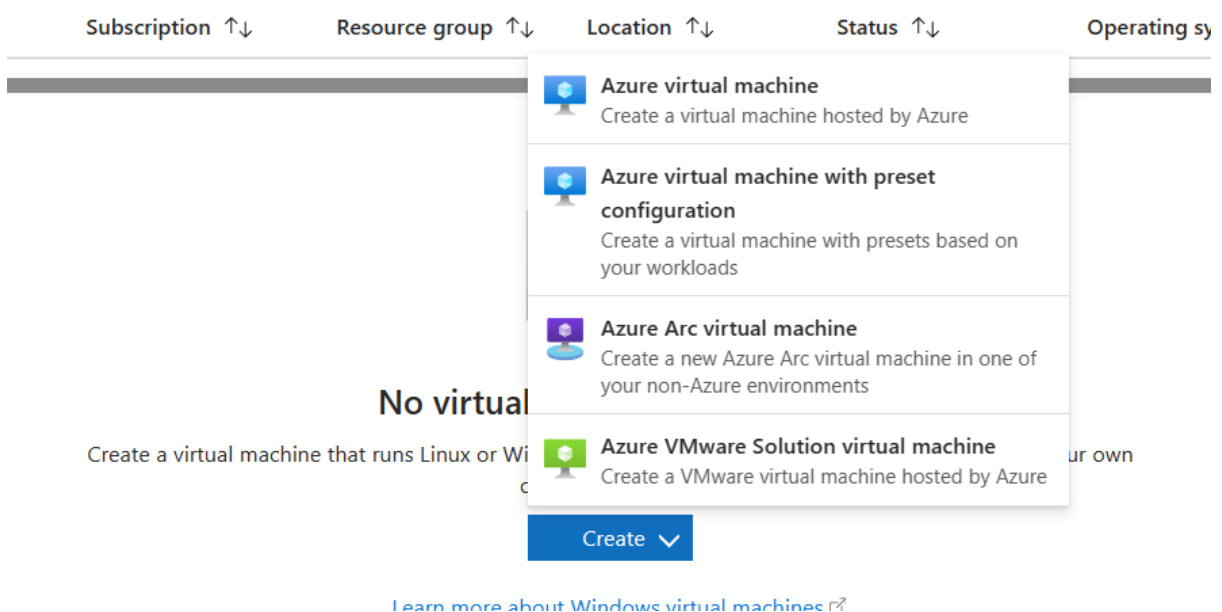
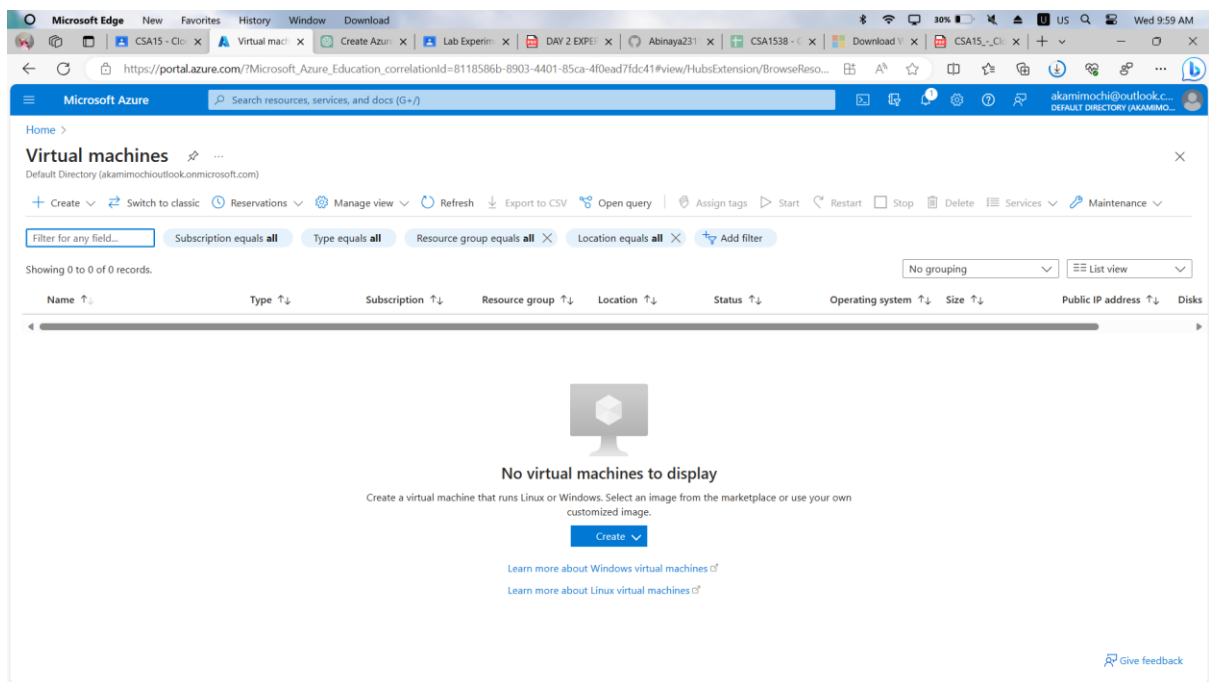


## Question 2:

Demonstrate Infrastructure as a Service (IaaS) by creating a Virtual Machine using a Public Cloud Service Provider (Azure), configure with required memory and CPU.



