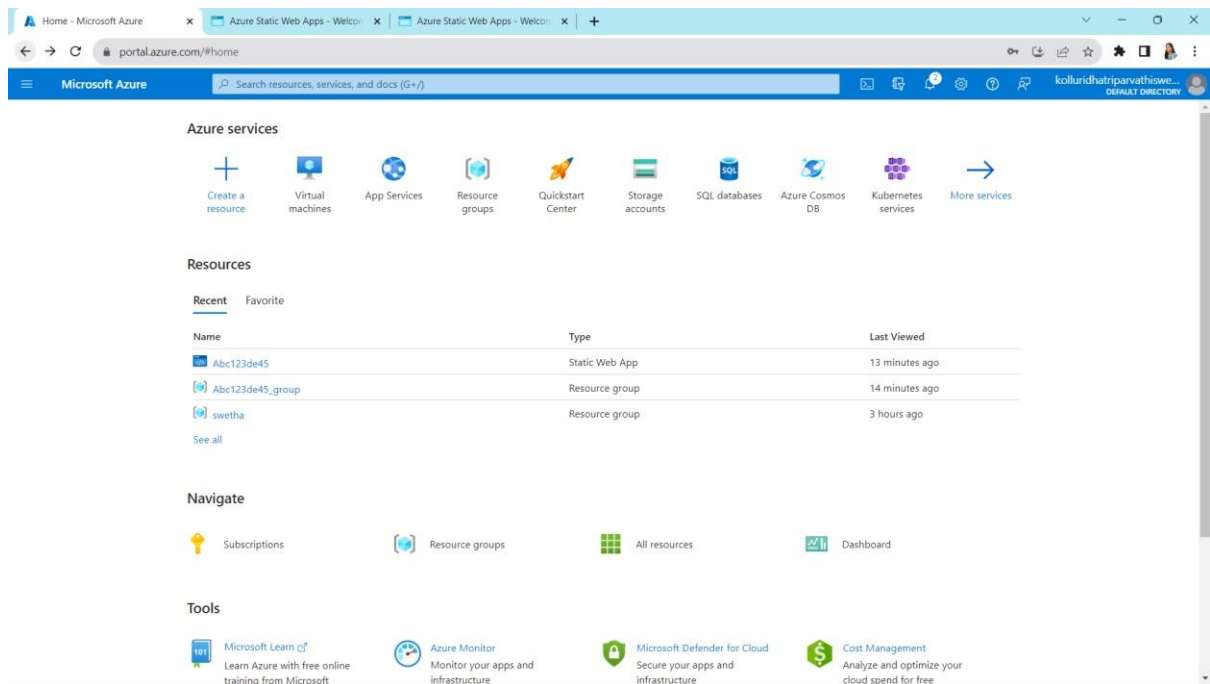


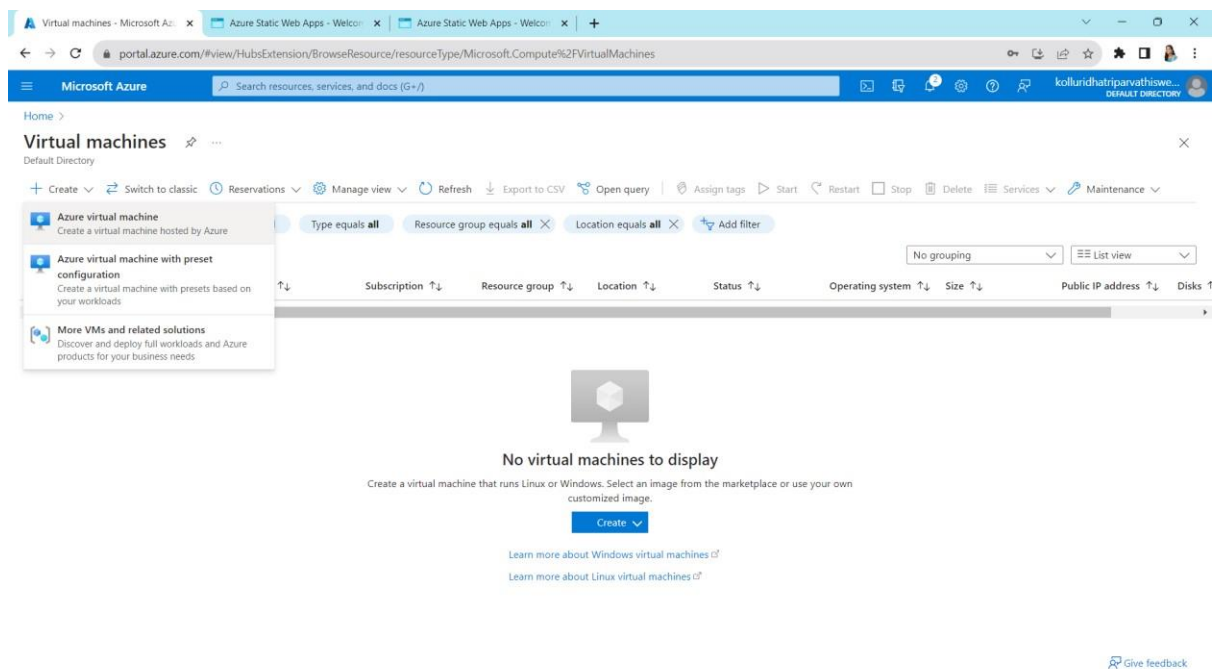
EXPERIMENT 13

Demonstrate Infrastructure as a Service (IaaS) by establishing the remote connection, launch the created VM image and run in your desktop. first we can sign in into Azure

Select virtual machine to create a virtual machine



Click on create



Fill up the given requirements

Change the disc size and click on next

Create a virtual machine - Micro x +

portal.azure.com/#create/Microsoft.VirtualMachine-ARM

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

Home > Virtual machines >

Create a virtual machine

Basics **Disks** Networking Management Monitoring Advanced Tags Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

VM disk encryption

Azure disk storage encryption automatically encrypts your data stored on Azure managed disks (OS and data disks) at rest by default when persisting it to the cloud.

Encryption at host ☐

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

OS disk

OS disk size

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.](#)

OS disk type

Delete with VM ☒

Key management

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

Click on next

Create a virtual machine - Micro x +

portal.azure.com/#create/Microsoft.VirtualMachine-ARM

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

Home > Virtual machines >

Create a virtual machine

NIC network security group ☐ None ☒ Basic ☐ Advanced

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

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

Click on next

Create a virtual machine - Micro x

portal.azure.com/#create/Microsoft.VirtualMachine-ARM

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

