1. **Install Terraform from below link**
   https://developer.hashicorp.com/terraform/downloads

   - First Navigate to Operating System Section & Select your OS,
     Here in my case I selects Linux
     Copy paste the below commands by opening the terminal

   ```
   wget -O- https://apt.releases.hashicorp.com/gpg | gpg --dearmor
   | sudo tee /usr/share/keyrings/hashicorp-archive-keyring.gpg

   echo "deb
   [signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg]
   https://apt.releases.hashicorp.com $(lsb_release -cs) main" |
   sudo tee /etc/apt/sources.list.d/hashicorp.list

   sudo apt update && sudo apt install terraform
   ```

   - After that I have installed Binary download for Linux
     Binary File Name: AMD64
   - Update the packages

   ```
   sudo apt-get update
   ```

   - Install necessary dependencies

   ```
   sudo apt-get install -y curl unzip
   ```

   - Unzip package

   ```
   unzip terraform_1.1.0_linux_amd64.zip
   ```

   - Move the terraform binary to proper folder

   ```
   sudo mv terraform /usr/local/bin/
   ```

   - Verify the installation

   ```
   terraform --version
   ```

2. **Configure AWS CLI**

Install the AWS CLI by running the following command:

```
sudo apt-get install awscli
```

Configure the AWS CLI:

```
aws configure
```

Provide AWS Access Key ID & Secret Key Access from IAM User Security Creds

3. **Create a folder and add file with extension .tf**

```
sudo mkdir terraform && touch main.tf
```

Inside main.tf, paste the below terraform code to Create an EC2 instance under free tier and add an EIP to it in Mumbai Region

```
provider "aws" {
  access_key = "YOUR_AWS_ACCESS_KEY_ID"
  secret_key = "YOUR_AWS_SECRET_KEY_ACCESS"
  region = "ap-south-1"
}

resource "aws_instance" "example" {
  ami           = "ami-0e306788ff2473ccb"
  instance_type = "t2.micro"
  key_name      = "my-key"

  tags = {
    Name = "example-instance"
  }
}

resource "aws_eip" "example" {
  vpc      = true
  instance = aws_instance.example.id

  tags = {
    Name = "example-eip"
  }
}
```

Also export the Access Key ID and Secret Access Key as environment variables using the following command:

```
export AWS_ACCESS_KEY_ID=your_access_key_id
export AWS_SECRET_ACCESS_KEY=your_secret_access_key
```

4. **Start Terraform Environment**

Now run the below command to initialize the terraform working directory

```
terraform init
```

Validate terraform file
```
terraform validate
```

Create an execution plan

```
terraform plan
```

Apply the terraform code
```
terraform apply
```

If you want to destroy the infrastructure you created, just type below command
terraform destroy
```
terraform destroy
```

5. **Now check on AWS**

Now verify on AWS whether infrastructure created or not