



Cloud Computing

Azure Lab 1

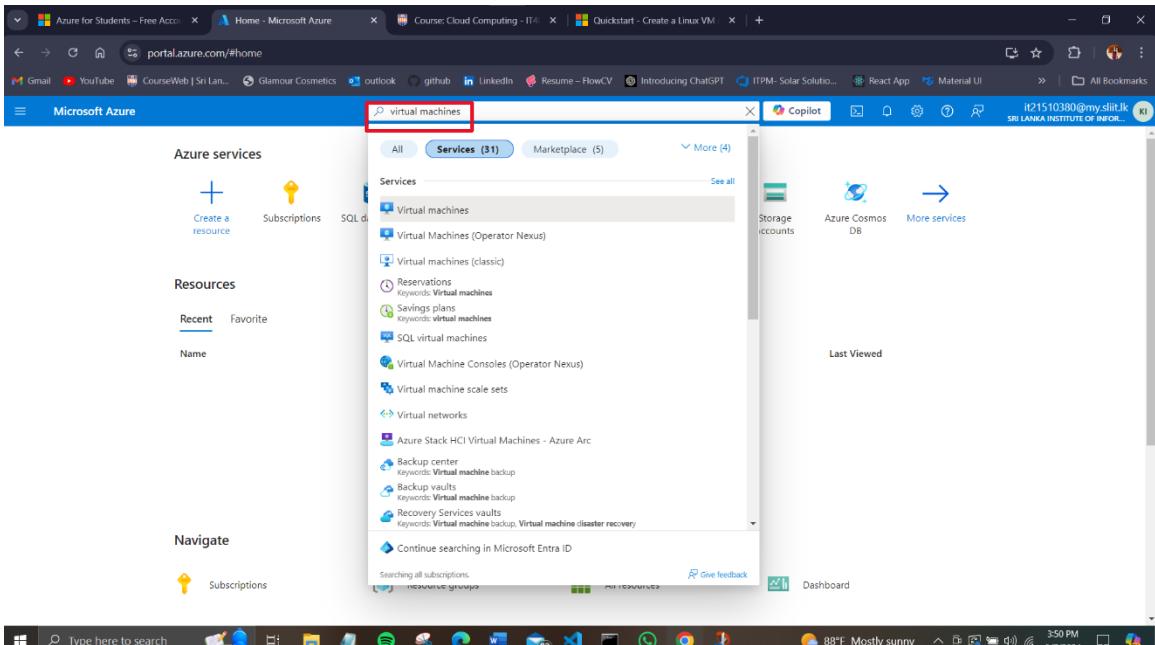
IT21510380 – Kularathna D.G.J.C

Create virtual machine

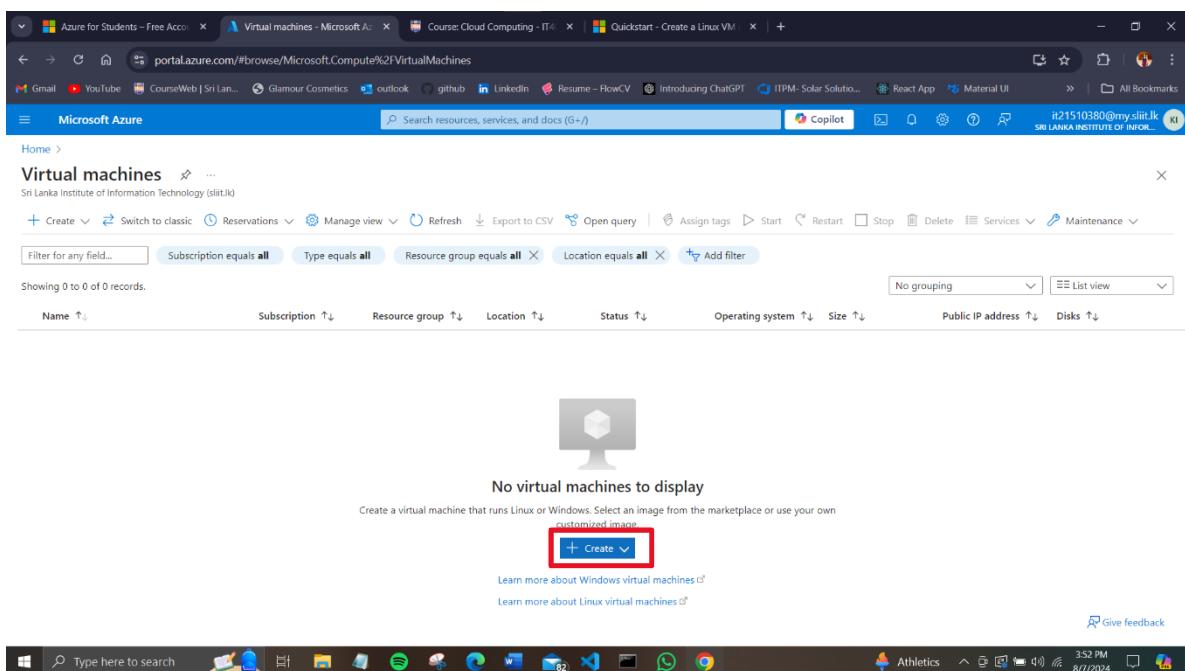
1. Enter *virtual machines* in the search.

