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+ZuEWW5Jl
mIveeK25EPvKajJzMCUXVNecM1XILFEmn/MHaxSNDK/QA+bv+mx/lUP8zudImX+k
iean27ydx02br7z6FheGPDe9q0OFsx/WmhtqK2lMOBhbP0YmIU2zVvwigFzV4bpMP
oPwjAop9zrWh8tD6x3y2nffU/dgQYwuGAJB8qSxDNuxdr0uMz3l9stRtTfOAdxGk1G8
mnp5dVxvOn87GAa1sQyodLg94mbzXth/VEF7OdAo6eLirgYyLV/qeJ3TjL3XcRi4FSE
gasMByiPWbhAypbEW+9gmL1JTPktZarF2AK5w+yJBwQ=="

      region   = "us-east-1"
    }

2. 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
```