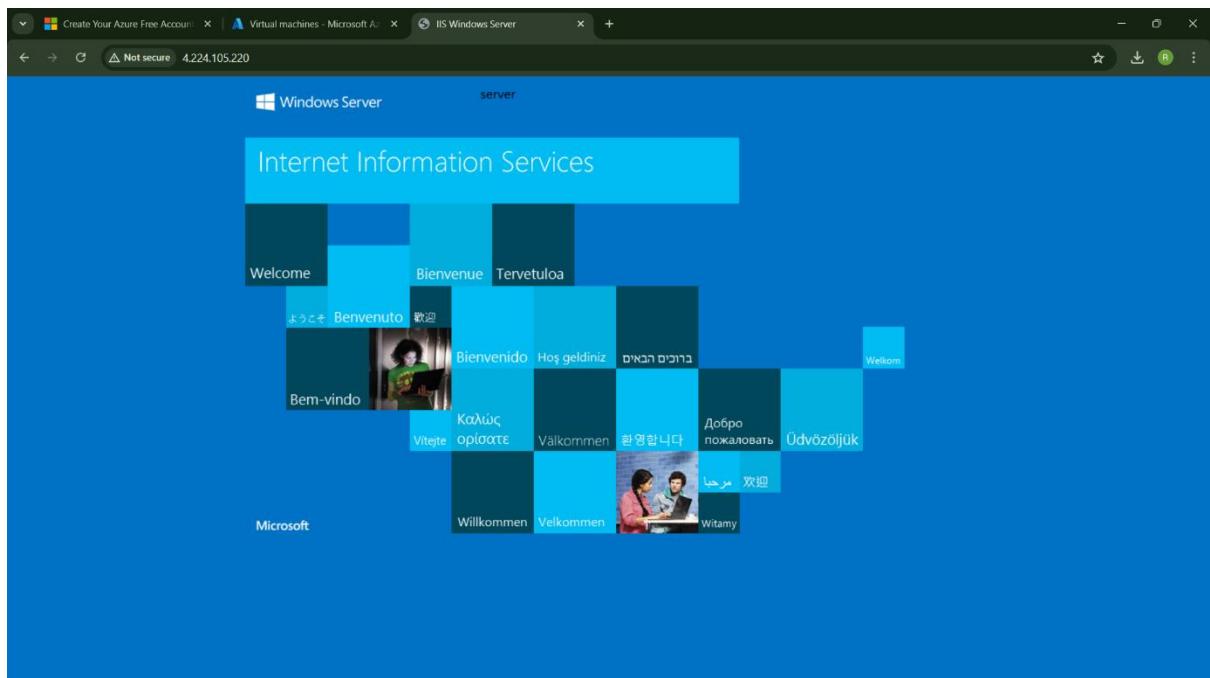
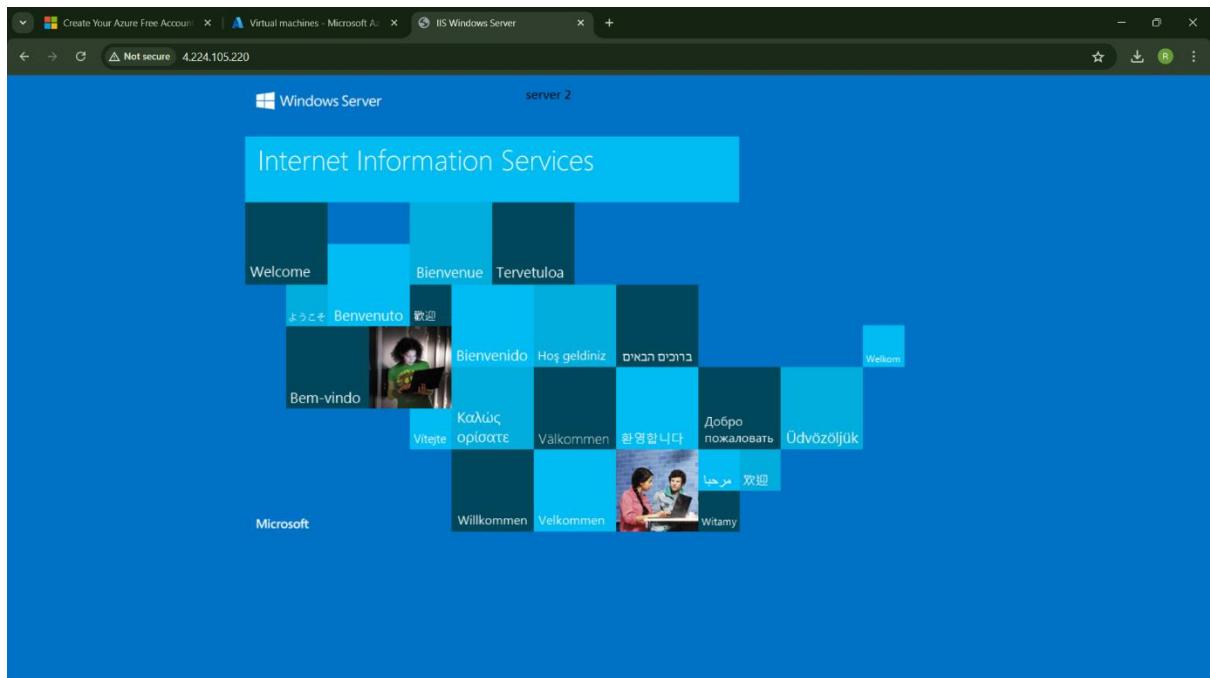
The screenshot shows the same Azure Load Balancer Overview page. The "Public IP address" field is highlighted with a yellow box, and a tooltip indicates it is being copied ("Copied").

