



NUTAN COLLEGE OF ENGINEERING & RESEARCH (NCER)
Department of Computer Science & Engineering (CSE)

Experiment No. 10

Title: Implementing and Using Sample Cloud Services with Microsoft Azure

Objective:

To implement and utilize sample cloud services provided by Microsoft Azure, exploring functionalities and capabilities within the Azure cloud platform.

Tools used:

- Microsoft Azure Portal

Prerequisite:

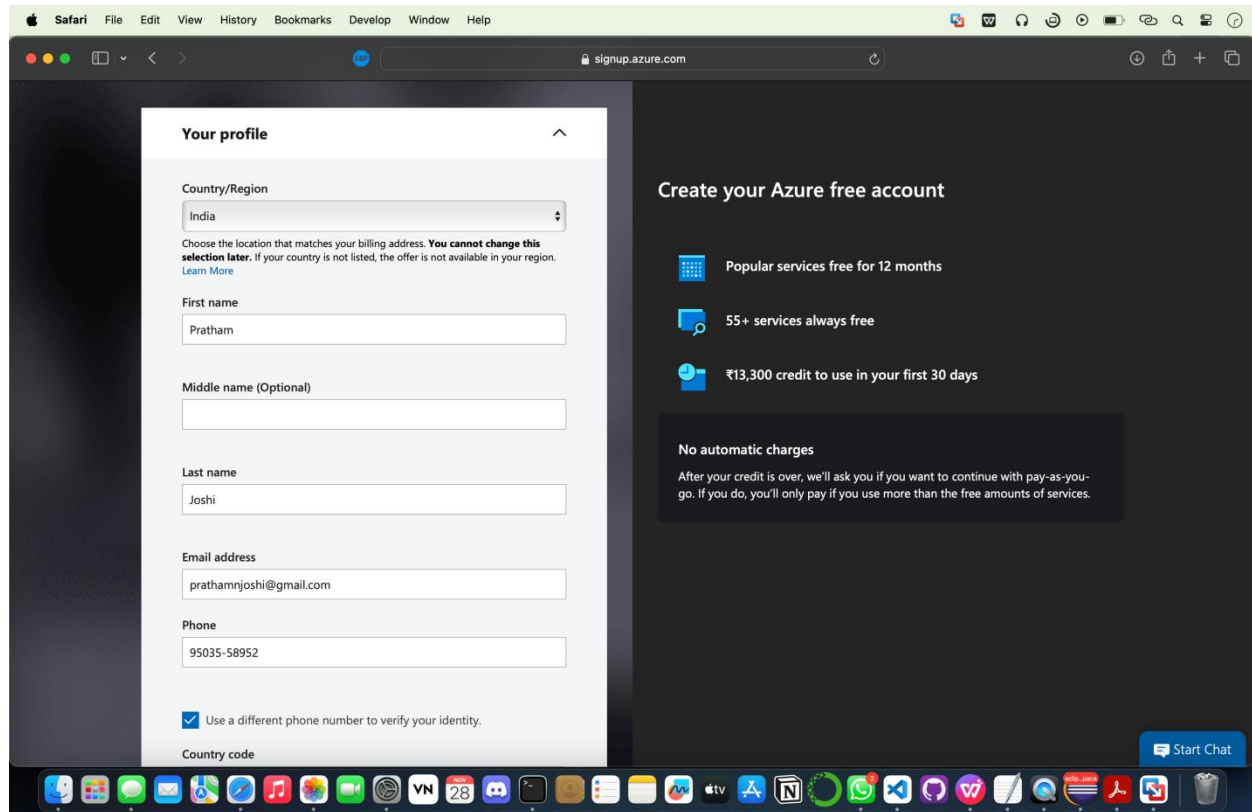
- An active Microsoft Azure account with necessary permissions and access
- Basic understanding of cloud computing concepts

Steps:

Step 1. Access Azure Portal

- Log in to the Azure Portal using your Azure account credentials

<https://azure.microsoft.com/en-in>



The screenshot shows the Azure Portal sign-up page in a Safari browser. The page is titled "Your profile" and "Create your Azure free account". The "Your profile" section contains the following fields:

- Country/Region: India (selected)
- First name: Pratham
- Middle name (Optional):
- Last name: Joshi
- Email address: prathamjoshi@gmail.com
- Phone: 95035-58952

Below the phone field, there is a checkbox labeled "Use a different phone number to verify your identity." which is checked. At the bottom of the form, there is a "Country code" field.

