

REPORT ON
MICROSOFT AZURE FUNDAMENTALS

NAME	SHRINITHI C S
REGISTER NO.	710722104096
DEPARTMENT	COMPUTER SCIENCE & ENGINEERING

CREATING AN AZURE VIRTUAL MACHINE

The screenshot shows the Microsoft Learn interface for the exercise 'Exercise - Create an Azure virtual machine'. The breadcrumb trail is: Training / Browse / Describe Azure compute and networking services / Unit 3 of 14. The exercise title is 'Exercise - Create an Azure virtual machine' with a duration of 10 minutes and a '100 XP' badge. A notification states: 'Sandbox activated! Time remaining: 52 min. You have used 1 of 10 sandboxes for today. More sandboxes will be available tomorrow.' The description says: 'In this exercise, you create an Azure virtual machine (VM) and install'. On the right, the 'Azure Cloud Shell' is open, displaying a JSON configuration for an extension. The configuration includes 'protectedSettings', 'provisionAfterExtensions', 'provisioningState', 'publisher', 'resourceGroup', 'settings' (with 'fileUri' pointing to a GitHub repository), 'suppressFailures', 'tags', 'type', 'typeHandlerVersion', and 'typePropertiesType'.

```
"protectedSettings": null,
"protectedSettingsFromKeyVault": null,
"provisionAfterExtensions": null,
"provisioningState": "Succeeded",
"publisher": "Microsoft.Azure.Extensions",
"resourceGroup": "learn-75de4690-4f0e-4fb6-832a-2de32bb3081d",
"settings": {
  "fileUri": [
    "https://raw.githubusercontent.com/MicrosoftDocs/mslearn-welcome-to-azure/master/configure-nginx.sh"
  ]
},
"suppressFailures": null,
"tags": null,
"type": "Microsoft.Compute/virtualMachines/extensions",
"typeHandlerVersion": "2.1",
"typePropertiesType": "customScript"
}
```

CONFIGURING NETWORK ACCESS

The screenshot shows the Microsoft Learn interface for the exercise 'Exercise - Configure network access'. The breadcrumb trail is: Training / Browse / Describe Azure compute and networking services / Unit 9 of 14. The exercise title is 'Exercise - Configure network access' with a duration of 10 minutes and a '100 XP' badge. A notification states: 'Sandbox activated! Time remaining: 46 min. You have used 1 of 10 sandboxes for today. More sandboxes will be available tomorrow.' The description says: 'In this exercise, you configure the access to the virtual machine (VM) you'. On the right, the 'Azure Cloud Shell' is open, displaying a JSON configuration for a network security group rule and the output of an 'az network nsg rule list' command. The JSON configuration includes 'sourcePortRange', 'sourcePortRanges', and 'type'. The command output shows a table of rules.

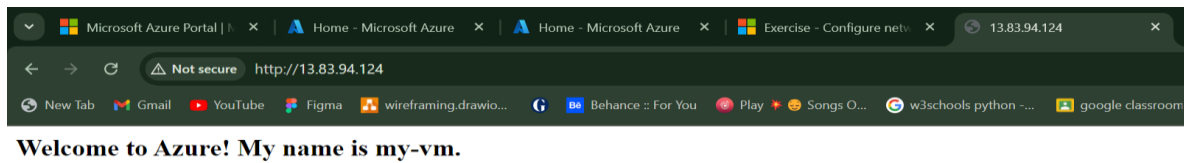
```
"sourcePortRange": "*",
"sourcePortRanges": [],
"type": "Microsoft.Network/networkSecurityGroups/securityRules"
}
```