Below the configuration, there's a section titled "Configure high availability and scalability for your applications" with three main options:

- Balance IPv4 and IPv6 addresses
- Build highly reliable applications
- Secure your networks

Each option has a "View [sub-module] configuration" button.

Step 15: copy and paste the public ip address and paste it.



Topic : Create SQL Database in Cloud

Step 1: Go to SQL Database server and create it & select location Central India.

Server name * sqldbserver57 .database.windows.net

Location * (Asia Pacific) Central India

Authentication

Azure Active Directory (Azure AD) is now Microsoft Entra ID. [Learn more](#)

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Microsoft Entra authentication [Learn more](#) using an existing Microsoft Entra user, group, or application as Microsoft Entra admin [Learn more](#), or select both SQL and Microsoft Entra authentication.

Authentication method Use Microsoft Entra-only authentication Use both SQL and Microsoft Entra authentication Use SQL authentication

OK

Step 2: Then select workload environment as development and go to networking.

Want to use SQL elastic pool? Yes No

Workload environment Development Production

Default settings provided for Development workloads. Configurations can be modified as needed.

Compute + storage * General Purpose - Serverless
Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled
[Configure database](#)

Backup storage redundancy Locally-redundant backup storage Zone-redundant backup storage Geo-redundant backup storage

Selected value for backup storage redundancy is Geo-redundant backup storage. Database backups will be geo-replicated which might impact your data residency requirements. [Learn more](#)

Review + create Next : Networking >

Step 3: Enable the allow Azure services and resources to access this server and add current client IP address.

Cost summary

General Purpose (GP_S_Gen5_1)	10.91
Cost per GB (in INR)	
Max storage selected (in GB)	x 41.6
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND	0.013263 INR

NOTES

1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing

Step 4: Select the use existing data as a sample and create it.