The "Create your Azure free account" section on the right lists the following benefits:

- Popular services free for 12 months
- 55+ services always free
- ₹13,300 credit to use in your first 30 days

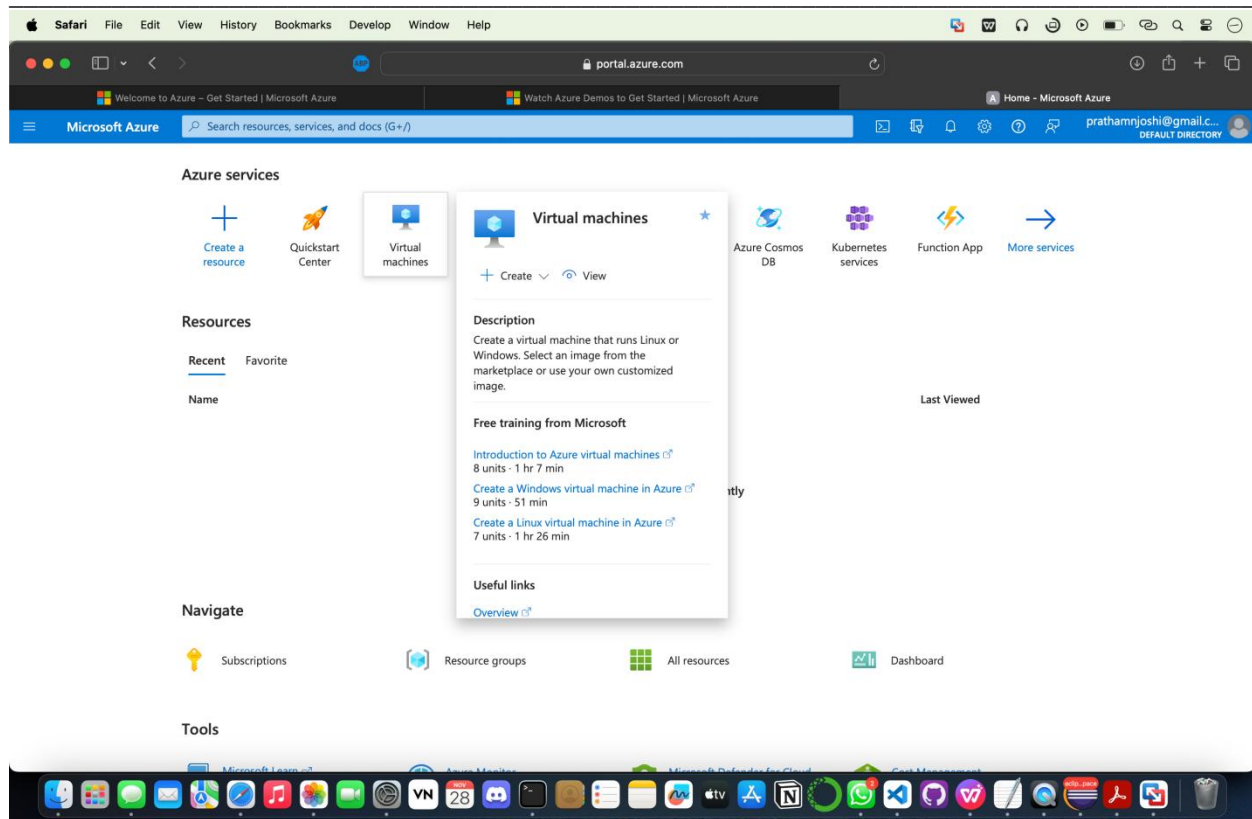
Below these benefits, there is a section titled "No automatic charges" with the text: "After your credit is over, we'll ask you if you want to continue with pay-as-you-go. If you do, you'll only pay if you use more than the free amounts of services."

