=========================================================

Setting Up a VM Instance on Google Cloud Platform (GCP)

=========================================================

=========================================

Remove any broken Docker installations

=========================================

sudo apt remove -y docker docker.io docker-compose-plugin docker-buildx-plugin containerd runc

sudo apt autoremove -y

=========================================

Add Docker's official repository again

=========================================

sudo apt update

sudo apt install -y ca-certificates curl gnupg

sudo install -m 0755 -d /etc/apt/keyrings

curl -fsSL https://download.docker.com/linux/debian/gpg | sudo tee /etc/apt/keyrings/docker.asc > /dev/null

sudo chmod a+r /etc/apt/keyrings/docker.asc

echo "deb [signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/debian $(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

sudo apt update

=========================================

Install Docker and Docker Compose

=========================================

sudo apt install -y docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

=========================

Start and Enable Docker

=========================

sudo systemctl start docker

sudo systemctl enable docker

============================

Verify Docker Installation

============================

docker --version

docker compose version

================================

Add user to docker group

================================

sudo usermod -aG docker $USER

==========================

Then, apply the changes:

==========================

newgrp docker

docker ps

====================================================================

If you still see a permission denied error, restart your system:

====================================================================

sudo reboot

================================

Docker Login

================================

docker login --username nisnsia --password ghp\_XW9JOfK9dqDKz6O17UuaX ghcr.io ### Change this to your username and password

docker compose pull

docker compose up -d

================================

Open Ports for Public Access

================================

1. Go to: VPC Network → Firewall.

2. Click: "Create Firewall Rule".

3. Set:

Name: allow-custom-ports

Network: default

Direction: Ingress

Source IP ranges: 0.0.0.0/0 (Allow all)

Protocols & ports: tcp:3000,5000

Click "Create".

========================================================================make public and private keys for the VM in google cloud

========================================================================

ssh-keygen -t rsa -f “D:\JAMK Projects\server-keys” -C "udana"