Home > Virtual machines >

Create a virtual machine

Basics Disks Networking **Management** Monitoring Advanced Tags Review + create

Configure management options for your VM.

Microsoft Defender for Cloud

Microsoft Defender for Cloud provides unified security management and advanced threat protection across hybrid cloud workloads. [Learn more](#)

✔ Your subscription is protected by Microsoft Defender for Cloud basic plan.

Identity

Enable system assigned managed identity ☐

Azure AD

Login with Azure AD ☐

RBAC role assignment of Virtual Machine Administrator Login or Virtual Machine User Login is required when using Azure AD login. [Learn more](#)

Azure AD login now uses SSH certificate-based authentication. You will need to use an SSH client that supports OpenSSH certificates. You can use Azure CLI or Cloud Shell from the Azure Portal. [Learn more](#)

Auto-shutdown

Enable auto-shutdown ☐

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

on next

The screenshot shows the 'Monitoring' tab of the 'Create a virtual machine' wizard. The breadcrumb trail is 'Home > Virtual machines > Create a virtual machine'. The tabs are 'Basics', 'Disks', 'Networking', 'Management', 'Monitoring' (selected), 'Advanced', 'Tags', and 'Review + create'. The 'Monitoring' section is titled 'Configure monitoring options for your VM.' and contains three sections: 'Alerts' with 'Enable recommended alert rules' (checkbox), 'Diagnostics' with 'Boot diagnostics' (radio buttons: 'Enable with managed storage account (recommended)', 'Enable with custom storage account', 'Disable'), and 'Enable OS guest diagnostics' (checkbox). At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next : Advanced >', along with a 'Give feedback' link.

