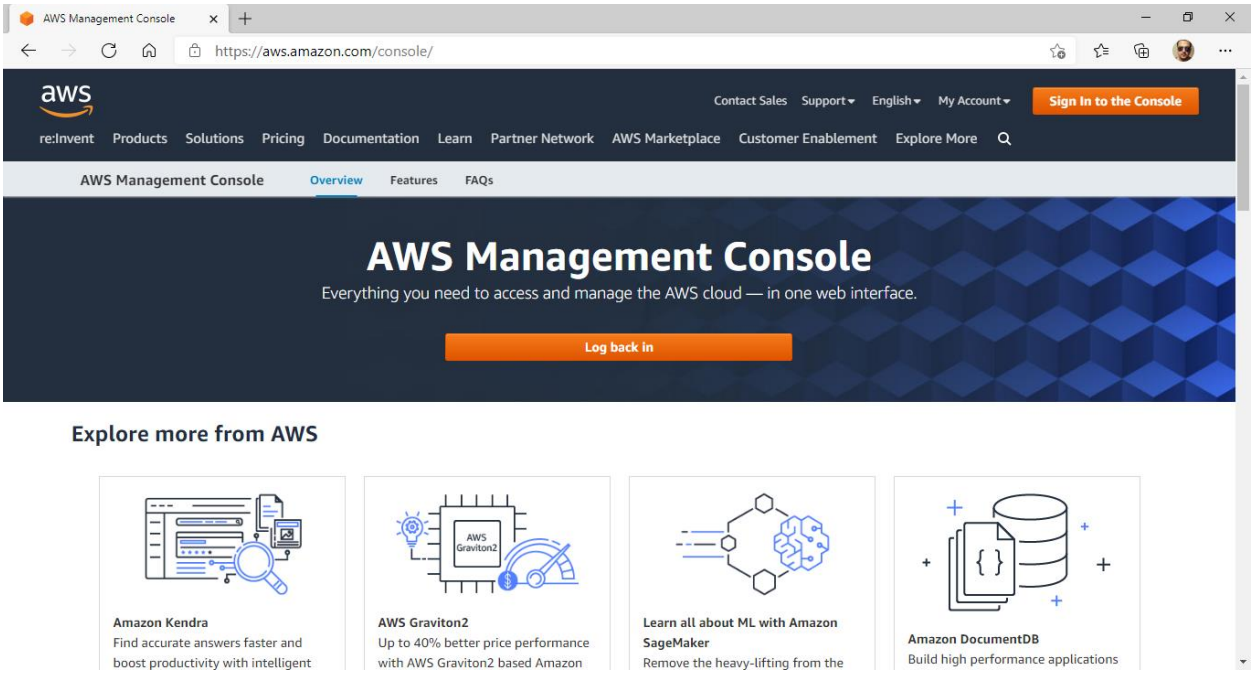
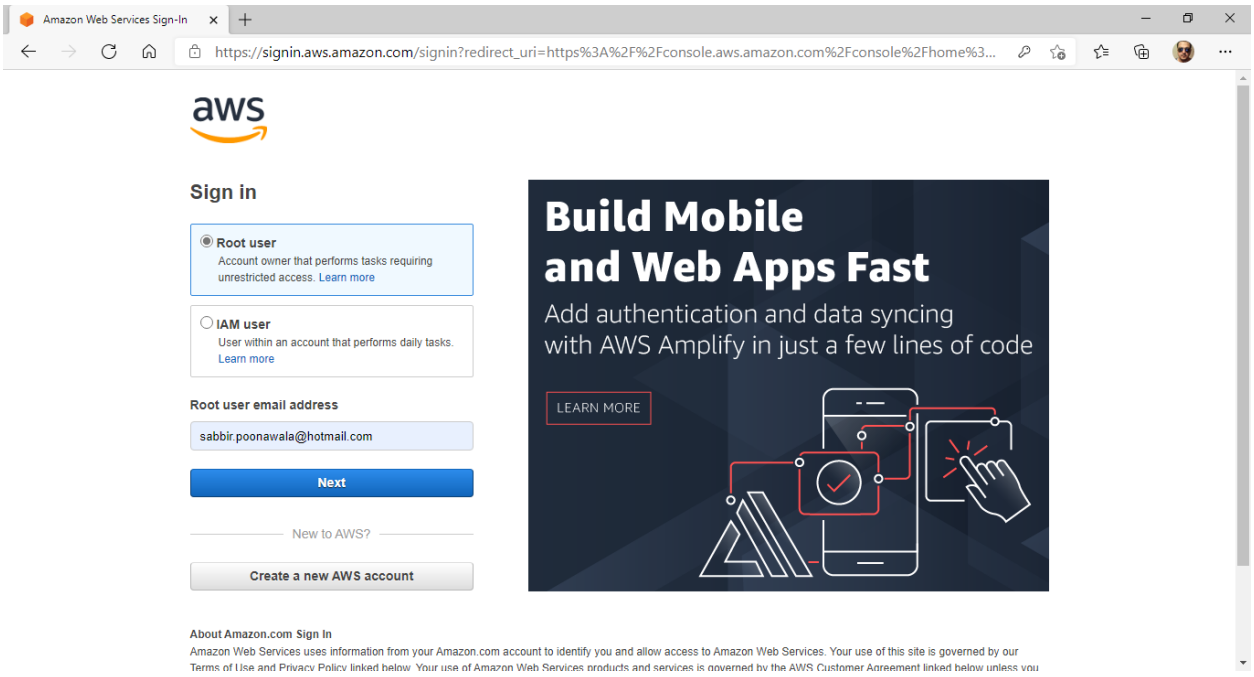
Steps to Install MongoDB on Ubuntu Amazon EC2 and access Remotely

Step 1: Go to AWS Management Console (amazon.com)



Step 2: Provide credentials


Amazon Web Services Sign-In
https://signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3...
aws
Sign in
Root user
Account owner that performs tasks requiring unrestricted access. Learn more
IAM user
User within an account that performs daily tasks. Learn more