Name	Priority	Port	Access
default-allow-ssh	1000	22	Allow
allow-http	100	80	Allow

```
shrinishelvaraj2003 [ ~ ]$ az network nsg rule list --resource-group "learn-75de4690-4f0e-4fb6-832a-2de32bb3081d" --nsg-name my-vmNSG --query '[].{Name:name, Priority:priority, Port:destinationPortRange, Access:access}' --output table
Name            Priority  Port  Access
-----
default-allow-ssh 1000    22    Allow
allow-http       100     80    Allow

shrinishelvaraj2003 [ ~ ]$ curl --connect-timeout 5 http://$IPADDRESS
curl: (28) Failed to connect to 13.83.94.124 port 80 after 5002 ms: Timeout was reached
shrinishelvaraj2003 [ ~ ]$ <html><body><h2>Welcome to Azure! My name is my-vm.</h2></body></html>
bash: syntax error near unexpected token `<'
shrinishelvaraj2003 [ ~ ]$
```

Output:

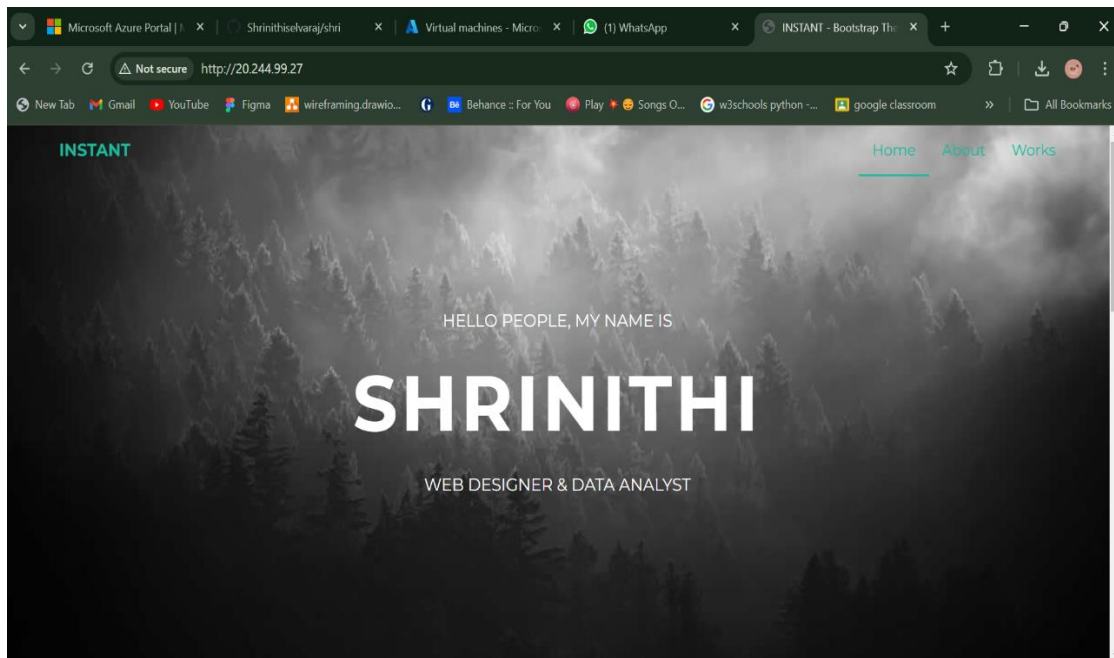


VIRTUAL MACHINE

A screenshot of the Microsoft Azure portal. The top navigation bar shows 'Microsoft Azure' and a search bar. The main heading is 'Virtual machines'. Below the heading, there are filters for 'Subscription equals all', 'Type equals all', 'Resource group equals all', and 'Location equals all'. A table lists the virtual machines. The table has columns: Name, Subscription, Resource group, Location, Status, Operating system, Size, and Public IP address. The table shows one record: 'shri' under 'Azure for Students' subscription, 'RG' resource group, 'Central India' location, 'Running' status, 'Linux' operating system, 'Standard_D2s_v3' size, and '4.213.224.63' public IP address. Below the table, there is a 'Give feedback' link. At the bottom, there is a terminal window with the following text: 'Type "az" to use Azure CLI', 'Type "help" to learn about Cloud Shell', 'Your Cloud Shell session will be ephemeral so no files or system changes will persist beyond your current session.', and 'shrinithiselvaraj2003 [~]\$'.