Click on next

The screenshot shows the 'Advanced' tab of the 'Create a virtual machine' wizard. The breadcrumb trail is 'Home > Virtual machines > Create a virtual machine'. The tabs are 'Basics', 'Disks', 'Networking', 'Management', 'Monitoring', 'Advanced' (selected), 'Tags', and 'Review + create'. The 'Advanced' section is titled 'Add additional configuration, agents, scripts or applications via virtual machine extensions or cloud-init.' and contains three sections: 'Extensions' with 'Extensions provide post-deployment configuration and automation.' and a 'Select an extension to install' button; 'VM applications' with 'VM applications contain application files that are securely and reliably downloaded on your VM after deployment. In addition to the application files, an install and uninstall script are included in the application. You can easily add or remove applications on your VM after create. Learn more >' and a 'Select a VM application to install' button; and 'Custom data and cloud init' with 'Pass a cloud-init script, configuration file, or other data into the virtual machine while it is being provisioned. The data will be saved on the VM in a known location. Learn more about custom data for VMs >' and a 'Custom data' text area. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next : Tags >', along with a 'Give feedback' link.

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Click
Give some names and values and click on next

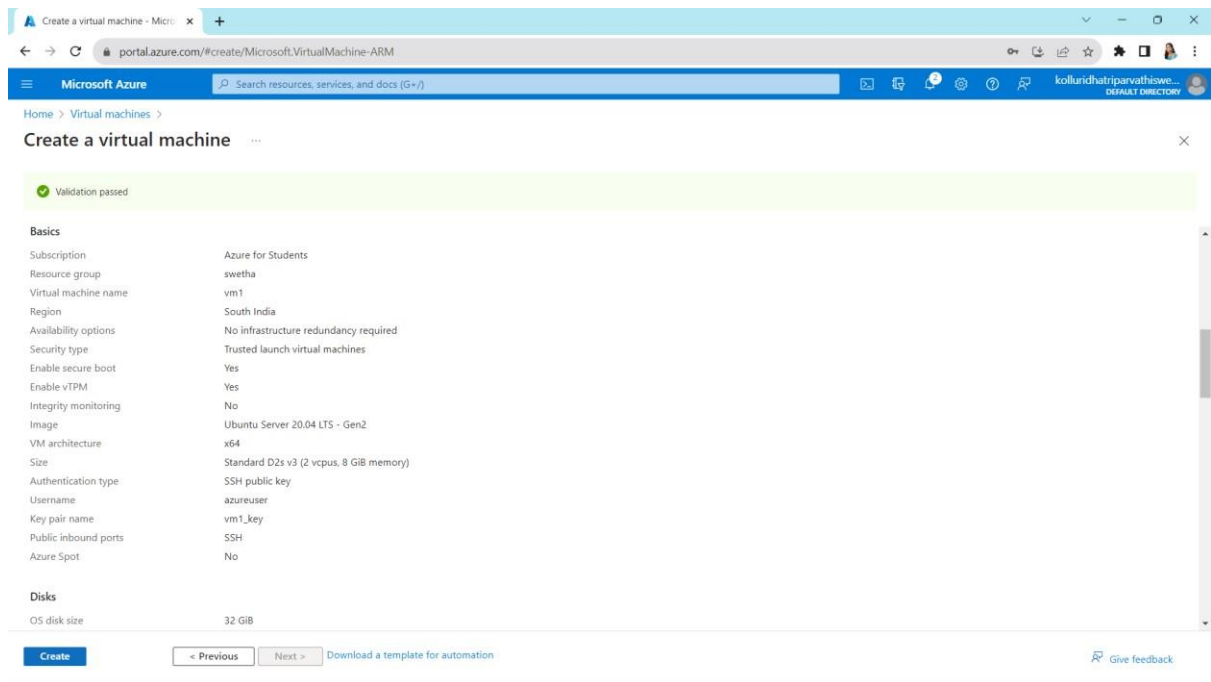
The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, specifically the 'Tags' tab. The breadcrumb navigation shows 'Home > Virtual machines > Create a virtual machine'. The wizard has several tabs: Basics, Disks, Networking, Management, Monitoring, Advanced, Tags (selected), and Review + create. A note explains that tags are name/value pairs for categorizing resources and consolidated billing. Below the note is a table for adding tags.

