Dr. N.G.P INSTITUTE OF TECHNOLOGY, COIMBATORE - 641048

AN AUTONOMOUS INSTITUTION

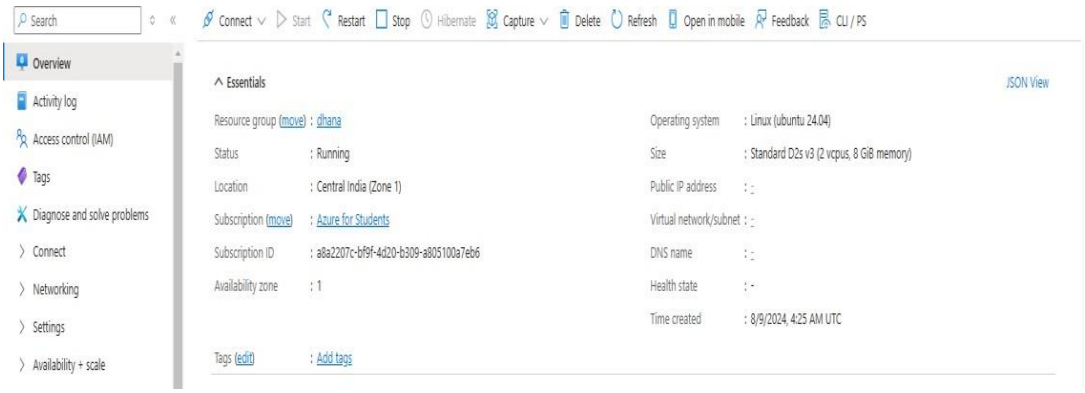
Reg No	**:**	710722104018
Name	**:**	Dhanavandhi.S
Class	**:**	III Year CSE A
Course Name	**:**	Microsoft azure Fundamentals
Company	**:**	Pinesphere Solution,Coimbatore
Start Date	**:**	06-08-2024
End Date	**:**	10-08-2024

CREATING A VIRTUAL MACHINE (VM) IN MICROSOFT AZURE:

Creating A Virtual Machine (Vm) In Microsoft Azure Involves The Following Steps:

1. Sign in to the Azure portal.
2. Navigate to "Create a resource" and select "Virtual Machine."
3. Choose a subscription, resource group, and region.
4. Configure VM settings, including size, OS, and storage.
5. Set up networking, security, and management options.
6. Review and create the VM, then monitor its

deployment.The VM will be ready to use after deployment.



HOST A WEBSITE FROM GITHUB ON A VIRTUAL MACHINE (VM) IN MICROSOFT AZURE

COMMANDS

Requesting a Cloud

Shell.Succeeded.Connecting

terminal...

Welcome to Azure Cloud Shell

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.

dhanavanthis90 [~]$ ssh kavya@4.240.73.145

The authenticity of host '4.240.73.145 (4.240.73.145)' can't be established.

ED25519 key fingerprint is SHA256:Tlzye0riER0kviLrxCyUqMm/HBsT2VzK+AKB5jPEq18.

This key is not known by any other names

Are you sure you want to continue connecting (yes/no/[fingerprint])? yes

Warning: Permanently added '4.240.73.145' (ED25519) to the list of known hosts.

kavya@4.240.73.145's password:

Permission denied, please try again.

kavya@4.240.73.145's password:

Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1010-azure x86_64)

 * Documentation: https://help.ubuntu.com

 * Management: https://landscape.canonical.com

 * Support: https://ubuntu.com/pro

 System information as of Sat Aug 10 05:11:53 UTC 2024

  System load: 0.0   Processes: 134

  Usage of /:   5.8% of 28.02GB   Users logged in: 0

  Memory usage: 3%   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.