The browser's address bar shows "signup.azure.com". The Safari menu bar at the top includes File, Edit, View, History, Bookmarks, Develop, Window, and Help. The macOS dock at the bottom contains various application icons.



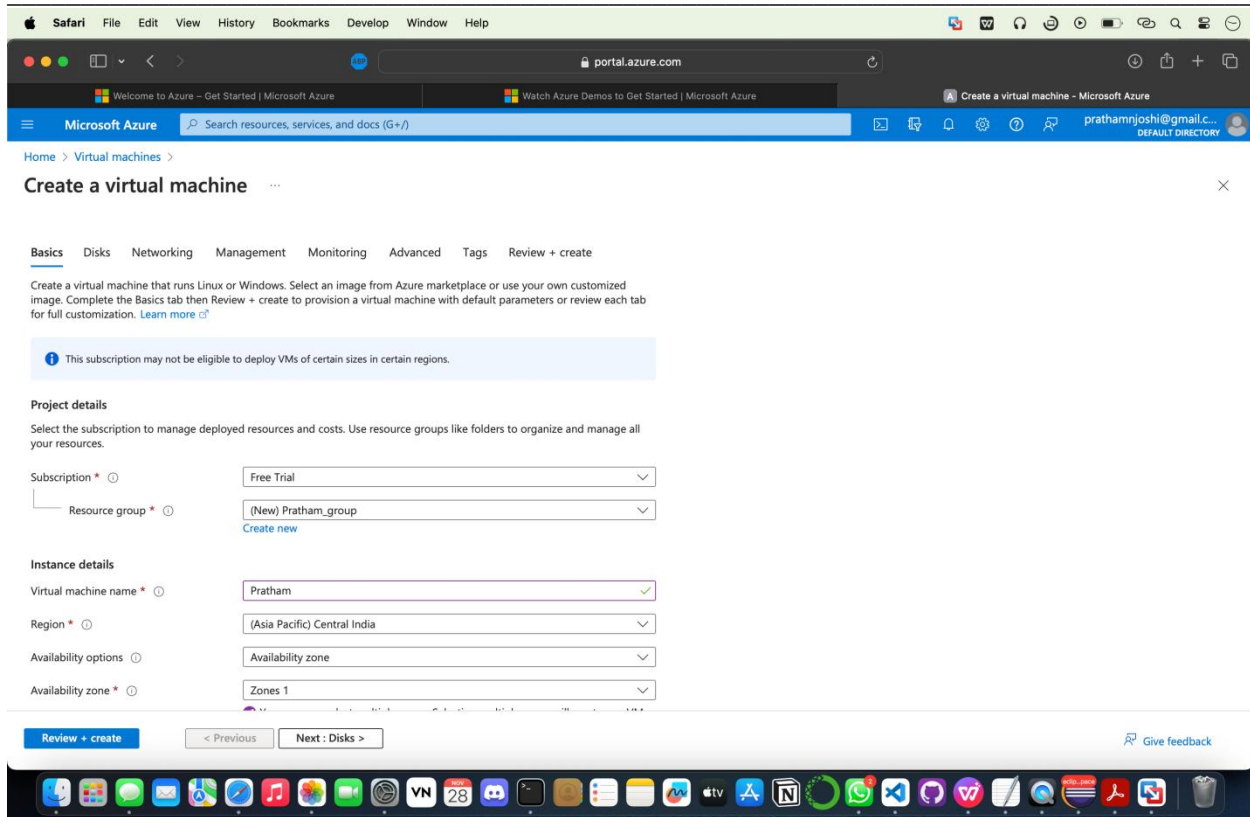
- ### Step 3. Create and Deploy Sample Service

- Choose a sample service (e.g., Azure Virtual Machine).



- Follow the Azure interface to create and deploy the selected service.

