

INFRASTRUCTURE AS A SERVICE (IAAS)

EXPERIMENT – 19

AIM:

To demonstrate Infrastructure as a Service (IaaS) by creating a resource group using a public cloud service provider (Azure), and configure it with minimum CPU, RAM, and storage.

PROCEDURE:

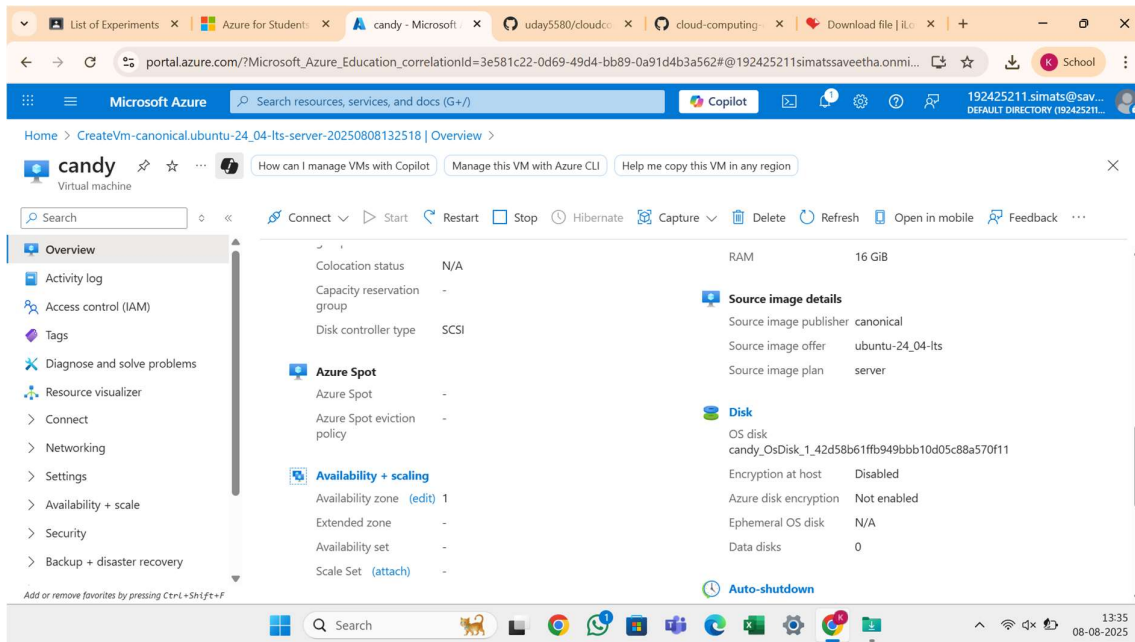
1. Login to the Microsoft Azure Portal by navigating to <https://portal.azure.com> and sign in with your Azure credentials.
2. Click on "Resource Groups" from the left-hand menu and then select "+ Create".
3. Choose your subscription and enter a unique name for the resource group such as "TestIaaS-RG".
4. Select an appropriate region like "Central India", click "Review + Create", and then click "Create".
5. After the resource group is created, go to "Virtual Machines" and click on "+ Add" followed by "Virtual Machine".
6. Enter the details such as subscription, the previously created resource group, and a virtual machine name like "testVM".
7. Select the same region as your resource group and choose a lightweight OS image such as Ubuntu 20.04 LTS.
8. Choose a minimum configuration for the VM like the B1s size with 1 vCPU and 1 GB RAM.
9. Set up authentication using either a password or SSH key.
10. Allow public inbound ports such as SSH (for Linux VMs) or RDP (for Windows VMs).
11. Click on "Review + Create" and then click "Create" to deploy the virtual machine.

12. After deployment, go to "Virtual Machines", select the deployed VM, and verify the configuration details for CPU, RAM, and storage.
13. Optionally, connect to the VM using SSH or RDP to test access.
14. To avoid unnecessary charges, go to "Resource Groups", select your resource group, and delete it when finished.

OUTPUT:

The screenshot shows the 'Create a virtual machine' page in the Azure portal. The browser address bar displays the URL: `portal.azure.com/?Microsoft_Azure_Education_correlationId=3e581c22-0d69-49d4-bb89-0a91d4b3a562#create/Microsoft.VirtualMachine`. The page has a navigation bar with tabs: Basics, Disks, Networking, Management, Monitoring, Advanced, Tags, and Review + create (which is selected). A green banner at the top indicates 'Validation passed'. The 'Price' section shows '1 X Standard E2s v3 by Microsoft' with a price of '0.1370 USD/hr'. The 'TERMS' section contains a long paragraph of legal terms. At the bottom, there is a 'Name' field with the value 'uday kiran' and a 'Create' button. The Windows taskbar at the bottom shows the time as 13:32 on 08-08-2025.

The screenshot shows the 'Overview' page for a virtual machine named 'candy' in the Azure portal. The browser address bar displays the URL: `portal.azure.com/?Microsoft_Azure_Education_correlationId=3e581c22-0d69-49d4-bb89-0a91d4b3a562#@192425211simatsaveetha.onmi...`. The page has a navigation bar with tabs: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, Settings, Availability + scale, Security, and Backup + disaster recovery. The 'Overview' tab is selected. The 'Essentials' section displays the following information: Resource group (move) 'uday', Status 'Running', Location 'Central India (Zone 1)', Subscription (move) 'Azure for Students', Subscription ID '2468a3e8-03d0-41a3-92d4-6d4f3c739d97', Availability zone '1', Operating system 'Linux (ubuntu 24.04)', Size 'Standard E2s v3 (2 vcpus, 16 GiB memory)', Public IP address '98.70.27.241', Virtual network/subnet 'candy-vnet/default', DNS name 'Not configured', Health state '-', and Time created '8/8/2025, 8:03 AM UTC'. The Windows taskbar at the bottom shows the time as 13:34 on 08-08-2025.



RESULT:

Successfully demonstrated Infrastructure as a Service (IaaS) by deploying a virtual machine with minimal resources using Microsoft Azure and organizing it under a newly created resource group.