Root user email address
sabbir.poonawala@hotmail.com
Next
New to AWS?
Create a new AWS account
Build Mobile and Web Apps Fast
Add authentication and data syncing with AWS Amplify in just a few lines of code
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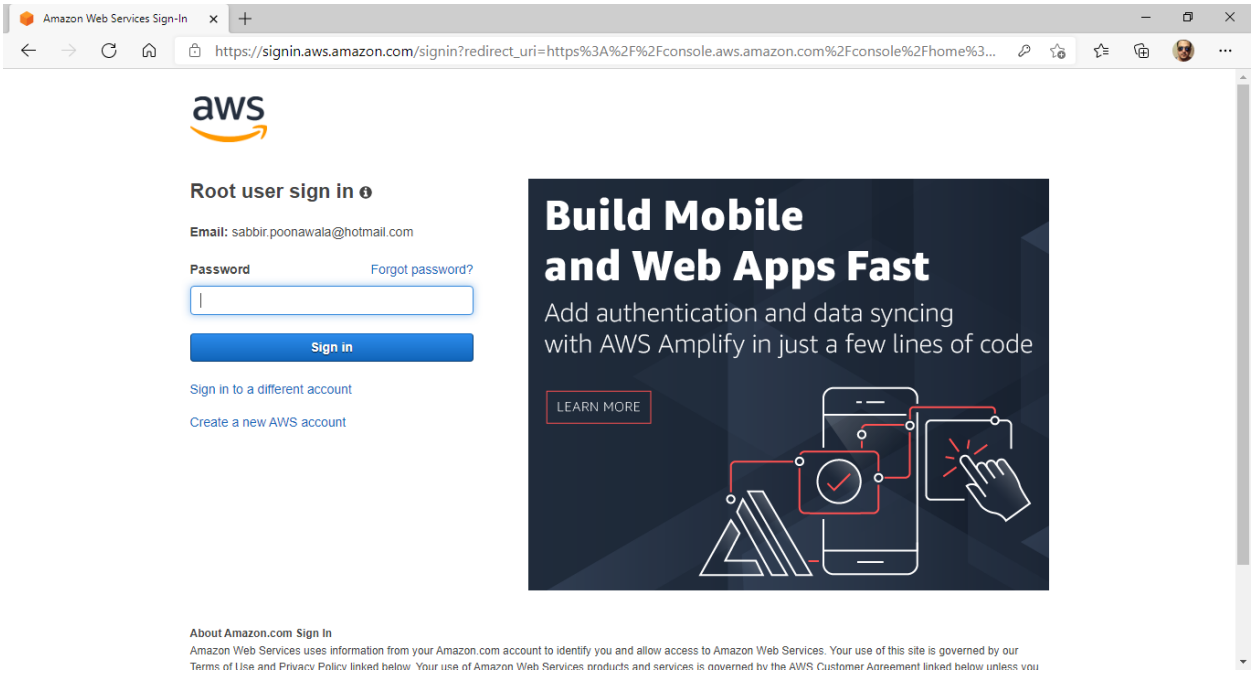
Amazon Web Services Sign-In
https://signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3...
aws
Root user sign in
Email: sabbir.poonawala@hotmail.com
Password
Forgot password?