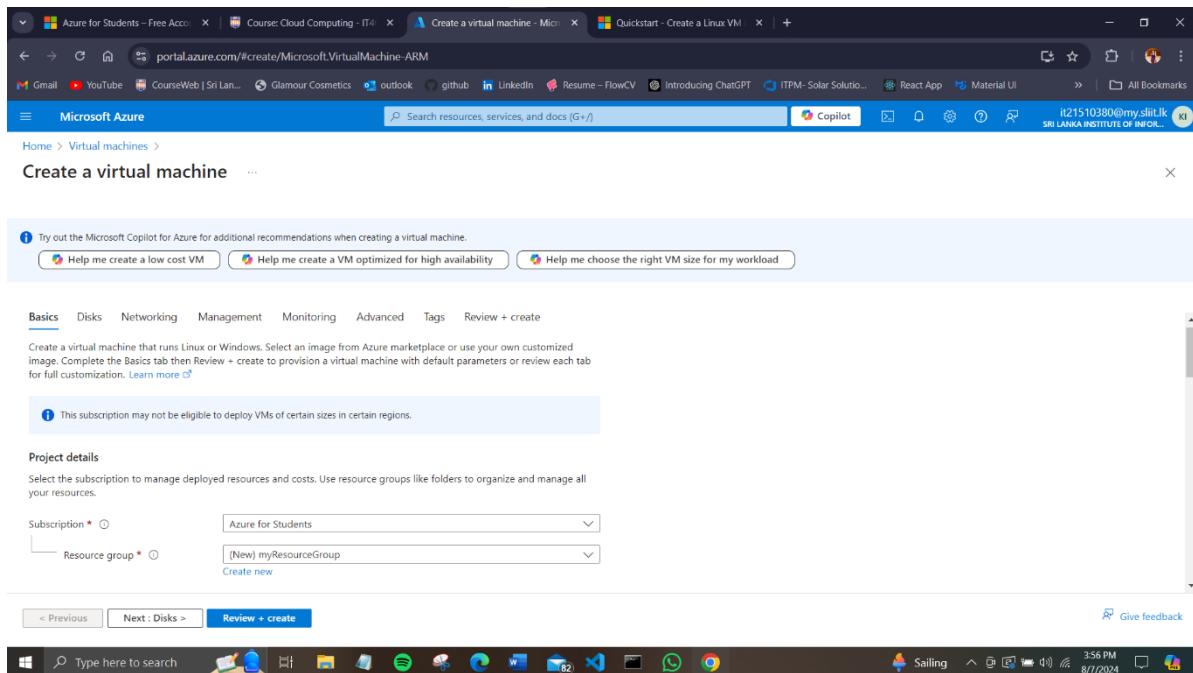
A screenshot of the Microsoft Azure portal interface. The search bar at the top has the text "virtual machine" entered. Below the search bar, the "Services" section is visible, showing a list of services including "Virtual machines", "Virtual Machines (Operator Nexus)", "Virtual machines (classic)", and "Reservations". To the right of the search bar, there are links for "Storage accounts", "Azure Cosmos DB", and "More services". The left sidebar shows sections for "Azure services", "Resources", and "Navigate". The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray.