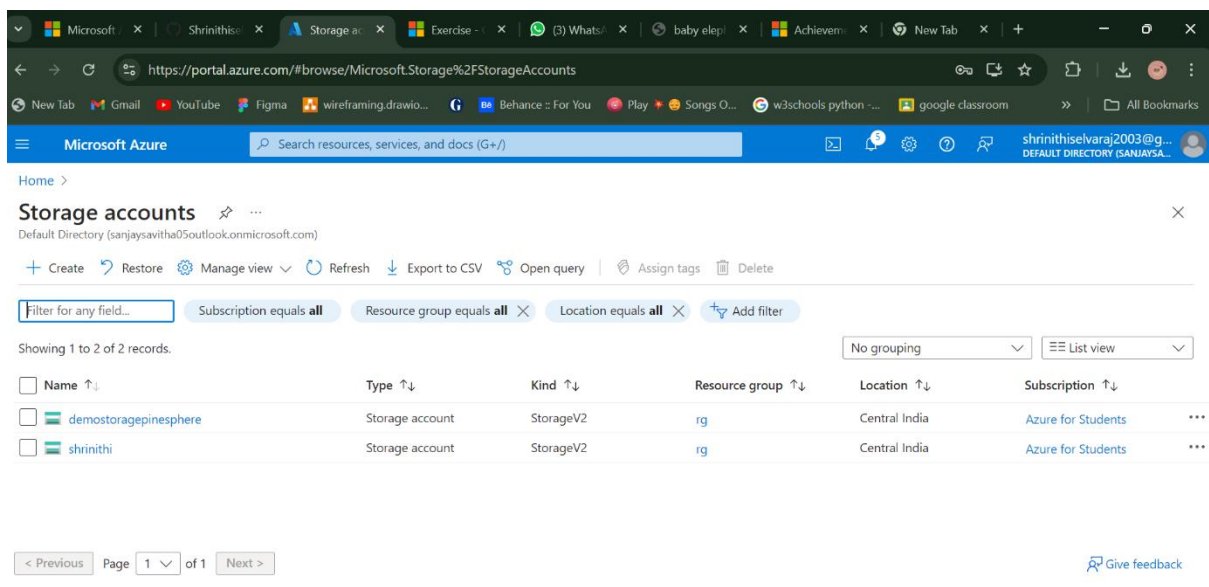
Name	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address
shri	Azure for Students	RG	Central India	Running	Linux	Standard_D2s_v3	4.213.224.63