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The screenshot displays the Microsoft Azure portal interface for creating a new virtual machine. The browser is Safari, and the URL is portal.azure.com. The user is logged in as prathamnjoshi@gmail.com. The page title is 'Create a virtual machine'. The 'Basics' tab is active, showing the following configuration details:

- Subscription:** Free Trial
- Resource group:** (New) Pratham_group
- Virtual machine name:** Pratham
- Region:** (Asia Pacific) Central India
- Availability options:** Availability zone
- Availability zone:** Zones 1

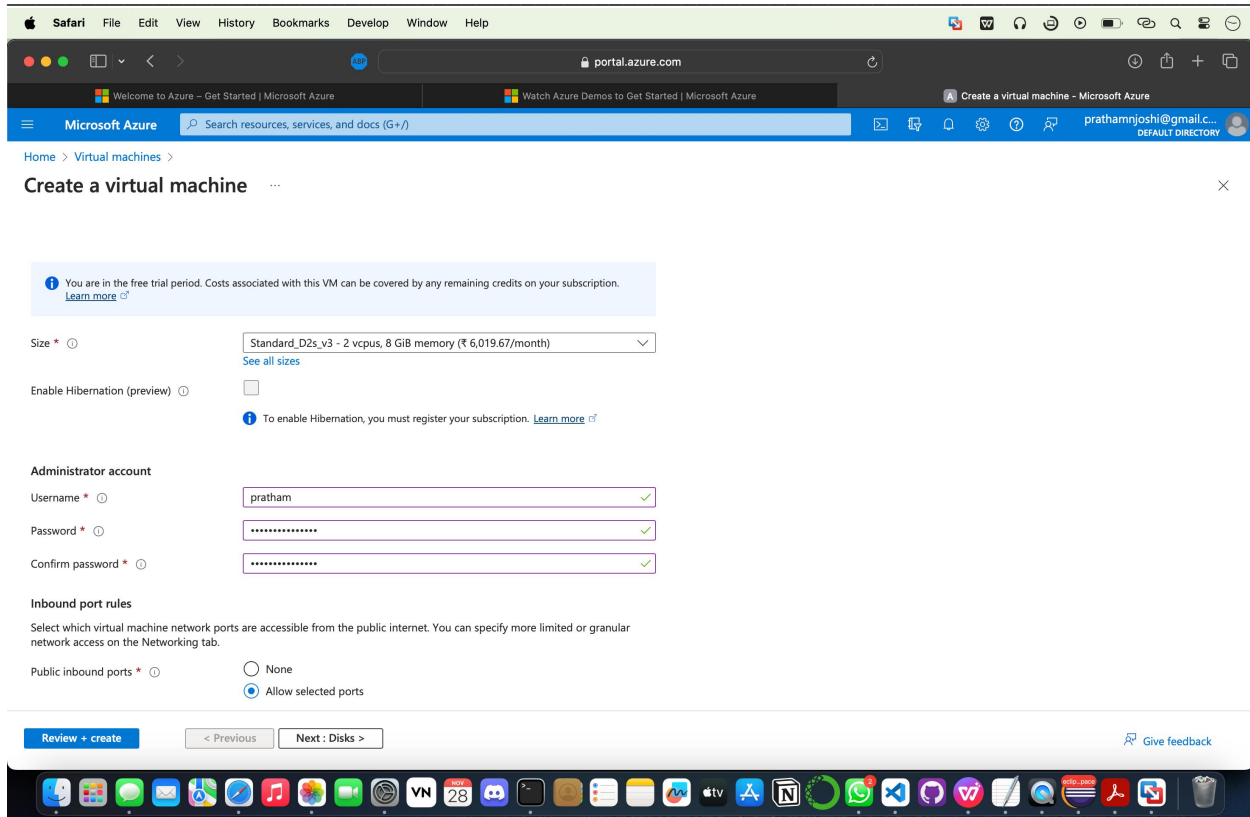
At the bottom, there are navigation buttons: '< Previous', 'Review + create', and 'Next: Disks >'. A 'Give feedback' link is also present.

- Configure settings as required during the creation process.

Step 4. Utilize the Service

- Access and interact with the deployed service to understand its functionalities.