2. Under Services, select Virtual machines.

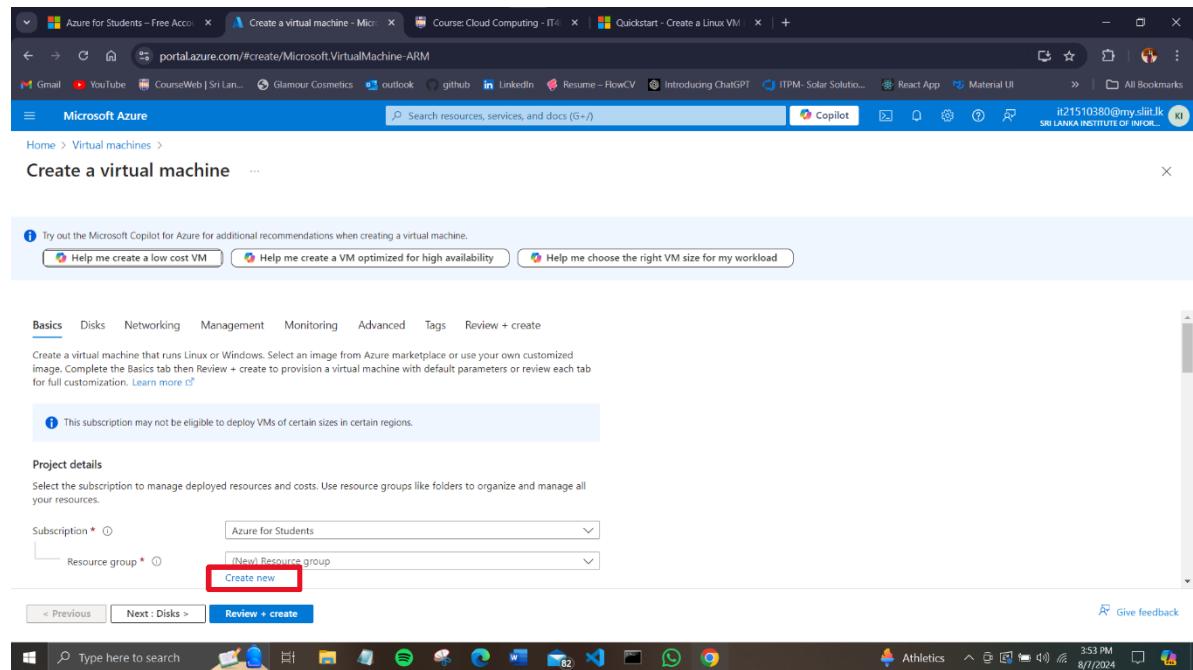


3. In the Virtual machines page, select Create and then Virtual machine. The Create a virtual machine page opens.

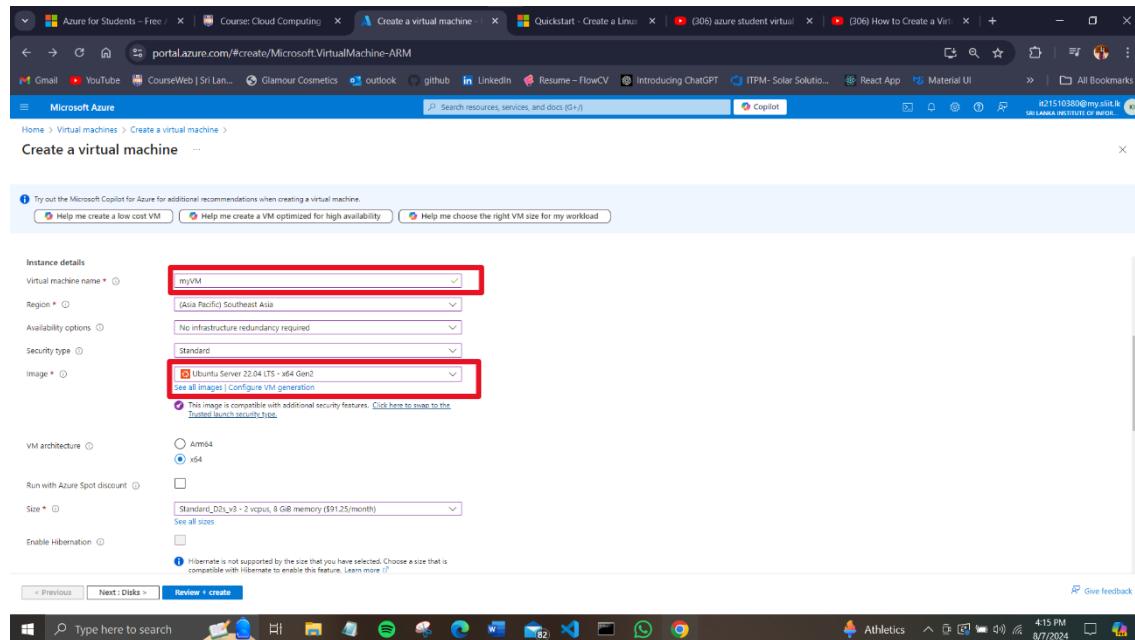




4. In the Basics tab, under Project details, make sure the **correct subscription is selected, and then choose **Create a new resource group**. Enter **myResourceGroup** for the name.*.**

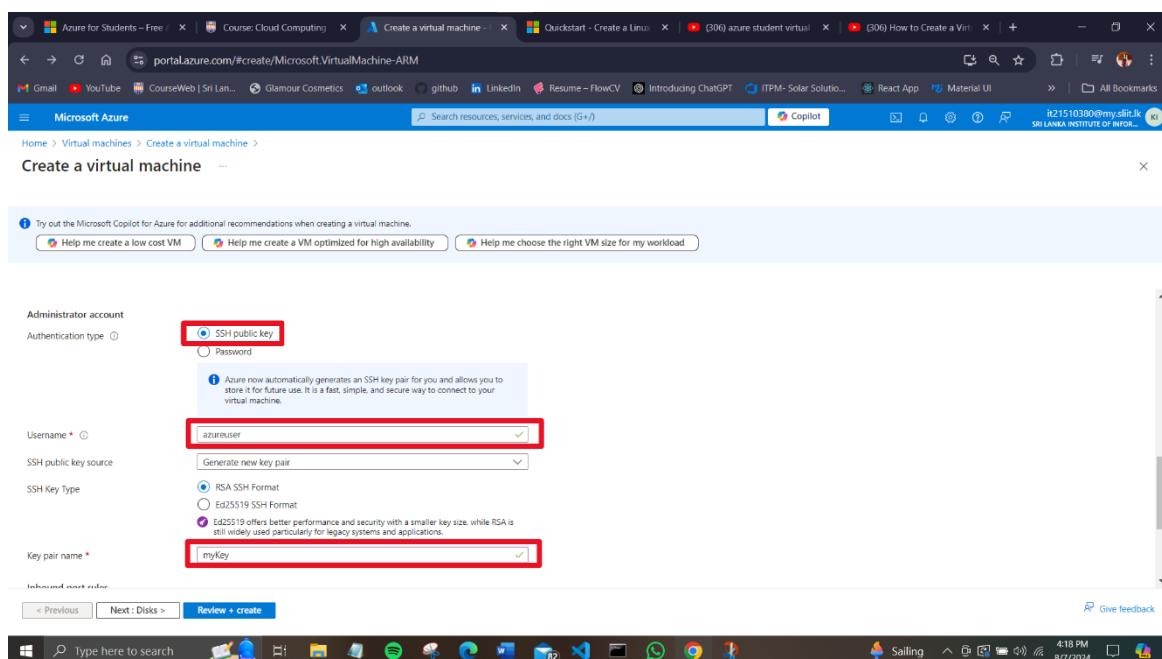


5. Under Instance details, enter *myVM* for the Virtual machine name, and choose *Ubuntu Server 22.04 LTS - Gen2* for your Image. Leave the other defaults. The default size and pricing is only shown as an example. Size availability and pricing are dependent on your region and subscription.



6. Under Administrator account, select SSH public key.

1. In **Username** enter *azureuser*.
2. For **SSH public key source**, leave the default of **Generate new key pair**, and then enter *myKey* for the **Key pair name**.



7. Under **Inbound port rules** > **Public inbound ports**, choose **Allow selected ports** and then select **SSH (22)** and **HTTP (80)** from the drop-down.

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 * HTTP (80), SSH (22)

All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.

< Previous Next : Disks > Review + create Give feedback

8. Leave the remaining defaults and then select the **Review + create** button at the bottom of the page.

Running final validation...

Try out the Microsoft Copilot for Azure for additional recommendations when creating a virtual machine.