Output



Github link: <https://github.com/Shrinithi/pine.git>

CREATING STORAGE ACCOUNT

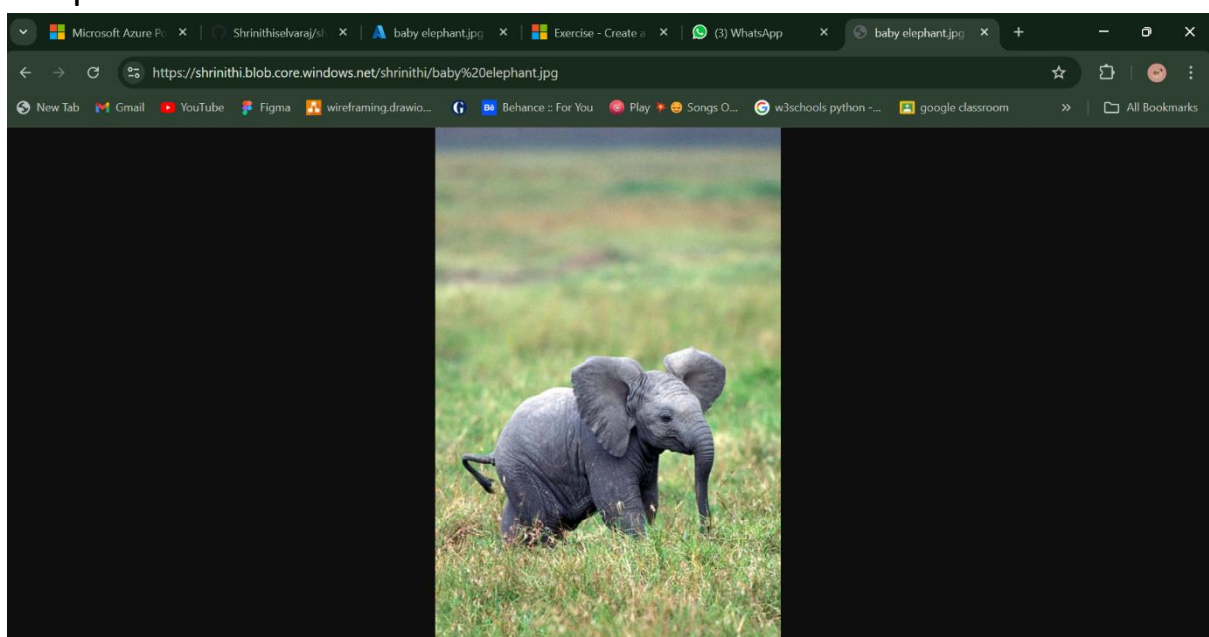


BLOB

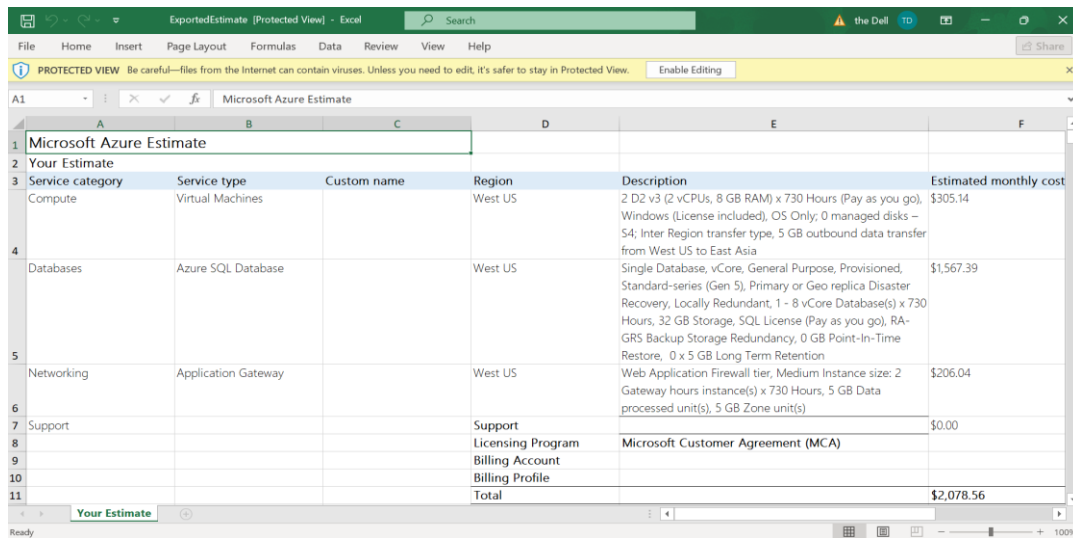
The screenshot shows the Microsoft Azure portal interface. On the left, the 'shriniithi' container is selected. The main area displays the 'baby elephant.jpg' blob. The 'Properties' tab is active, showing the following details:

Property	Value
URL	https://shriniithi.blob.core.windows.net/shriniithi/baby%20elephant.jpg
LAST MODIFIED	8/10/2024, 2:47:48 PM
CREATION TIME	8/10/2024, 2:47:48 PM
VERSION ID	-
TYPE	Block blob
SIZE	74.8 KiB
ACCESS TIER	Hot (Inferred)
ACCESS TIER LAST MODIFIED	N/A
ARCHIVE STATUS	-

