**JAVA HOME CLOUD Terraform Project**

Terraform :- Terraform is a tool for automating Infrastructure provisioning or a tool for implementing infrastructure as code .

Using Terraform we can automatically setup infrastructure in the cloud

Infrastructure as code (IAC): is practise of provisioning the resources in the cloud using configuration files.

Advantages of IAC:

1. It Is automated , if you want to create similar environments like dev,test,prod kind of environments we can reuse them .
2. If there are any issues with the release you made recently for your infrastructure , we can revert back it to previous state,
3. Iif you caught with any bugs troubleshooting will becomes easy using source code management tools like git ,we can go and see what are the recent changes made to the infrastructure.

Terraform tool is from Hashicorp and this tool is written in Go Lang

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Configure AWS IAM access KEY ID and secret Access key

In aws acoount go to IAM ->USERS->add user-> un:Terraform AKIAQAGUHQ4QEGJIAMWW –ACESS KEY ID , SECRET ACCESS KEY g3oL+2JfCfsIbmSjtkUwdGNbqMN1Q2CW9wMYAbbY->access type->Programatic access ->Set permissions->attach existing policies directly->and choose administrative acces🡪create user.

Inorder to configure access keys and secret keys we need amazon cli in laptop

Run following commands in terminal 🡪 aws comfigure

Copy and paste access key id of Terraform user

Copy and paste the secret key of Terraform user

Region to procision the resources we neeed is Mumbai ap-south-1

The configurations are by default used by Terraform to create the resources in the aws account

Install Atom Editor

Create a Workspace : mkdir Terraform

cd Terraform

atom .

go to search bar and install packages 🡪terraform🡪 language Terraform (install)-🡪terraform-fmt(install)🡪go to settings (format on save ) is checked

Terraform supports multiple cloud providers,but we are using aws

Providers.tf