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https://portal.azure.com/?Microsoft\_Azure\_Education\_correlationId=8118586b-8903-4401-85ca-4f0ead7fdc41#create/Microsoft.VirtualMa...

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Home > Virtual machines >

## Create a virtual machine

Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Virtual machine name \*

Region \*

Availability options

Security type   
[Configure security features](#)

Image \*   
[See all images](#) | [Configure VM generation](#)

VM architecture ☐ Arm64 ☒ x64  
Arm64 is not supported with the selected image.

Run with Azure Spot discount ☒

Eviction type ☒ Capacity only: Your virtual machine will be evicted when Azure's excess capacity disappears.  
☐ Price or capacity: Your virtual machine will be evicted when Azure's excess capacity disappears, or costs exceed your specified max price.

☒ Stop / Deallocation

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go.microsoft.com/fwlink/?LinkId=2126834

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## Create a virtual machine

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

OS disk type \*   
The selected VM size supports premium disks. We recommend Premium SSD for high IOPS workloads. Virtual machines with Premium SSD disks qualify for the 99.9% connectivity SLA.

Delete with VM ☒

Key management

Enable Ultra Disk compatibility ☐  
Ultra disk is not supported with selected security type.

Data disks for vm01

You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a

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## Create a virtual machine

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network \* (new) vm01-vnet [Create new](#)

Subnet \* (new) default (10.0.0.0/24)

Public IP (new) vm01-ip [Create new](#)

NIC network security group ☐ None ☒ Basic ☐ Advanced

Public inbound ports \* ☐ None ☒ Allow selected ports

Select inbound ports \* 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.**

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## Create a virtual machine

**⚠ This image does not support Login with Azure AD.**

Auto-shutdown

Enable auto-shutdown ☐

Backup

Enable backup ☐

Site Recovery

Enable Disaster Recovery ☐

**i** To enable Disaster recovery, set the security type back to Standard in the Basics tab. Disaster recovery isn't supported for the Trusted launch or Confidential virtual machines security types.

Guest OS updates

Enable hotpatch ☐

**i** Hotpatch is not available for this image. [Learn more](#)

Patch orchestration options ☐ Automatic by OS (Windows Automatic Updates)

**i** Some patch orchestration options are not available for this image. [Learn more](#)

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Home > Virtual machines >

## Create a virtual machine

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 ☐

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

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## Create a virtual machine

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

Add additional configuration, agents, scripts or applications via virtual machine extensions or cloud-init.

**Extensions**

Extensions provide post-deployment configuration and automation.

Extensions

**VM applications**

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](#)

[Select a VM application to install](#)

**Custom data**

Pass a 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](#)

Custom data

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

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## Create a virtual machine

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

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more about tags](#)

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Name	Value	Resource
Name	: Webserver	All resources
Owner	: XYZ	All resources
Application Owner	: ABC	All resources
Backup Team	: PQR	All resources
Business Unit	: Record	13 selected
		13 selected

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

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Home >

## CreateVm-canonical.0001-com-ubuntu-server-focal-2-20231018131001 | Overview

Deployment

Search Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

**Your deployment is complete**

Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f... Start time: 10/18/2023, 1:14:11 PM  
Subscription: Azure for Students Correlation ID: 0367fe0b-b7b0-4c83-b964-7406671445f8  
Resource group: Resourcegroup1

**Deployment details**

**Next steps**

[Setup auto-shutdown](#) Recommended  
[Monitor VM health, performance and network dependencies](#) Recommended  
[Run a script inside the virtual machine](#) Recommended

[Go to resource](#) [Create another VM](#)

**Give feedback**  
[Tell us about your experience with deployment](#)

**Deployment succeeded**  
Deployment 'CreateVm-canonical.0001-com-ubuntu-server-focal-2-20231018131001' to resource group 'Resourcegroup1' was successful.  
[Go to resource](#) [Pin to dashboard](#)

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Home > CreateVm-canonical.0001-com-ubuntu-server-focal-2-20231018131001 | Overview > VM1

VM1 | Connect Virtual machine

Search

Overview  
Activity log  
Access control (IAM)  
Tags  
Diagnose and solve problems

Settings  
Networking  
Connect  
Disks  
Size  
Microsoft Defender for Cloud  
Advisor recommendations  
Extensions + applications  
Availability + scaling  
Configuration  
Identity  
Properties  
Locks

Just-in-time policy : Unsupported by plan

Recommended

SSH using Azure CLI  
Quickly connect in browser. Supports Azure AD authentication. Private key not required.  
Public IP address (4.240.92.154)  
Select

Most common

Native SSH  
No additional software needed. Private key required for connection. Best for those with existing SSH tools.  
Public IP address (4.240.92.154)  
Select

More ways to connect (3)

Bastion basic or standard  
Advanced capabilities including custom inbound port, RDP on desktop, and host scaling.  
Go to Bastion

Remote desktop protocol  
Most Linux machines do not have RDP enabled. Use SSH or install a desktop environment like xRDP.  
Learn about RDP on Linux

Serial console  
Troubleshooting with access independent of the network or operating system state.  
Go to serial console

Windows Terminal

azureuser@VM1: ~

```
System information as of Thu Oct 19 06:57:19 UTC 2023

System load: 0.01      Processes:      127
Usage of /:  7.2% of 28.89GB Users logged in: 0
Memory usage: 5%      IPv4 address for eth0: 10.0.0.4
Swap usage: 0%

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
  just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

6 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

*** System restart required ***

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM1:~$ |
```