Output:



ESTIMATING WORKLOAD COSTS USING PRICING CALCULATOR



Service category	Service type	Custom name	Region	Description	Estimated monthly cost
Compute	Virtual Machines		West US	2 D2 v3 (2 vCPUs, 8 GB RAM) x 730 Hours (Pay as you go), Windows (License included), OS Only; 0 managed disks – S4; Inter Region transfer type, 5 GB outbound data transfer from West US to East Asia	\$305.14
Databases	Azure SQL Database		West US	Single Database, vCore, General Purpose, Provisioned, Standard-series (Gen 5), Primary or Geo replica Disaster Recovery, Locally Redundant, 1 - 8 vCore Database(s) x 730 Hours, 32 GB Storage, SQL License (Pay as you go), RA-GRS Backup Storage Redundancy, 0 GB Point-In-Time Restore, 0 x 5 GB Long Term Retention	\$1,567.39
Networking	Application Gateway		West US	Web Application Firewall tier, Medium Instance size: 2 Gateway hours instance(s) x 730 Hours, 5 GB Data processed unit(s), 5 GB Zone unit(s)	\$206.04
Support			Support		\$0.00
			Licensing Program	Microsoft Customer Agreement (MCA)	
			Billing Account		
			Billing Profile		
			Total		\$2,078.56

COMPARING WORKLOAD COSTS USING TCO :

Total Cost of Ownership (TCO) Calculator

Estimate the cost savings you can realize by migrating your workloads to Azure

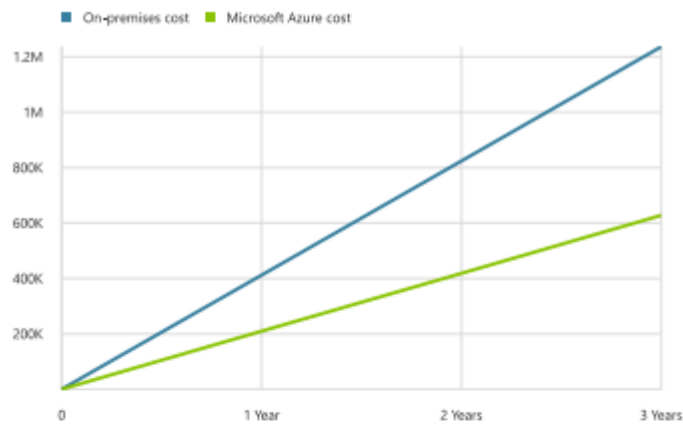
 My saved reports

 Sign In

Over 3 year(s) with Microsoft Azure, your estimated cost savings
could be as much as **\$608,414**

Total on-premises vs. Azure cost over time

Savings from running workloads in Azure accrue over time. The following shows how those savings add up over years.



Total on-premises over 3 year(s)

TCO of on-premises environments tends to be driven by compute and data center costs.

Total Azure cost over 3 year(s)

In Azure, certain cost categories decrease or go away completely.

\$1,236,573
Total cost

\$628,159
Total cost



73% Compute
6% Data center
11% Networking
2% Storage
9% IT Labor



58% Compute
0% Data center
0% Networking
24% Storage
18% IT Labor

MICROSOFT BADGES:

Microsoft

Shrinithi

babyelep

Exercise

(1) Whats

babyelep

Achievem

New Tab


https://learn.microsoft.com/en-us/users/me/achievements#badges-section

New Tab Gmail YouTube Figma wireframing.drawio... Behance : For You Play Songs O... w3schools python ... google classroom All Bookmarks

SC

Shrinithi CS

shrinithiselvaraj2003@gmail.com



37

Badges

6

Trophies

0

Reputation points

0

Accepted answers

0

Following

0

Followers

LEVEL 8

51,850/72,099 XP

Activity

Training

Plans

Challenges

Achievements

Have an achievement code? [Redeem your code now.](#)

Modules

Learning Paths

Courses

Plans

Other