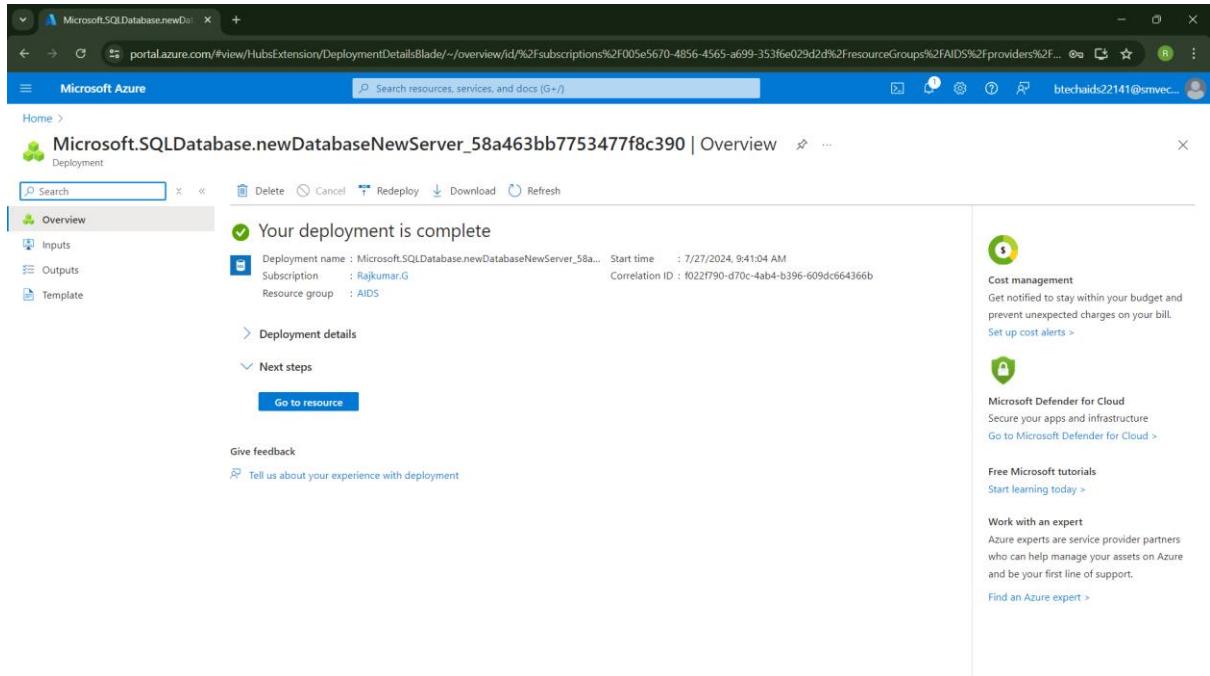
Cost summary

General Purpose (GP_S_Gen5_1)	10.91
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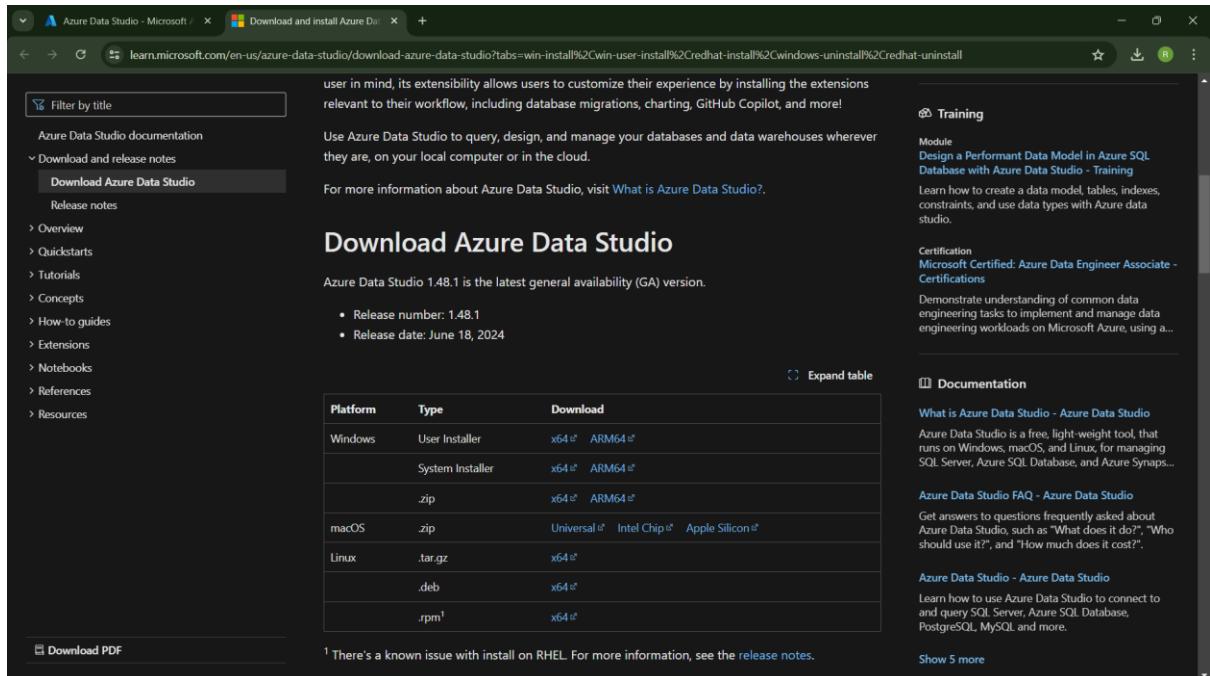
1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing

