Project 3

Implement infrastructure as code (IaC). Main objective will be how to use IaC tools to automate the deployment and management of infrastructure

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steps

- 1. Create an instance
- 2. Install terraform and jenkins
- 3. In jenkins install terraform plugin
- 4. create IAM user for access & secret key
- 5. Create a file in .tf extension , file contain provider and resource of s3 bucket
- 6. Push file in respective respository (bhagi-terra)
- 7. In jenkins pipeline clone it and do terraform inti ,Validate, plan , apply
- 8. And build

PIPELINE:

```
pipeline {
  agent any
  stages{
     stage('clone'){
       steps{
          checkout scmGit(branches: [[name: '*/main']], extensions: [], userRemoteConfigs: [[url:
'https://github.com/Bhargavi413/bhagi-terra.git']])
       }
     }
     stage('terraform init'){
       steps{
          sh 'terraform init'
        }
     stage('terraform validate'){
       steps{
          sh 'terraform validate'
        }
```

```
stage('terraform plan'){
    steps{
        sh 'terraform plan'
    }

stage('terraform apply'){
    steps{
        sh 'terraform apply --auto-approve'
    }
}
```

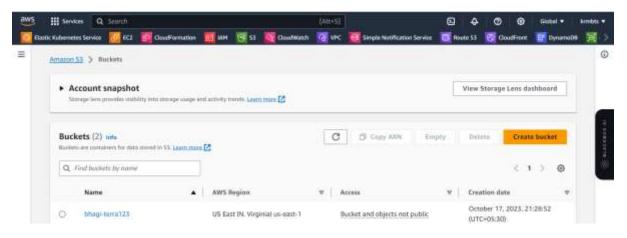
OUTPUT:



TERRAFORM TF FILE CODE:I

```
}
resource "aws_s3_bucket" "s3bucket" {
bucket = "bhagi-terra123"
tags = {
Name = "terraform"
}
}
```

S3-BUCKET CREATED THROUGH JENKINS PIPELINE



CONSOLE OUTPUT OF CREATING S3 BUCKET