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Create a virtual machine

You are in the free trial period. Costs associated with this VM can be covered by any remaining credits on your subscription. [Learn more](#)

Size * [See all sizes](#)

Enable Hibernation (preview) ☐

To enable Hibernation, you must register your subscription. [Learn more](#)

Administrator account

Username * ✓

Password * ✓

Confirm password * ✓

Inbound port rules

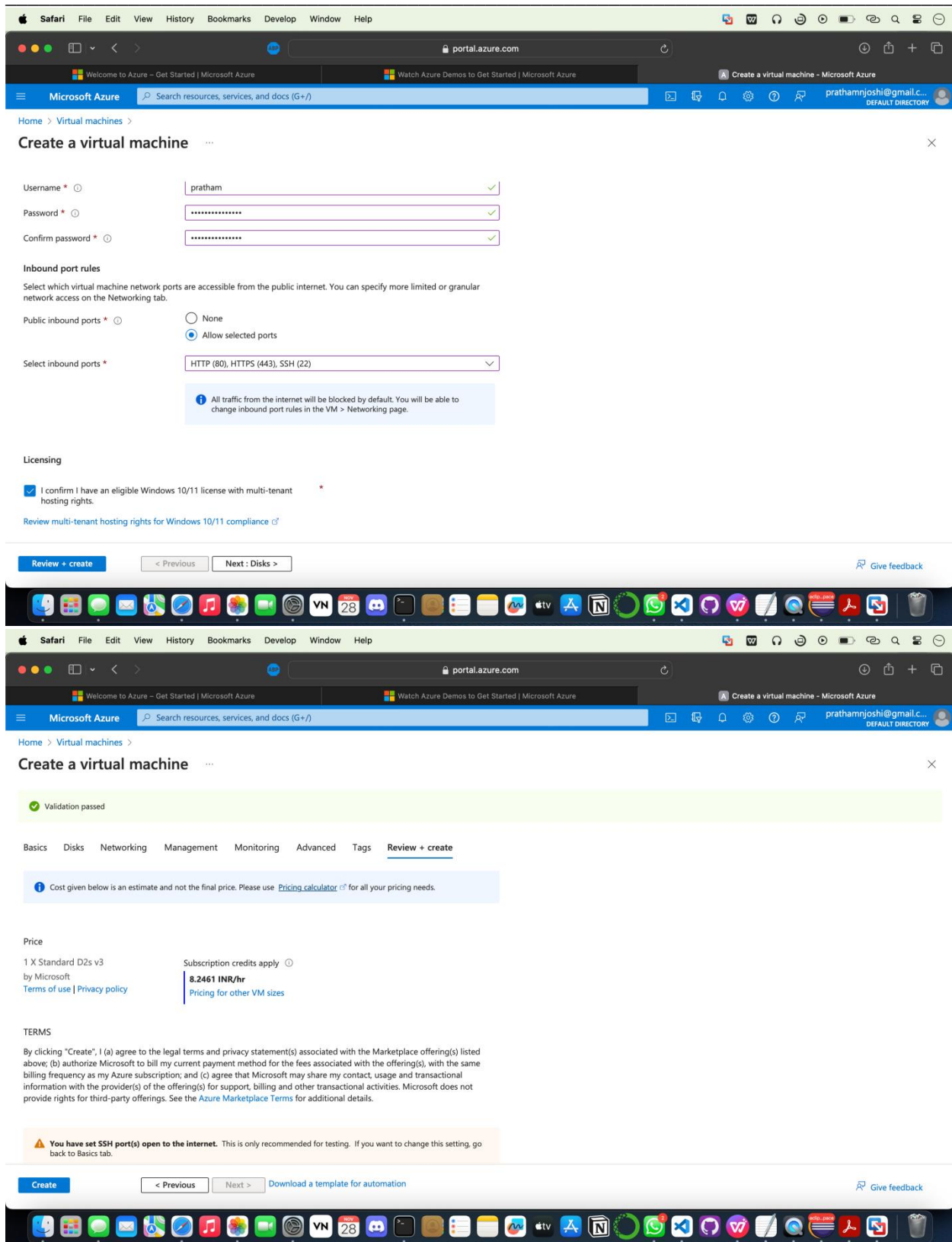
Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ☐ None ☒ Allow selected ports

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

- Experiment with features like scalability, management, and monitoring provided by Azure.

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Create a virtual machine

Username *

Password *

Confirm password *

Inbound port rules

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

Public inbound ports * ☐ None ☒ Allow selected ports

Select inbound ports *

Licensing

☒ I confirm I have an eligible Windows 10/11 license with multi-tenant hosting rights.