13 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


Last login: Fri Aug 9 07:46:37 2024 from 20.235.209.48
kavya@myvm:~$ sudo apt update
Hit:1 http://azure.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://azure.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:3 http://azure.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://azure.archive.ubuntu.com/ubuntu noble-security InRelease
Get:5 http://azure.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [344 kB]
Get:6 http://azure.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [5716 B]
Get:7 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [321 kB]
Get:8 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [12.7 kB]
Fetched 809 kB in 1s (1549 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
9 packages can be upgraded. Run 'apt list --upgradable' to see them.
kavya@myvm:~$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.1).
0 upgraded, 0 newly installed, 0 to remove and 9 not upgraded.
kavya@myvm:~$ sudo apt install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.24.0-2ubuntu7).
0 upgraded, 0 newly installed, 0 to remove and 9 not upgraded.
kavya@myvm:~$  sudo systemctl  start nginx
kavya@myvm:~$ sudo systemctl enable nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx
```

kavya@myvm:~$ cd /var/www/html

kavya@myvm:/var/www/html$ sudo rm -rf *

kavya@myvm:/var/www/html$ sudo git clone https://github.com/dhana302004/techno.git .

fatal: destination path '.' already exists and is not an empty directory.

kavya@myvm:/var/www/html$ sudo chown -R www-data:www-data /var/www/html

kavya@myvm:/var/www/html$ ls

kavya@myvm:/var/www/html$ sudo git clone https://github.com/dhana302004/techno.git^[[2~