Step 5: Then deploy it and go to resource.



The screenshot shows the Microsoft Azure portal interface. The main title bar reads "Microsoft.SQLDatabase.newDatabaseNewServer_58a463bb7753477f8c390 | Overview". On the left, there's a navigation pane with "Overview" selected, along with "Inputs", "Outputs", and "Template" options. Below the navigation is a summary section with a green checkmark indicating "Your deployment is complete". It shows deployment details: "Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer_58a...", "Subscription : Rajkumar.G", "Resource group : AIDS", "Start time : 7/27/2024, 9:41:04 AM", and "Correlation ID : f022f790-d70c-4ab4-b396-609dc664366b". To the right of the main content area, there are several promotional cards: "Cost management" (Get notified to stay within your budget and prevent unexpected charges on your bill. Set up cost alerts >), "Microsoft Defender for Cloud" (Secure your apps and infrastructure. Go to Microsoft Defender for Cloud >), "Free Microsoft tutorials" (Start learning today >), and "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 >).

Step 6: Download and install Azure Data Studio.

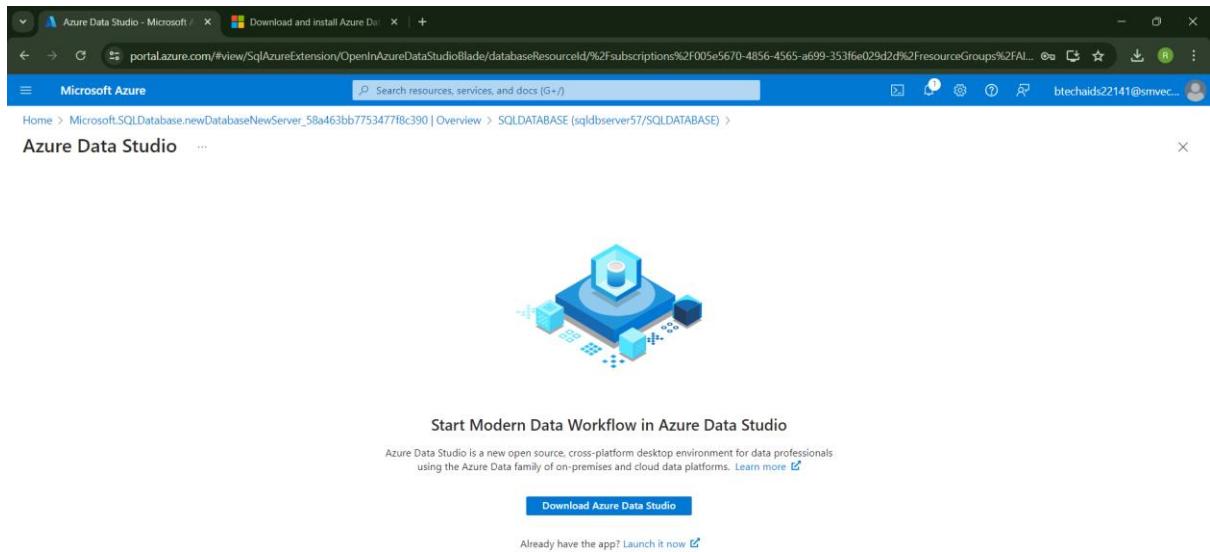


The screenshot shows the "Download and install Azure Data Studio" page from learn.microsoft.com. The left sidebar includes links for "Azure Data Studio documentation", "Download and release notes" (with "Download Azure Data Studio" highlighted), "Release notes", "Overview", "Quickstarts", "Tutorials", "Concepts", "How-to guides", "Extensions", "Notebooks", "References", and "Resources". The main content area features a heading "Download Azure Data Studio" and a sub-section "What is Azure Data Studio?". It states that "Azure Data Studio 1.48.1 is the latest general availability (GA) version." Below this, there's a table of download links:

Platform	Type	Download
Windows	User Installer	x64 x64 ARM64 ARM64
	System Installer	x64 x64 ARM64 ARM64
	.zip	x64 x64 ARM64 ARM64
macOS	.zip	Universal Universal Intel Chip Intel Chip Apple Silicon Apple Silicon
Linux	.tar.gz	x64 x64
	.deb	x64 x64