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Basics Disks Networking Management Monitoring Advanced Tags Review + create

Price

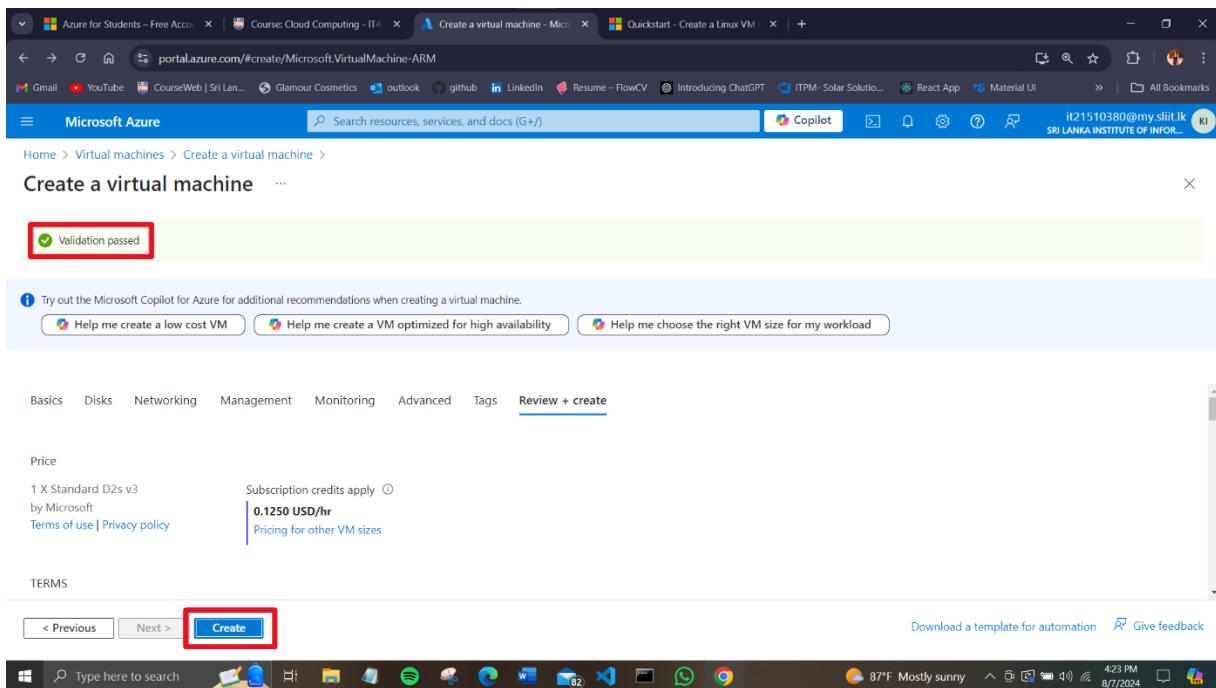
1 X Standard D2s v3 by Microsoft
Subscription credits apply
0.1250 USD/hr
Pricing for other VM sizes

TERMS

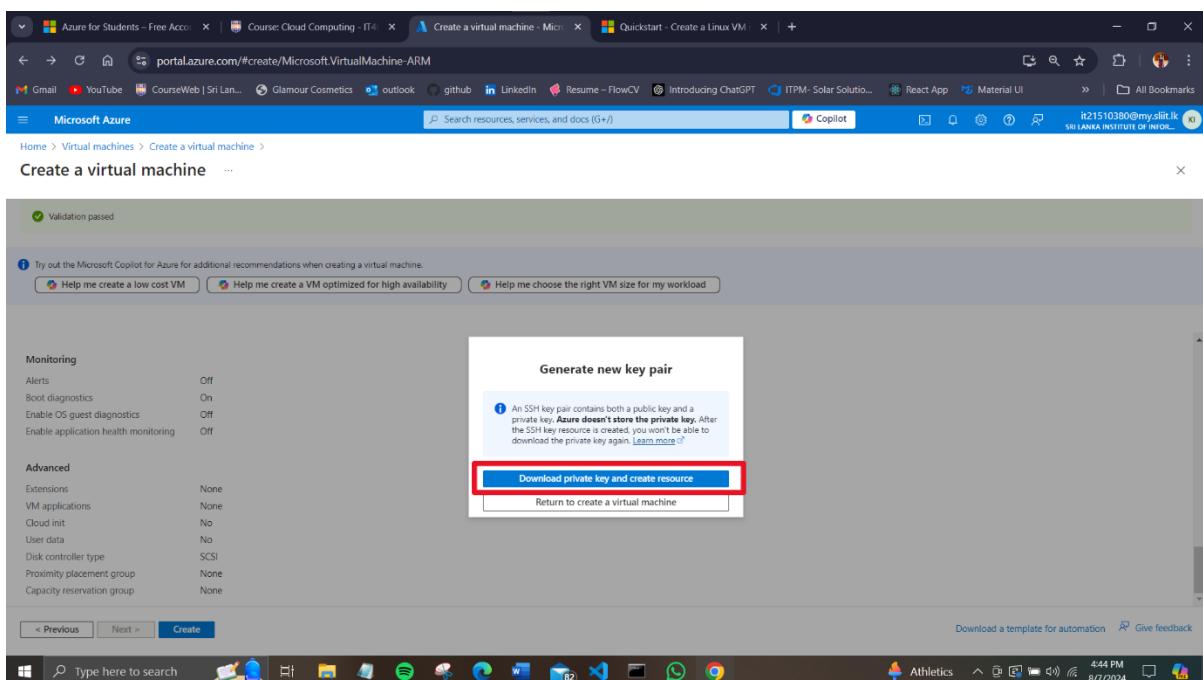
< Previous Next > Create Download a template for automation Give feedback