Cloning into 'resume'...

remote: Enumerating objects: 90, done.

remote: Counting objects: 100% (90/90), done.

remote: Compressing objects: 100% (88/88), done.

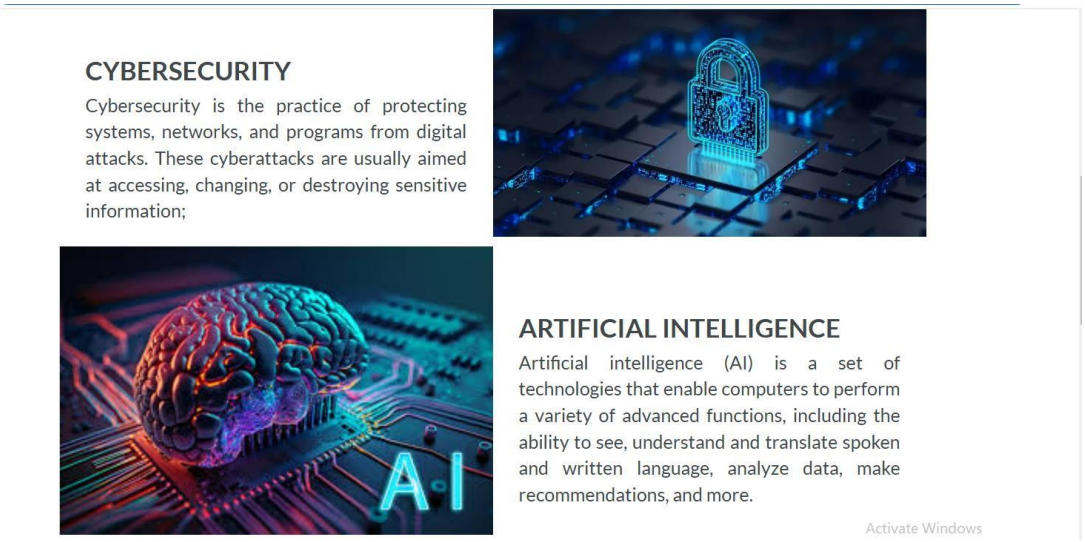
remote: Total 90 (delta 4), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (90/90), 818.23 KiB | 8.43 MiB/s, done.

Resolving deltas: 100% (4/4), done.

kavya@VM:/var/www/html$ sudo chown -R www-data:www-data /var/www/html

kavya@VM:/var/www/html$



CREATION OF STORAGE ACCOUNT IN MICROSOFT:

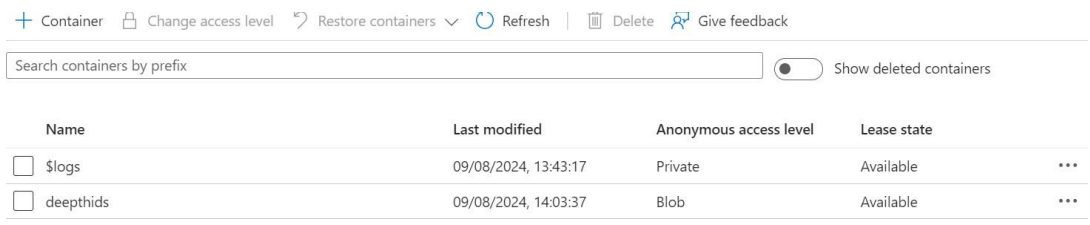
To Create A Storage Account In Microsoft Azure, Follow These Steps:

1. Sign in to Azure Portal.
2. Create a Resourc
3. Configure the Basics
4. Set Advanced Options
5. Review and Create
6. Access the Storage Account
7. After deployment, access the storage account to manage containers, blobs, files, tables, or queues.

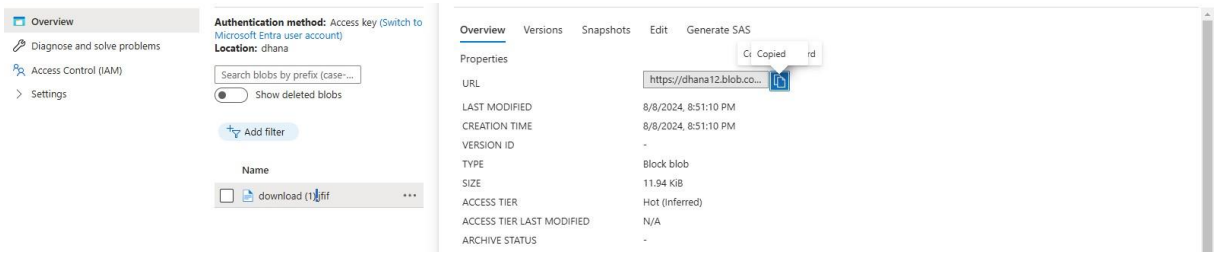
MANAGING OF STORAGE ACCOUNT

To Upload An Image Into A Container In An Azure Storage Account, Follow These Steps:

1. Access the Storage Account: Sign in to the Azure portal and navigate to your Storage Account.
2. Create a Container: In the Storage Account, select "Containers" and click "Add Container." Name the container and set the access level (private, blob, or container).
3. Open the Container: Once created, click on the container to open it.
4. Upload the Image: Click the "Upload" button within the container. In the upload window, browse your local machine to select the image file.
5. Configure Upload Settings: Optional - You can set advanced upload options like overwriting existing files, setting metadata, or assigning blob tier.