	.rpm ¹	x64 x64

Footnotes at the bottom mention a known issue with RHEL installation and a link to release notes. To the right, there are sections for "Training" (Design a Performant Data Model in Azure SQL Database with Azure Data Studio - Training), "Certification" (Microsoft Certified: Azure Data Engineer Associate - Certifications), "Documentation" (What is Azure Data Studio - Azure Data Studio), "FAQ" (Azure Data Studio FAQ - Azure Data Studio), and "Azure Data Studio - Azure Data Studio".

Step 7: Afterwards open the installed app by the link in cloud database.



Step 8: We can it by the query and store it in cloud.

A screenshot of SQL Server Management Studio (SSMS). The top menu bar includes File, Edit, View, Help, and a toolbar with icons for New Query, Open, Save, and Run. The central pane shows a query window with the following T-SQL code:

```
1 CREATE TABLE CUSTOMERS1(
2     ID INT NOT NULL,
3     NAME CHAR(20) NOT NULL,
4     AGE INT NOT NULL,
5     ADDRESS CHAR(30),
6     SALARY DECIMAL(18,2),
7     PRIMARY KEY (ID)
8 );
9
10 INSERT INTO CUSTOMERS1 VALUES (7, 'JEE', 30, 'INDIA', 15000.00);
11 INSERT INTO CUSTOMERS1 VALUES (71, 'JEEn1', 50, 'INDIAN', 75000.00);
12
13 SELECT * FROM CUSTOMERS1;
14
```

The status bar at the bottom indicates the query was run at Ln 14, Col 1 with 2 rows affected. The bottom pane displays the results of the query, showing two rows of data in a table format:

ID	NAME	AGE	ADDRESS	SALARY
7	JEE	30	INDIA	15000.00
71	JEEn1	50	INDIAN	75000.00

Step 9: Delete it from the dataset if do not want it.

The screenshot shows the Microsoft Azure portal interface. On the left, the 'SQL databases' blade is open, displaying a single record: 'SQLDATABASE (sqlserver57/SQLDATABASE)' under 'Server'. On the right, a modal window titled 'Delete Resources' is displayed, listing the selected resource 'SQLDATABASE (sqlserver57/SQLDATABASE)' as a 'Database'. A text input field contains 'delete', and two buttons at the bottom are 'Delete' (highlighted in red) and 'Cancel'.

Topic : Create Query and excute it

Step 1: Go to Azure Cosmos DB and create it.