[Review multi-tenant hosting rights for Windows 10/11 compliance](#)

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

Basics Disks Networking Management Monitoring Advanced Tags [Review + create](#)

Price

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

Subscription credits apply ☐

8.2461 INR/hr
[Pricing for other VM sizes](#)

TERMS

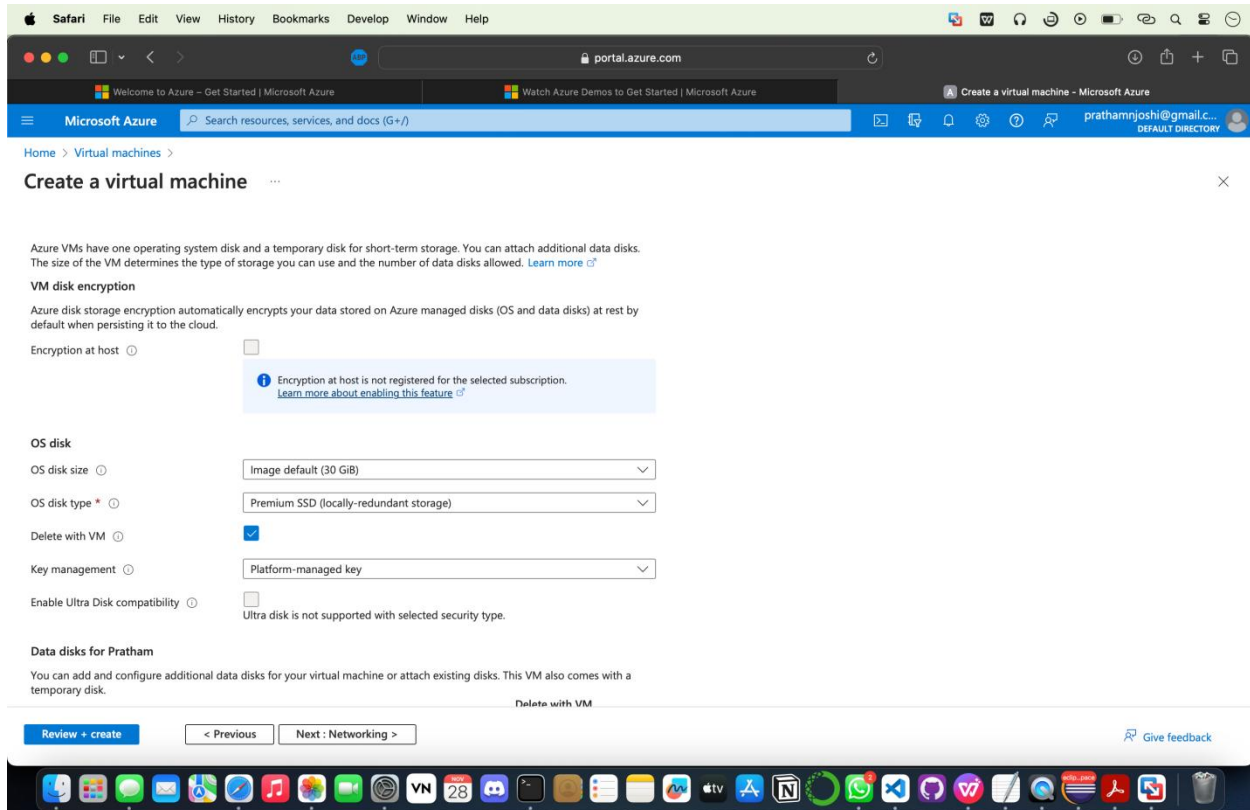
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and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

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

[Create](#) [< Previous](#) [Next >](#) [Download a template for automation](#) [Give feedback](#)

Step 5. Explore Integration

- Investigate how different Azure services can be integrated to create comprehensive cloud solutions.



- Understand how Azure resources can interact with each other within the Azure environment.

Step 6. Experiment and Learn

- Experimented with other sample services available in Azure to gain familiarity with the diverse capabilities of the platform.

Conclusion:

Successfully implemented and utilized sample cloud services within Microsoft Azure, gaining insights into the functionalities and capabilities offered by the Azure cloud platform.