Name	Value	Resource
cloud	123	All resources
computing	456	13 selected
		13 selected

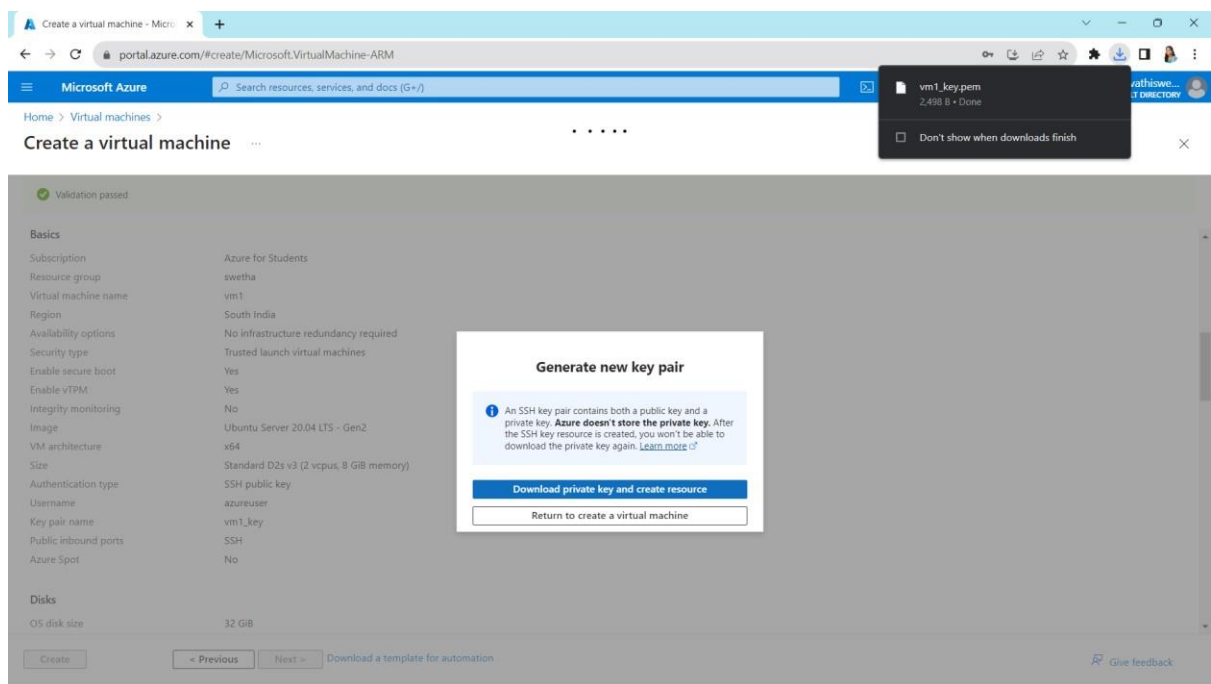
At the bottom of the wizard, there are three buttons: 'Review + create' (highlighted in blue), '< Previous', and 'Next: Review + create >'. A 'Give feedback' link is also present in the bottom right corner.