The screenshot shows the Microsoft Azure portal interface. The 'Azure Cosmos DB' blade is open, showing a message 'No Azure Cosmos DB accounts to display'. It includes a call-to-action button 'Create Azure Cosmos DB account' and a 'Try now' link. The top navigation bar shows the user's name 'SRI MANAKULA VINAYAGAR EN...'.

[Give feedback](#)

Step 2: And then click the Azure Cosmos DB for NOSQL.

The screenshot shows the Microsoft Azure portal with the URL portal.azure.com/#create/Microsoft.DocumentDB. The page title is "Create an Azure Cosmos DB account". It displays six options for creating a new account based on different APIs:

- Azure Cosmos DB for NoSQL**: Fully managed NoSQL database service for building scalable, high performance applications.
- Azure Cosmos DB for PostgreSQL**: Fully-managed relational database service for PostgreSQL with distributed query execution, powered by the Citus open source extension.
- Azure Cosmos DB for MongoDB**: Fully managed database service for apps written for MongoDB. Recommended if you have existing MongoDB workloads that you plan to migrate to Azure Cosmos DB.
- Azure Cosmos DB for Apache Cassandra**: Fully managed Cassandra database service for apps written for Apache Cassandra. Recommended if you have existing Cassandra workloads that you plan to migrate to Azure Cosmos DB.
- Azure Cosmos DB for Table**: Fully managed database service for apps written for Azure Table storage.
- Azure Cosmos DB for Apache Gremlin**: Fully managed graph database service using the Gremlin query language, based on Apache TinkerPop project.

Each option includes a "Create" button and a "Learn more" link. At the bottom left, there are "Give Feedback" and "Help improve this page" links.

Step 3: Type account name and location (US) Central US EUAP.

The screenshot shows the Microsoft Azure portal with the URL portal.azure.com/#create/Microsoft.DocumentDB. The page title is "Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL". The "Basics" tab is selected. The configuration details are as follows:

- Subscription**: Rajkumar.G
- Resource Group**: AIDS
- Account Name**: cosmosdb57
- Location**: (US) Central US EUAP
- Availability Zones**: Disable
- Capacity mode**: Provisioned throughput

At the bottom, there are "Review + create" and "Feedback" buttons, along with "Previous" and "Next: Global distribution" links.

Step 4: Review and create it.

The screenshot shows the 'Create Azure Cosmos DB Account' wizard on the 'Review + create' step. A green validation success bar at the top indicates that the account name '(new) cosmosdb-57' is available. The 'Basics' tab is selected, showing the following configuration details:

Setting	Value
Subscription	Rajkumar.G
Resource Group	AIDS
Location	Central US
Account Name	(new) cosmosdb-57
API	Azure Cosmos DB for NoSQL
Capacity mode	Provisioned throughput
Geo-Redundancy	Disable
Multi-region Writes	Disable
Availability Zones	Disable

The 'Creation Time' section shows an estimated creation time of 2 minutes. Below the basics, there's a 'Backup Policy' section. At the bottom, there are 'Create' and 'Next' buttons, along with a 'Feedback' link.

Step 5: Create container and write query on the items.