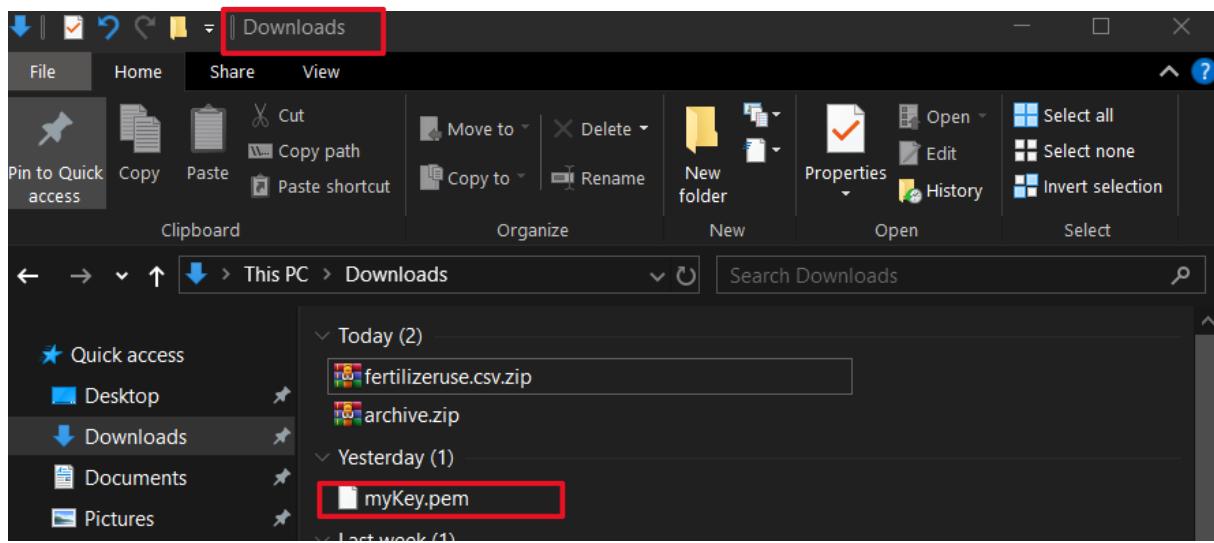
87°F Mostly sunny 4:23 PM 8/7/2024

9. On the **Create a virtual machine** page, you can see the details about the VM you are about to create. When you are ready, select **Create**.



10. When the **Generate new key pair** window opens, select **Download private key and create resource**. Your key file will be download as **myKey.pem**. Make sure you know where the .pem file was downloaded; you will need the path to it in the next step.





A screenshot of the Microsoft Azure portal. The URL is 'portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F777e9da5-6b7f-4907-96a4-f2a161c87a53%2FresourceGroups%2Fm...'. The page title is 'CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240807160055 | Overview'. The main content area shows a deployment status: 'Deployment is in progress'. Deployment details include: Deployment name: CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240807160055, Start time: 8/7/2024, 4:45:17 PM, Subscription: Azure for Students, Correlation ID: 44a61bd0-bb2b-43a4-b8a5-66cd140e996. Below this, there's a 'Deployment details' table with columns: Resource, Type, Status, and Operation details. The table shows 'No results.' There are sections for 'Give feedback' (with a link to 'Tell us about your experience with deployment') and 'Work with an expert' (with a link to 'Find an Azure expert'). The bottom of the screen shows the Windows taskbar with various pinned icons and system status indicators.

11. When the deployment is finished, select **Go to resource.**

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id%2fsubscriptions%2f77e9da5-6b7f-4907-96a4-f2a161c87a5%2fresourceGroups%2fmyResourceGroup/providers/Microsoft.Compute/virtualMachines/myVM>. The page displays a green checkmark indicating "Your deployment is complete". Below this, it shows deployment details: Deployment name: CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240807160055, Start time: 8/7/2024, 4:45:17 PM, Subscription: Azure for Students, Resource group: myResourceGroup. A "Go to resource" button is highlighted with a red box. The right sidebar contains links for Cost Management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

12. On the page for your new VM, select the public IP address and copy it to your clipboard.

Public IP address - 40.65.176.62

The screenshot shows the Microsoft Azure portal with the URL <https://portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id%2fsubscriptions%2f77e9da5-6b7f-4907-96a4-f2a161c87a5%2fresourceGroups%2fmyResourceGroup/providers/Microsoft.Compute/virtualMachines/myVM>. The page displays the VM "myVM" with status "Running". The "Networking" section shows the Public IP address: 40.65.176.62, which is highlighted with a red box. The left sidebar lists various management options like Connect, Networking, Settings, and Security.

Connect to virtual machine

1. Create an SSH Connection with the VM. On a Windows machine, open a **PowerShell prompt**. At your prompt, open an SSH connection to your virtual machine. **Replace the IP address** with the one from your **VM**, and **replace the path to the .pem** with the path to where the key file was downloaded.

```
☐ Select azuruser@myVM -  
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
  
Try the new cross-platform PowerShell https://aka.ms/pscore6  
  
PS C:\Users\User> ssh -L ~/Downloads/myKey.pem azuruser@40.65.176.62  
The authenticity of host '40.65.176.62 (40.65.176.62)' can't be established.  
ECDSA key fingerprint is SHA256:yKE1sq8tBHKq7kM5nVh7yapTxyB8kExdHflw.  
Are you sure you want to connect? y/n [n]: y  
Warning: Permanently added '40.65.176.62' (ECDSA) to the list of known hosts.  
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1025-azure x86_64)  
  
 * Documentation: https://help.ubuntu.com  
 * Management: https://landscape.canonical.com  
 * Support: https://ubuntu.com/pro  
  
System information as of Wed Aug 7 12:02:46 UTC 2024  
  
System load: 0.08 Processes: 112  
Usage of /: 5.9% of 28.89GB Users logged in: 0  
Memory usage: 4% IPv4 address for eth0: 10.0.0.4  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
4 updates can be applied immediately.  
4 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/can or run: sudo pro status  
  
  
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.  
  
azuruser@myVM: $
```

Install web server

To see your VM in action, **install the NGINX web server**. From your **SSH session**, update your package sources and then install the latest NGINX package.

