**Automating Infrastructure using Terraform**

Terraform is an IaC tool used to provision the various infrastructure components. In this project I written an terraform code to launch AWS ec2 instance and installed Python, Java and Jenkins by calling an shell script inside user-data.

Required steps:

Step1: provide AWS access key and secret key and AWS region and keypair.

Step2: create a security group with inbound and outbound rules that allows traffic to Jenkins.

Step3: create ec2 resource and attach created security group with default vpc -id.

Step4: write a shell script for installing python, java and Jenkins and start and enable the service.

Step5: call this shell script file inside user-data in ec2 resource.

Step6: Verify this Jenkins installation by accessing Jenkins home through web. We can find the IP address in terraform state file that will create on successful creation of ec2 instance.

We can connect to this instance with keypair by using putty.