It shows our summary

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on create and it asks to download click on download



Our required virtual machine is created

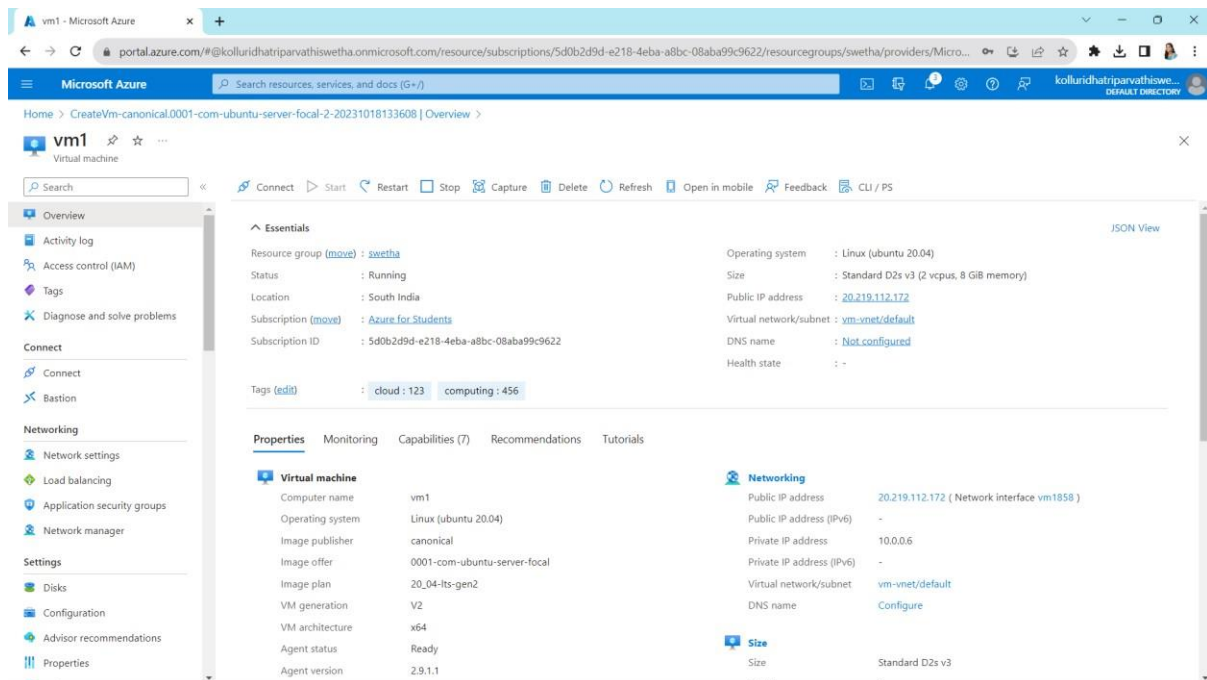
P.ARTHI - 192224159

Click

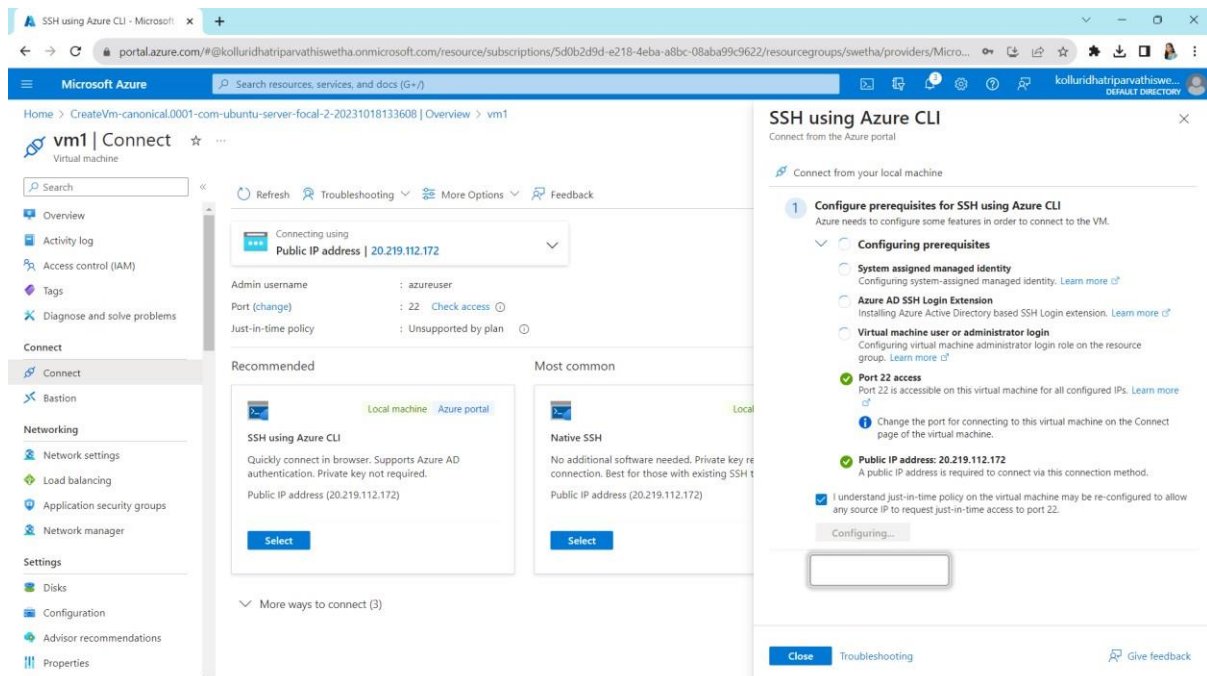
The screenshot displays the Microsoft Azure portal interface. At the top, the browser address bar shows the URL: `portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F5d0b2d9d-e218-4eba-a8bc-08aba99c9622%2FresourceGroups%2Fswetha...`. The page title is "CreateVm-canonical.0001-com-ubuntu-server-focal-2-20231018133608 | Overview". The left sidebar contains navigation links: "Overview", "Inputs", "Outputs", and "Template". The main content area features a green checkmark icon and the text "Your deployment is complete". Below this, deployment details are listed: "Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f...", "Subscription: Azure for Students", and "Resource group: swetha". The "Next steps" section includes links for "Setup auto-shutdown", "Monitor VM health, performance and network dependencies", and "Run a script inside the virtual machine". At the bottom of this section are buttons for "Go to resource" and "Create another VM". A "Give feedback" link is also present. On the right side, a "Deployment succeeded" notification box states: "Deployment 'CreateVm-canonical.0001-com-ubuntu-server-focal-2-20231018133608' to resource group 'swetha' was successful." Below the notification, there are three promotional cards: "Cost Management" (Get notified to stay within your budget), "Microsoft Defender for Cloud" (Secure your apps and infrastructure), and "Free Microsoft tutorials" (Start learning today). The bottom of the page features a solid blue horizontal bar.