Commands;

```
sudo apt-get -y update
```

```
sudo apt-get -y install nginx
```

```
az Select azureuser@myVM: ~
Get:1 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:2 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Err:1 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
  Could not connect to 10.0.2.14:80 - connect() failed.
Reading package lists... Done
Building dependency tree... Done
Reading status information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libldebflated libfontconfig1 libjqbig0 libjpeg-turbo8 libjpeg8
  libnginx-mod-http-geopl2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter libnginx-mod-mail
  libnginx-mod-stream libnginx-mod-stream-geopl2 libtiff5 libwebp7 libxpm4 nginx-common nginx-core
Suggested packages:
  libxml-tools for wrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libldebflated libfontconfig1 libjqbig0 libjpeg-turbo8 libjpeg8
  libnginx-mod-http-geopl2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter libnginx-mod-mail
  libnginx-mod-stream libnginx-mod-stream-geopl2 libtiff5 libwebp7 libxpm4 nginx nginx-common nginx-core
0 upgraded, 20 newly installed, 0 to remove and 4 not upgraded.
Need to get 2693 kB of archives.
After this operation, 8358 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 Fonts-dejavu-core all 2.37-2ub1ld1 [1041 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 fontconfig-config all 2.13.1-4.2.ubuntu5 [29.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 libldebflated0 amd64 1.10-2_0.ubuntu5 [13.4 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy/main amd64 libfontconfig1 amd64 2.13.1-4.2.ubuntu5 [131 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy/main amd64 libjpeg-turbo8 amd64 2.1.2-2.ubuntu1 [134 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy/main amd64 libjpeg8 amd64 8c-2ubuntu10 [2264 kB]
Get:7 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libjqbig0 amd64 2.1-3.ubuntu0.22.04.1 [9.2 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtiff5 amd64 4.1.0-6.ubuntu0.22.04.1 [906 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libwebp7 amd64 4.1.0-6.ubuntu0.9 [185 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libxpm4 libxpm4 amd64 1:3.5-12.ubuntu0.22.04.2 [36.7 kB]
Get:11 http://archive.ubuntu.com/ubuntu jammy/main amd64 libgd3 amd64 2.3.0-2ubuntu2 [129 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx-common all 1.18.0-ubuntu14.4 [40.6 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-http-geopl2 amd64 1.18.0-ubuntu14.4 [11.9 kB]
Get:14 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-image-filter amd64 1.18.0-ubuntu14.4 [15.4 kB]
Get:15 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-mail amd64 1.18.0-ubuntu14.4 [13.7 kB]
Get:16 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-mail libnginx-mod-mail amd64 1.18.0-ubuntu14.4 [45.7 kB]
Get:17 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-stream amd64 1.18.0-ubuntu14.4 [72.9 kB]
Get:18 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnginx-mod-stream-geopl2 amd64 1.18.0-ubuntu14.4 [10.1 kB]
Get:19 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx-core amd64 1.18.0-ubuntu14.4 [40.6 kB]
Get:20 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx amd64 1.18.0-ubuntu14.4 [3872 kB]
Fetched: 2693 kB in 0s (38.2 kB/s)
Preconfiguring packages ...
Selecting previously unselected package fonts-dejavu-core.
(Reading database ... 62092 files and directories currently installed.)
Preparing to unpack .../fonts-dejavu-core_2.37-2ub1ld1_all.deb ...
Unpacking fonts-dejavu-core (2.37-2ub1ld1) ...
Selecting previously unselected package fontconfig-config.
Preparing to unpack .../01-fontconfig-config_2.13.1-4.2ubuntu5_all.deb ...
Unpacking fontconfig-config (2.13.1-4.2ubuntu5) ...
Selecting previously unselected package libldebflated0:amd64.
Preparing to unpack .../02-libldebflated0_1.10-2_amd64.deb ...
Unpacking libldebflated0:amd64 (1.10-2) ...
Selecting previously unselected package libfontconfig1:amd64.
Preparing to unpack .../03-libfontconfig1_2.13.1-4.2ubuntu5_amd64.deb ...
Unpacking libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Selecting previously unselected package libjpeg-turbo8:amd64.

```

```
az Select azureuser@myVM: ~
Get:20 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 nginx amd64 1.18.0-6ubuntu14.4 [3872 kB]
Fetched: 2693 kB in 0s (38.2 kB/s)
Preconfiguring packages ...
Selecting previously unselected package fonts-dejavu-core.
(Reading database ... 62092 files and directories currently installed.)
Preparing to unpack .../00-fonts-dejavu-core_2.37-2ub1ld1_all.deb ...
Unpacking fonts-dejavu-core (2.37-2ub1ld1) ...
Selecting previously unselected package fontconfig-config.
Preparing to unpack .../01-fontconfig-config_2.13.1-4.2ubuntu5_all.deb ...
Unpacking fontconfig-config (2.13.1-4.2ubuntu5) ...
Selecting previously unselected package libldebflated0:amd64.
Preparing to unpack .../02-libldebflated0_1.10-2_amd64.deb ...
Unpacking libldebflated0:amd64 (1.10-2) ...
Selecting previously unselected package libfontconfig1:amd64.
Preparing to unpack .../03-libfontconfig1_2.13.1-4.2ubuntu5_amd64.deb ...
Unpacking libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Selecting previously unselected package libjpeg-turbo8:amd64.
Preparing to unpack .../04-libjpeg-turbo8_2.1.2-0ubuntu1_amd64.deb ...
Unpacking libjpeg-turbo8:amd64 (2.1.2-0ubuntu1) ...
Selecting previously unselected package libjpeg8:amd64.
Preparing to unpack .../05-libjpeg8_8c-2ubuntu10_amd64.deb ...
Unpacking libjpeg8:amd64 8c-2ubuntu10 ...
Selecting previously unselected package libjnigh8:amd64.
Preparing to unpack .../06-libjnigh8_2.1-3.ubuntu0.22.04.1_amd64.deb ...
Unpacking libjnigh8:amd64 (2.1-3.ubuntu0.22.04.1) ...
Selecting previously unselected package libwebp7:amd64.
Preparing to unpack .../07-libwebp7_1.1.0-0ubuntu0.22.04.2_amd64.deb ...
Unpacking libwebp7:amd64 (1.1.0-0ubuntu0.22.04.2) ...
Selecting previously unselected package libtiff5:amd64.
Preparing to unpack .../08-libtiff5_4.3.0-0ubuntu0.9_amd64.deb ...
Unpacking libtiff5:amd64 (4.3.0-0ubuntu0.9) ...
Selecting previously unselected package libxpm4:amd64.
Preparing to unpack .../09-libxpm4_1.0.9-0ubuntu0.22.04.2_amd64.deb ...
Unpacking libxpm4:amd64 (1.0.9-0ubuntu0.22.04.2) ...
Selecting previously unselected package libgpg3:amd64.
Preparing to unpack .../10-libgpg3_2.3.0-2ubuntu2_amd64.deb ...
Unpacking libgpg3:amd64 (2.3.0-2ubuntu2) ...
Selecting previously unselected package nginx-common.
Preparing to unpack .../11-nginx-common_1.18.0-ubuntu14.4_all.deb ...
Unpacking nginx-common (1.18.0-ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-http-geopl2.
Preparing to unpack .../12-libnginx-mod-http-geopl2_1.18.0-ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-http-geopl2 (1.18.0-ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-image-filter.
Preparing to unpack .../13-libnginx-mod-image-filter_1.18.0-ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-image-filter (1.18.0-ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-mail.
Preparing to unpack .../15-libnginx-mod-mail_1.18.0-ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-mail (1.18.0-ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../16-libnginx-mod-stream_1.18.0-ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-stream (1.18.0-ubuntu14.4) ...

