Write Up

Creating EC2 Instance using terraform

- Install the Visual studio code and modify the edit environment variables for your account
- Install Terraform: The first step is to install Terraform on your local machine.
- Configure AWS credentials: Before we can create an EC2 instance, we need to configure our AWS credentials in Terraform.
- Create a Terraform configuration file: Next, we need to create a Terraform configuration file that defines the EC2 instance we want to create. This file should include information such as the instance type, AMI, security group, and key pair.
- Initialize Terraform: Before we can create the EC2 instance, we need to initialize Terraform. This can be done by running the "terraform init" command in the directory where the configuration file is located.
- Create the EC2 instance: Once Terraform is initialized, we can create the EC2 instance by running the "terraform apply" command.
- Verify the EC2 instance: After the EC2 instance is created, we can verify that it was created successfully by logging into the AWS Management Console.

Installing Jenkins and Java

- Update the Ubuntu package index: This can be done by running the command "sudo apt-get update" in the terminal.
- Install Java: Jenkins requires Java to be installed on the system. To install Java, run the command "sudo apt-get install openjdk-8-jre-headless" in the terminal.
- Add Jenkins repository to the system: This can be done by running the command "wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -" and "sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'" in the terminal.
- Install Jenkins: we can install Jenkins by running the command "sudo apt-get update" and "sudo apt-get install jenkins" in the terminal.
- Start Jenkins service: start the Jenkins service by running the command "sudo systemctl start jenkins" in the terminal.
- Verify the Jenkins installation: To verify that Jenkins is running and accessible, open a web browser and enter "http://localhost:8080" in the address bar. This should open the Jenkins dashboard.
- Initial setup wizard: After accessing the Jenkins dashboard, the initial setup wizard will appear. Follow the instructions to complete the setup.

Installing Phyton

- Update the Ubuntu package index:This can be done by running the command "sudo apt-get update" in the terminal.

- Install Python: To install the latest version of Python, run the command "sudo apt-get install python3" in the terminal.
- Verify the Python installation: To verify that Python is installed and accessible, open a terminal and enter "python3"