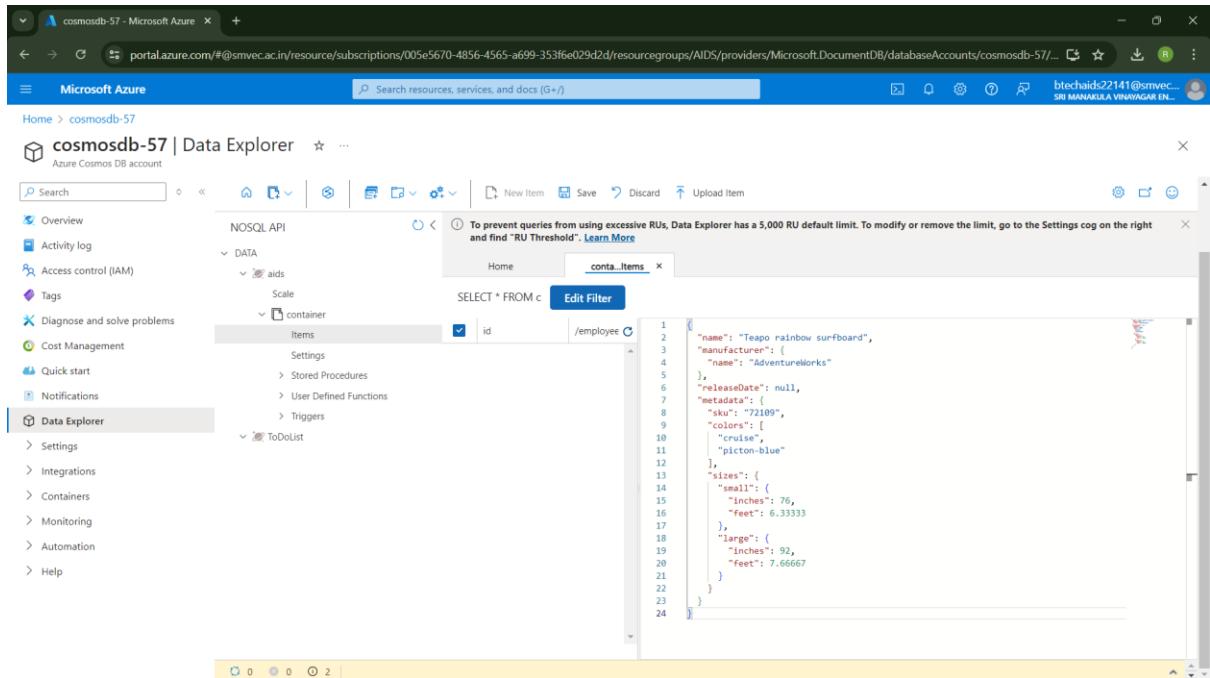
The screenshot shows the 'cosmosdb-57 | Data Explorer' interface. The left sidebar lists various management options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Cost Management, Quick start, and Notifications. The main area displays the NOSQL API Data Explorer for the 'Items' container. A modal window titled 'Items.Items' is open, showing a query editor with the following SQL code:

```
SELECT * FROM c
```

The code editor contains a single JSON document:

```
1 { "id": "replace_with_new_document_id",  
2   "partitionKey": "replace_with_new_partition_key_value"  
3 }  
4 }
```

Step 6: write this query on the items.



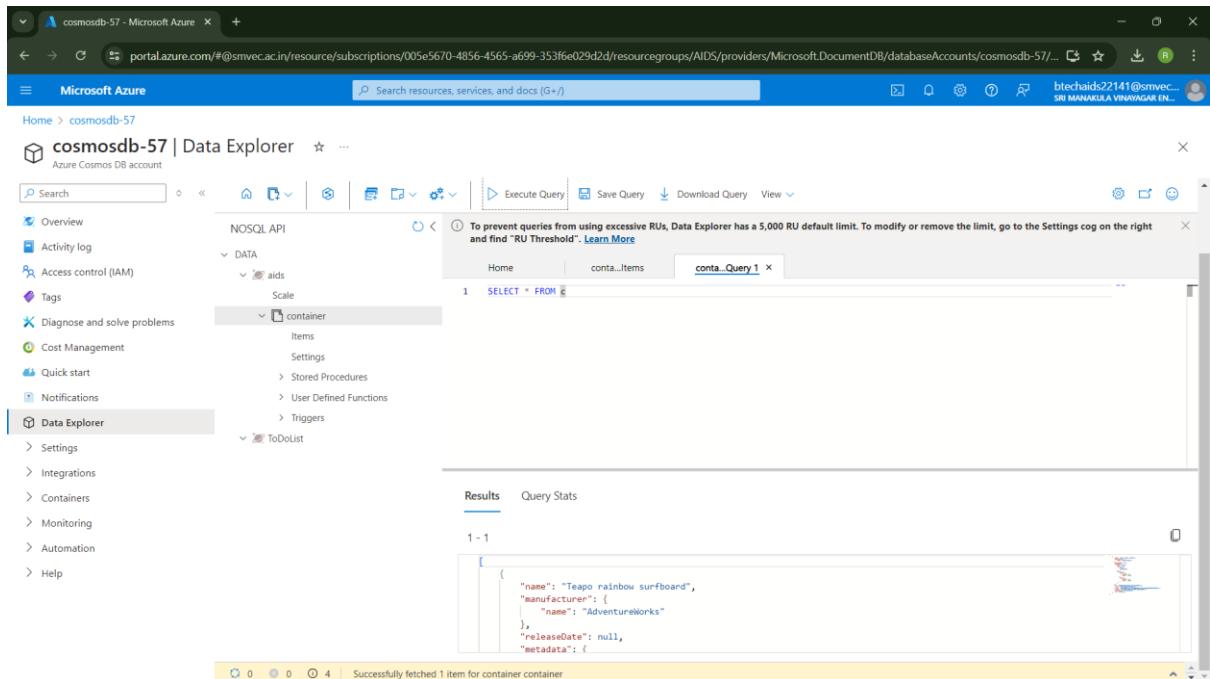
The screenshot shows the Microsoft Azure Data Explorer interface for the 'cosmosdb-57' database. The left sidebar has a 'Data Explorer' section selected. In the main area, under the 'NOSQL API' tab, a query is being typed into the 'conta...Items' input field:

```
SELECT * FROM c
```