```

```
[Select azureuser@myVM: ~]
Unpacking libgdb3:amd64 (2.3.0-2ubuntu2) ...
Selecting previously unselected package nginx-common.
Preparing to unpack .../11-nginx-common_1.18.0-6ubuntu14.4_all.deb ...
Unpacking nginx-common (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-http-geolp2.
Preparing to unpack .../12-libnginx-mod-http-geolp2_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-http-geolp2 (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-http-image-filter.
Preparing to unpack .../13-libnginx-mod-http-image-filter_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-http-xslt-filter.
Preparing to unpack .../14-libnginx-mod-http-xslt-filter_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-http-xslt-filter (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-mail.
Preparing to unpack .../15-libnginx-mod-mail_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-mail (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../16-libnginx-mod-stream_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-geoip2.
Preparing to unpack .../17-libnginx-mod-geoip2_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-geoip2 (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package nginx-core.
Preparing to unpack .../18-nginx-core_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx-core (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package nginx.
Preparing to unpack .../19-nginx_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx (1.18.0-6ubuntu14.4) ...
Setting up libpcre4:amd64 (1:3.5.12-1ubuntu0.22.04.2) ...
Setting up libdeflate0:amd64 (1:1.10-2) ...
Setting up nginx (1.18.0-6ubuntu14.4) ...
Creating symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjbig0:amd64 (2.1.3-1ubuntu0.22.04.1) ...
Setting up libnginx-mod-mail (1.18.0-6ubuntu14.4) ...
Setting up fonts-dejavu-core (2.37-2build1) ...
Setting up libjpeg-turbo0:amd64 (2.2.1-2ubuntu22.04.2) ...
Setting up libwebp5:amd64 (2.2.1-2ubuntu22.04.2) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Setting up libjbig0:amd64 (2.1-2ubuntu10) ...
Setting up libnginx-mod-mail (1.18.0-6ubuntu14.4) ...
Setting up fontconfig-config (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Setting up libtiff5:amd64 (4.1.0-0ubuntu0.9) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Setting up libjbig0:amd64 (2.1.3-1ubuntu0.22.04.1) ...
Setting up libnginx-mod-stream geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Setting up nginx-core (1.18.0-6ubuntu14.4) ...
 * Upgrading binary nginx
Setting up nginx (1.18.0-6ubuntu14.4) ...
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Scanning processes...
Scanning linux images...[ OK ]
```

When done, type exit to leave the SSH session.

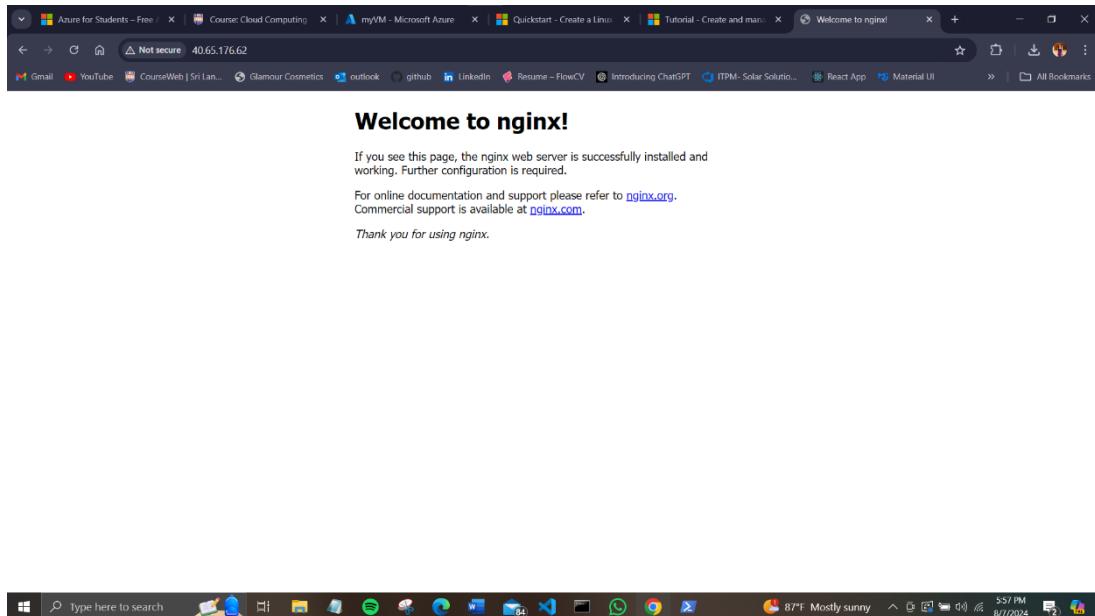
```
[Windows PowerShell]
Preparing to unpack .../18-nginx-core_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx-core (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package nginx.
Preparing to unpack .../19-nginx_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx (1.18.0-6ubuntu14.4) ...
Setting up libxpm4:amd64 (1:3.5.12-1ubuntu0.22.04.2) ...
Setting up libpcre4:amd64 (1.18.0-6ubuntu14.4) ...
Setting up nginx (1.18.0-6ubuntu14.4) ...
Creating symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjbig0:amd64 (2.1.3-1ubuntu0.22.04.1) ...
Setting up libnginx-mod-http-xslt-filter (1.18.0-6ubuntu14.4) ...
Setting up fonts-dejavu-core (2.37-2build1) ...
Setting up libjpeg-turbo0:amd64 (2.2.1-2ubuntu22.04.2) ...
Setting up libwebp7:amd64 (2.2.1-2ubuntu22.04.2) ...
Setting up libnginx-mod-geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libjpeg8:amd64 (5c~Ubuntu10) ...
Setting up libnginx-mod-mail (1.18.0-6ubuntu14.4) ...
Setting up fontconfig-config (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Setting up libtiff5:amd64 (4.1.0-0ubuntu0.9) ...
Setting up libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Setting up nginx-core (1.18.0-6ubuntu14.4) ...
 * Upgrading binary nginx
Setting up nginx (1.18.0-6ubuntu14.4) ...
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
azuser@myVM: ~
```