6. Start the Upload: Click "Upload" to start the process. Once the upload is complete, your image will be stored in the container and accessible based on the access level you set.



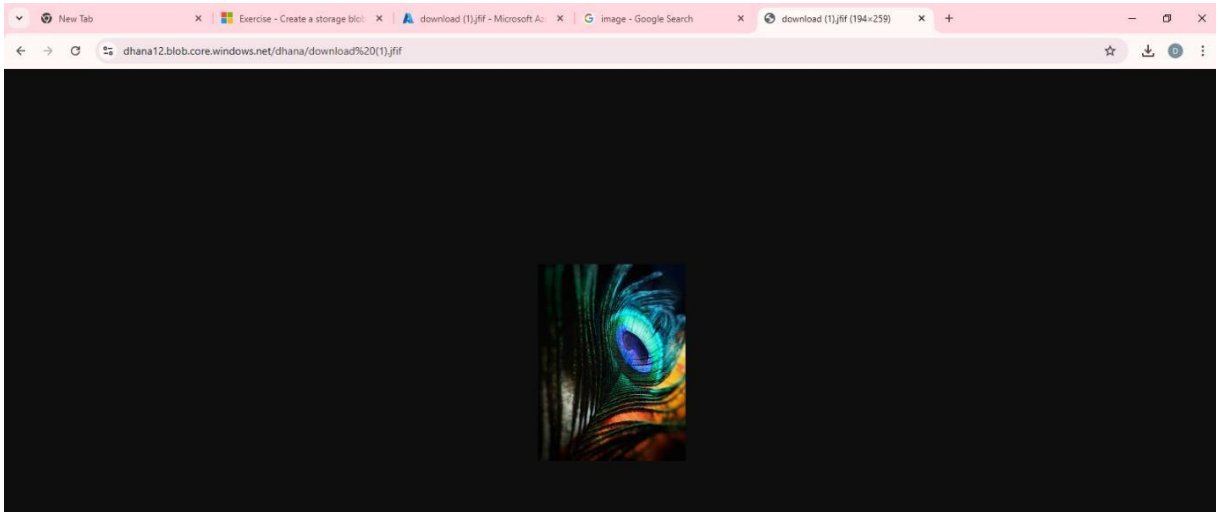
AFTER UPLOADED THE IMAGE :



URL PATH OF IMAGE :

https://dhana12.blob.core.windows.net/dhana/download (1).jfif

OUTPUT :



STATIC WEB PAGE :

Deploying a Static Web Page on Azure

Using Azure Static Web App:

Prepare Your Site: Develop your static site and push it to a GitHub repository.

Set Up Azure Static Web Apps:

1. Sign in to Azure Portal.
2. Click **Create a resource** > **Static Web Apps**.
3. Connect to your GitHub repo and branch.

Deploy and Access:

1. Azure deploys your site automatically.
2. Access it via the provided URL.

Resource group (move)
deepthi

Subscription (move)
Azure for Students

Subscription ID
50e35468-ea36-48bd-8995-0185f4584a19

Location
Global

Sku
Free

URL
https://purple-bay-08b55170f.5.azurestaticapps.net

Source
main (GitHub)

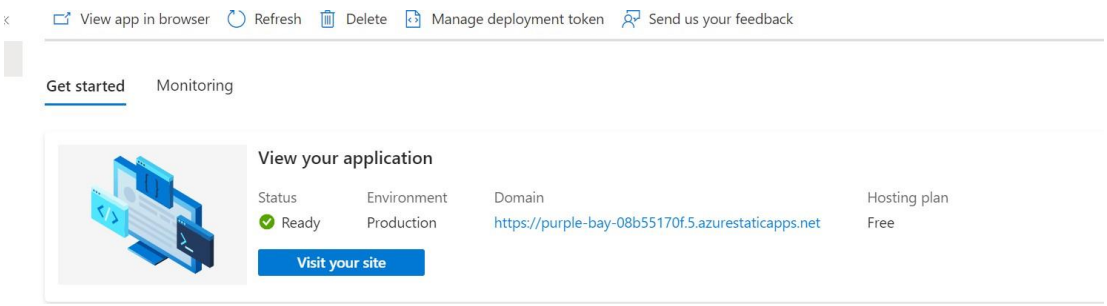
Deployment history
GitHub Action runs

View workflow
azure-static-web-apps-purple-bay-08b55170f.yml

Access Your GitHub Pages Site :

Visit Your Site:

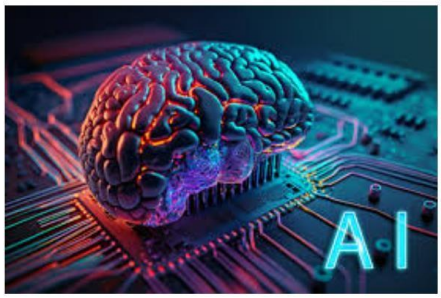
Open a web browser and navigate to https://github.com/dhana302004/techno.git
You should see your static web page displayed.



OUTPUT :

CYBERSECURITY

Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks. These cyberattacks are usually aimed at accessing, changing, or destroying sensitive information;



ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is a set of technologies that enable computers to perform a variety of advanced functions, including the ability to see, understand and translate spoken and written language, analyze data, make recommendations, and more.