**Source Code to launch an EC2 instance using Terraform.**

1. **Cred.tf**

* provider “aws” {

access\_key = “ASIAY25YFBYPPD5NUIUN”

secret\_key = “paL/cOy9teGMMnwoUv4QcILKQ9IZ3x6zMSq8/Jn6”

token = “FwoGZXIvYXdzEKD//////////wEaDAMF+4YIBCBxE7/xPCK7AS1x03t+ZuEWW5JlmIveeK25EPvKajJzMCUXVNecM1XILFEmn/MHaxSNDK/QA+bv+mx/lUP8zudImX+kiean27ydx02br7z6FheGPDe9q0OFsx/WmhtqK2lMOBhbP0YmIU2zVvwigFzV4bpMPoPwjAop9zrWh8tD6x3y2nffU/dgQYwuGAJB8qSxDNuxdr0uMz3l9stRtTfOAdxGk1G8mnp5dVxvOn87GAa1sQyodLg94mbzXth/VEF7OdAo6eLirgYyLV/qeJ3TjL3XcRi4FSEgasMByiPWbhAypbEW+9gmL1JTPktZarF2AK5w+yJBwQ==”

region = “us-east-1”

}

1. **Main.tf**

* resource “aws\_securtiy\_group” “allow\_tls” {

name = “allow\_tls”

description = “allow for ec2 instance”

vpc\_id = “vpc-0b90f11ec5c002d7b”

ingress {

description = “tls port 8080 for ec2 instance”

from\_port = “8080”

to\_port = “8080”

protocol = “tcp”

cidr\_blocks = [“0.0.0.0/0”]

}

egress {

from\_port = 0

to\_port = 0

protocol = “-1”

cidr\_blocks = [“0.0.0.0/0”]

}

tags = {

Name = "For SL Project"

}

}

* resource "aws\_instance" "TerraVM" {

ami = "ami-0c7217cdde317cfec"

instance\_type = "t2.micro"

key\_name = "Terr"

tags = {

name = "EC2"

owner = "Amar"

}

vpc\_security\_group\_ids = ["${aws\_security\_group.allow\_tls.id}"]

}

* **terraform init**
* **terraform validate**
* **terraform plan**
* **terraform apply**

**Run below mentioned commands on newly created Ec2 instance**

1. **Sudo apt-get update**
2. **Sudo apt-get install openjdk-11-jdk**
3. **Sudo apt-get install maven**
4. To install Jenkins, we need to run curl command which is mentioned below.

**curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc > /dev/null**

**echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable binary/ | sudo tee /etc/apt/sources.list.d/jenkins.list > /dev/null**

**sudo apt-get update**

**sudo apt-get install jenkins**