View the web server in action

Use a **web browser** of your choice to view the default **NGINX welcome page**. Type the public IP address of the VM as the web address. The public IP address can be found on the VM overview page or as part of the SSH connection string you used earlier.



Clean up resources

1. On the Overview page for the VM, select the **Resource group** link.

The screenshot shows the Azure portal with the URL <https://portal.azure.com/#@slit.lk/resourcegroups/777e9da5-6b7f-4907-96a4-f2a161c87a53/resourceGroups/myResourceGroup/overview>. The 'myResourceGroup' resource group is selected. The 'Delete resource group' button is highlighted with a red box. The page displays the following information:

myResourceGroup Resource group

Overview

Subscription (move) : [Azure for Students](#)
Subscription ID : 777e9da5-6b7f-4907-96a4-f2a161c87a53
Tags (edit) : [Add tags](#)

Resources

Name	Type	Location
myKey	SSH key	Southeast Asia
myVM	Virtual machine	Southeast Asia
myVM-ip	Public IP address	Southeast Asia
myVM-nsg	Network security group	Southeast Asia
myVM-vnet	Virtual network	Southeast Asia
myvm889	Network Interface	Southeast Asia

2. At the top of the page for the resource group, select **Delete resource group**.

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with various navigation options like Overview, Activity log, Access control (IAM), Tags, Resource visualizer, Events, Settings, Cost Management, Monitoring, Automation, and Help. The main area displays a list of resources under the 'Resources' tab, including myKey, myVM, myVM-ip, myVM-nsg, myVM-vnet, and myvm889. To the right, a modal window titled 'Delete a resource group' is open. It contains a warning message: 'The following resource group and all its dependent resources will be permanently deleted.' Below this, it lists 'Resource group to be deleted' (myResourceGroup) and 'Dependent resources to be deleted (7)' which includes myKey, myVM, myVM-ip, myVM-nsg, myVM-vnet, myvm889, and myVM_disk1_1395be154328494dae53226b69. There's also a checkbox for 'Apply force delete for selected Virtual machines and Virtual machine scale sets' and a text input field for 'Enter resource group name to confirm deletion' with 'myResourceGroup' typed in. At the bottom of the modal are 'Delete' and 'Cancel' buttons.

3. A page will open warning you that you are about to delete resources. Type the name of the resource group and select **Delete** to finish deleting the resources and the resource group.

This screenshot is identical to the one above, showing the 'Delete a resource group' dialog box. The only difference is that the 'Delete' button at the bottom of the modal has been highlighted with a red box, indicating the user should click it to proceed with the deletion.

The screenshot shows the Microsoft Azure Resource Group Overview page for a group named "myResourceGroup". The page displays various resources like myKey, myVM, myVM-ip, myVM-nsg, myVM-vnet, and myvm899. A delete confirmation dialog box is overlaid on the page, prompting the user to confirm the deletion of the resource group "myResourceGroup". The dialog includes a "Delete" button and a "Go back" button.

The screenshot shows the Microsoft Azure Resource Group Overview page for the same "myResourceGroup". A success message box is displayed, stating "... Deleting resource group myResourceGroup Deleting resource group myResourceGroup". The main table of resources is visible below, showing items like myKey, myVM, myVM-ip, myVM-nsg, myVM-vnet, and myvm899, all located in Southeast Asia.

A screenshot of the Microsoft Azure portal showing the 'myResourceGroup' resource group overview. A red box highlights the 'Deleting' status message at the top. The 'Essentials' section shows the subscription (Azure for Students), ID (777e9da5-6b7f-4907-96a4-f2a161c87a53), location (Southeast Asia), and deployment status (1 Succeeded). The 'Resources' section displays a search bar and filter options, with a message stating 'No resources match your filters'. The Windows taskbar at the bottom shows various pinned icons.

A screenshot of the Microsoft Azure portal showing the 'Virtual machines' blade. A red box highlights the 'No virtual machines to display' message. Below it, instructions for creating a new virtual machine are provided, along with links for Windows and Linux options. The Windows taskbar at the bottom shows various pinned icons.