The results pane displays the following JSON document:

```
1  {
2    "name": "Teapo rainbow surfboard",
3    "manufacturer": {
4      "name": "AdventureWorks"
5    },
6    "releaseDate": null,
7    "metadata": {
8      "sku": "72109",
9      "colors": [
10        "cruise",
11        "picon-blue"
12      ],
13      "size": {
14        "small": {
15          "inches": 76,
16          "feet": 6.33333
17        },
18        "large": {
19          "inches": 92,
20          "feet": 7.66667
21        }
22      }
23  }
```

Step 7: Select new query option and execute it.



The screenshot shows the Microsoft Azure Data Explorer interface for the 'cosmosdb-57' database. The left sidebar has a 'Data Explorer' section selected. In the main area, under the 'NOSQL API' tab, the query 'conta...Items' is selected in the dropdown. The results pane shows the same JSON document as before:

```
1  {
2    "name": "Teapo rainbow surfboard",
3    "manufacturer": {
4      "name": "AdventureWorks"
5    },
6    "releaseDate": null,
7    "metadata": {
8      "sku": "72109",
9      "colors": [
10        "cruise",
11        "picon-blue"
12      ],
13      "size": {
14        "small": {
15          "inches": 76,
16          "feet": 6.33333
17        },
18        "large": {
19          "inches": 92,
20          "feet": 7.66667
21        }
22      }
23  }
```

At the bottom of the results pane, a message says 'Successfully fetched 1 item for container container'.

Step 8: Can type of any which is related to the first query and execute it.

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#@smvec.ac.in/resource/subscriptions/005e5670-4856-4565-a699-353f6e029d2d/resourcegroups/AlDS/providers/Microsoft.DocumentDB/databaseAccounts/cosmosdb-57/>. The page title is "cosmosdb-57 | Data Explorer". The left sidebar shows "Data Explorer" selected. The main area displays a query in the "Execute Query" tab:

```
1 SELECT
2   p.name,
3   p.metadata.sku,
4   p.sizes.small.inches AS size
5 FROM
6   products p
```

The results pane shows one item:

```
[{"name": "Teapo rainbow surfboard", "sku": "72109"}]
```

Step 9: Delete the database and then delete Azure Cosmos DB.

The screenshot shows the Microsoft Azure portal with the same URL as the previous screenshot. The "Delete Database" dialog is open on the right side. It contains a warning message: "Warning! The action you are about to take cannot be undone. Continuing will permanently delete this resource and all of its children resources." Below the message is a text input field labeled "Confirm by typing the Database id" with the value "alids". At the bottom of the dialog are "OK" and "Cancel" buttons.