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Click
on connect

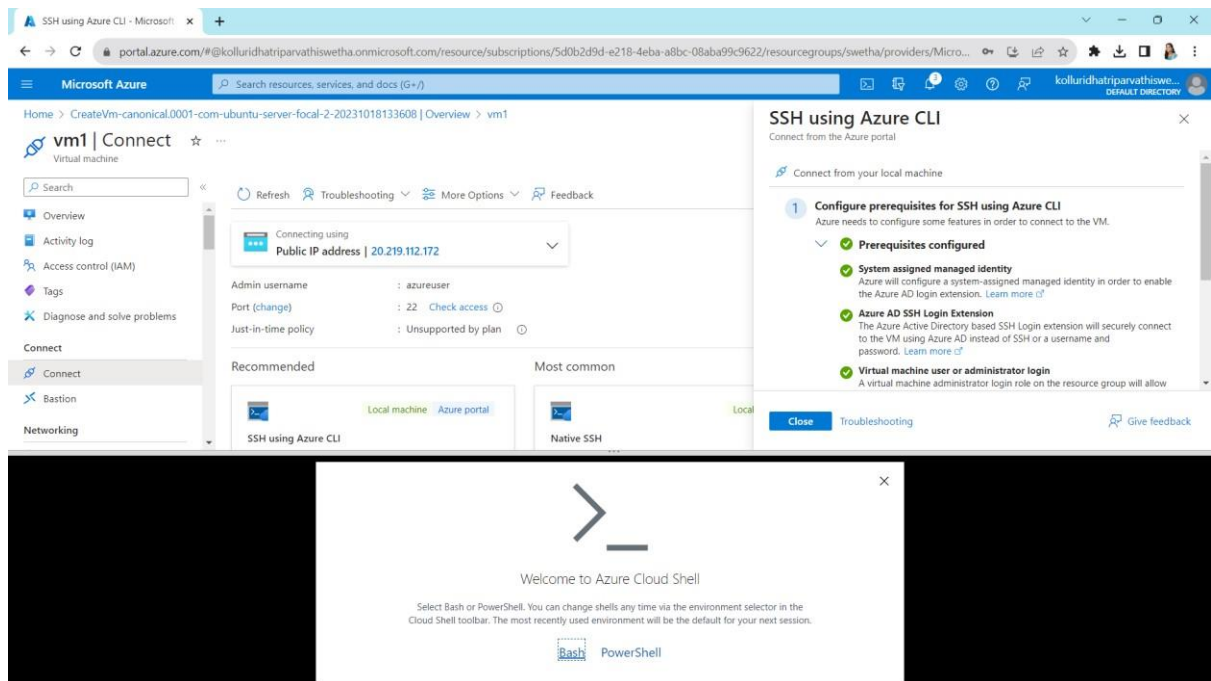


It will loaded and appears like this



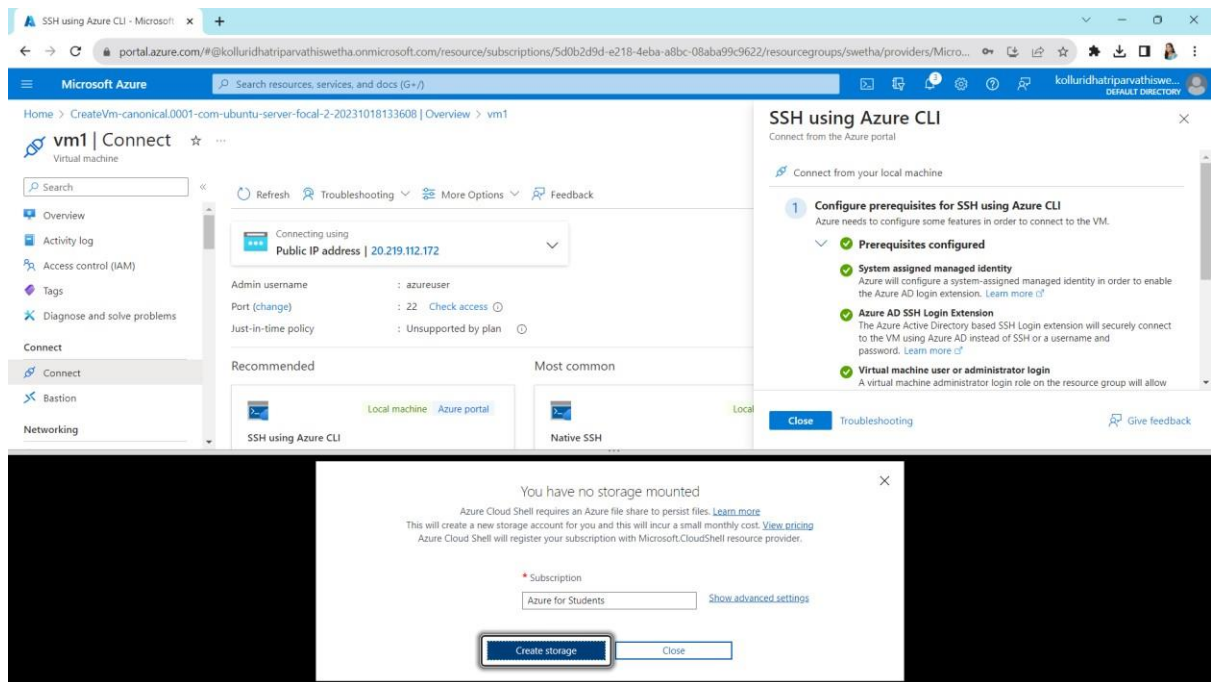
Click
And then close

on bash which is on bottom



Click on create storage

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Finally established the remote connection

