STEPS :  
1.Launched the instance with access keys.

2.Have created the VPC and I have attached with Cidr blocks

3.created the subnets and security groups.

4.Given the port numbers for the communication from outside to inside

5.created the IgW for the vpc

6.Created the new key pair and given name as deployer key pair

7.created the instance through AMI and given the connection by using ssh and provisioned the instance& installed the mango DB with given specifications.

**#Creating a terraform script for installation of mongo DB instance on AWS instance**  
provider "aws" {  
 access\_key = "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"  
 secret\_key = "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"  
 region = "us-east-2"  
}  
  
#Creating a VPC  
resource "aws\_vpc" "main" {  
 cidr\_block = "[10.0.0.0/16](http://10.0.0.0/16)"  
 }  
  
#Creating a public subnet  
resource "aws\_subnet" "public-subnet" {  
 vpc\_id = aws\_vpc.main.id  
 cidr\_block = "[10.0.1.0/24](http://10.0.1.0/24)"  
}  
  
#Creating a security group for VPC  
resource "aws\_security\_group" "sg-vpc" {  
 name = "vpc\_test\_web"  
  
 ingress {  
 from\_port = 80  
 to\_port = 80  
 protocol = "tcp"  
 cidr\_blocks = ["[0.0.0.0/0](http://0.0.0.0/0)"]  
 }  
  
 ingress {  
 from\_port = 443  
 to\_port = 443  
 protocol = "tcp"  
 cidr\_blocks = ["[0.0.0.0/0](http://0.0.0.0/0)"]  
 }  
  
 ingress {  
 from\_port = 22  
 to\_port = 22  
 protocol = "tcp"  
 //Add CIDR block of source of access  
 cidr\_blocks = ["[0.0.0.0/0](http://0.0.0.0/0)"]  
 }  
 egress {  
 from\_port = 0  
 to\_port = 0  
 protocol = "-1"  
 cidr\_blocks = ["[0.0.0.0/0](http://0.0.0.0/0)"]  
 }  
  
 vpc\_id= aws\_vpc.main.id  
}  
  
#Creating a Internet Gateway for your VPC  
resource "aws\_internet\_gateway" "gw" {  
 vpc\_id = aws\_vpc.main.id  
}  
  
# Creating a new key-pair named deployer-key  
resource "aws\_key\_pair" "deployer" {  
 key\_name = "deployer-key"  
 public\_key = "ssh-rsa \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"  
}  
  
# Creating a AWS EC2 instance  
resource "aws\_instance" "ubuntu"{  
 ami = "ami-06d51e91cea0dac8d"  
 instance\_type = "t2.micro"  
 subnet\_id = aws\_subnet.public-subnet.id  
 ebs\_block\_device {  
 device\_name = "/dev/sda1"  
 volume\_size = "100"  
 }  
 connection {  
 type = "ssh"  
 user = "ubuntu"  
 host = aws\_instance.ubuntu.public\_ip  
 private\_key = "./id\_rsa"  
 }  
 provisioner "remote-exec" {  
 inline = [  
 "sudo apt update",  
 "sudo apt install -y mongodb",  
 "sudo systemctl status mongodb"  
 ]  
 }  
}