Sign in
Sign in to a different account
Create a new AWS account
Build Mobile and Web Apps Fast
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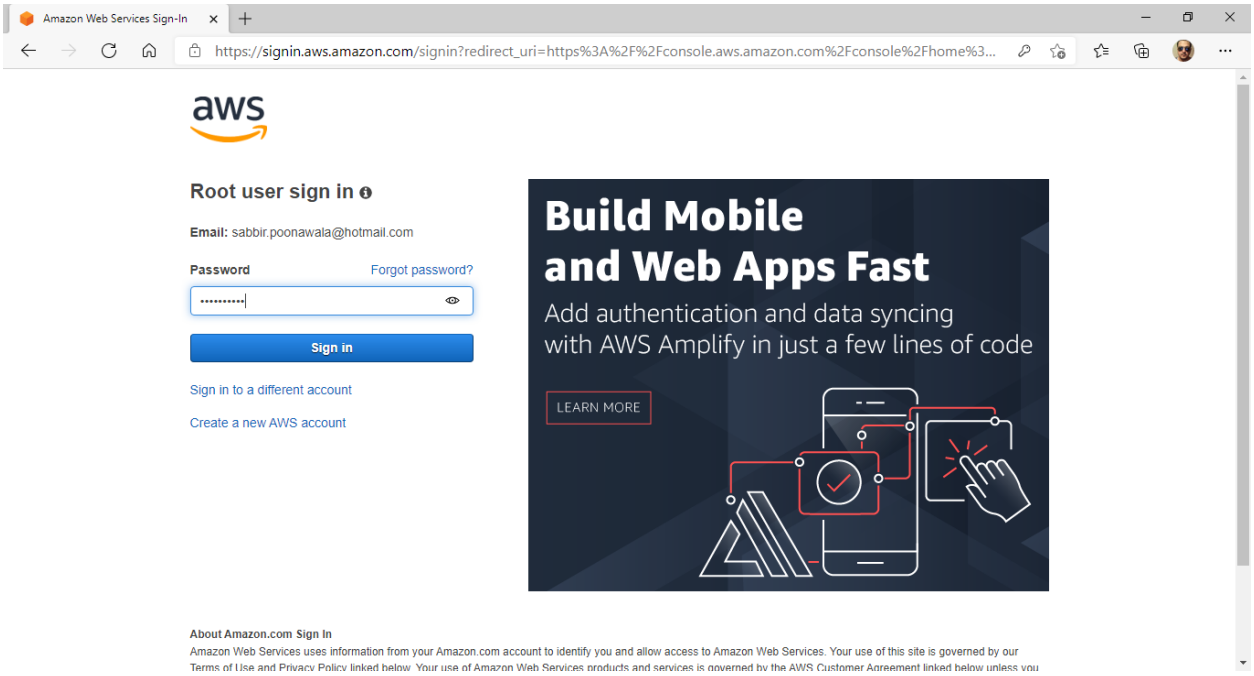
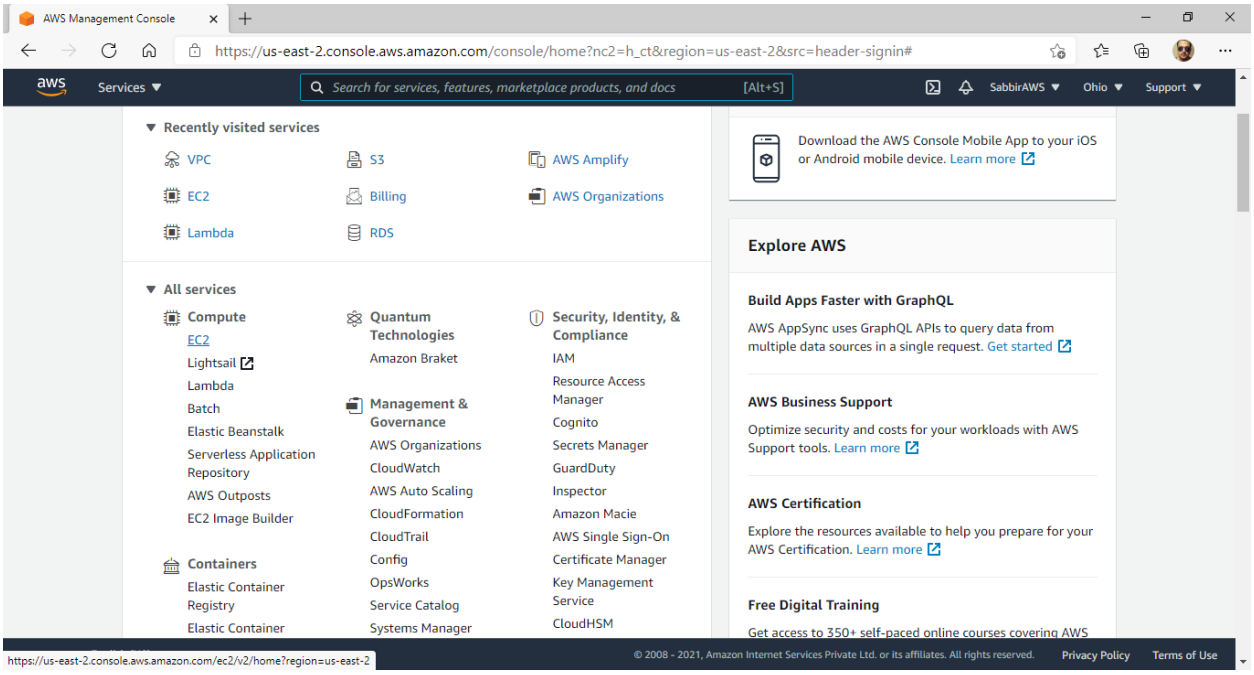
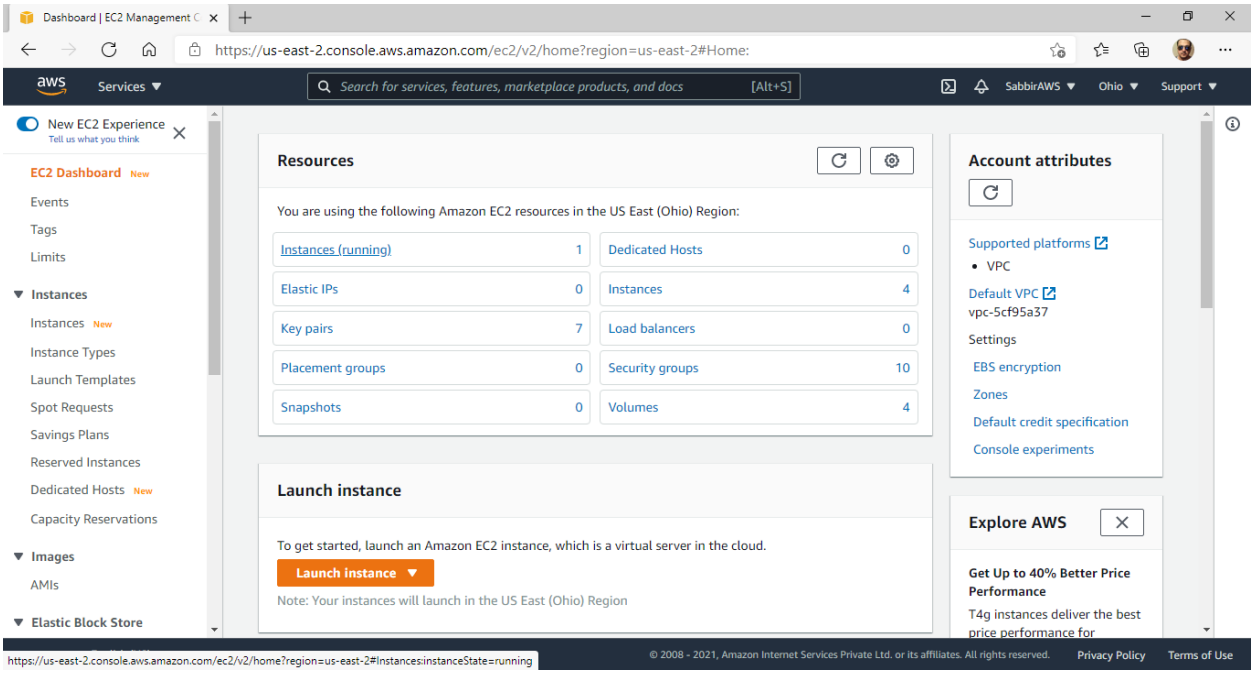


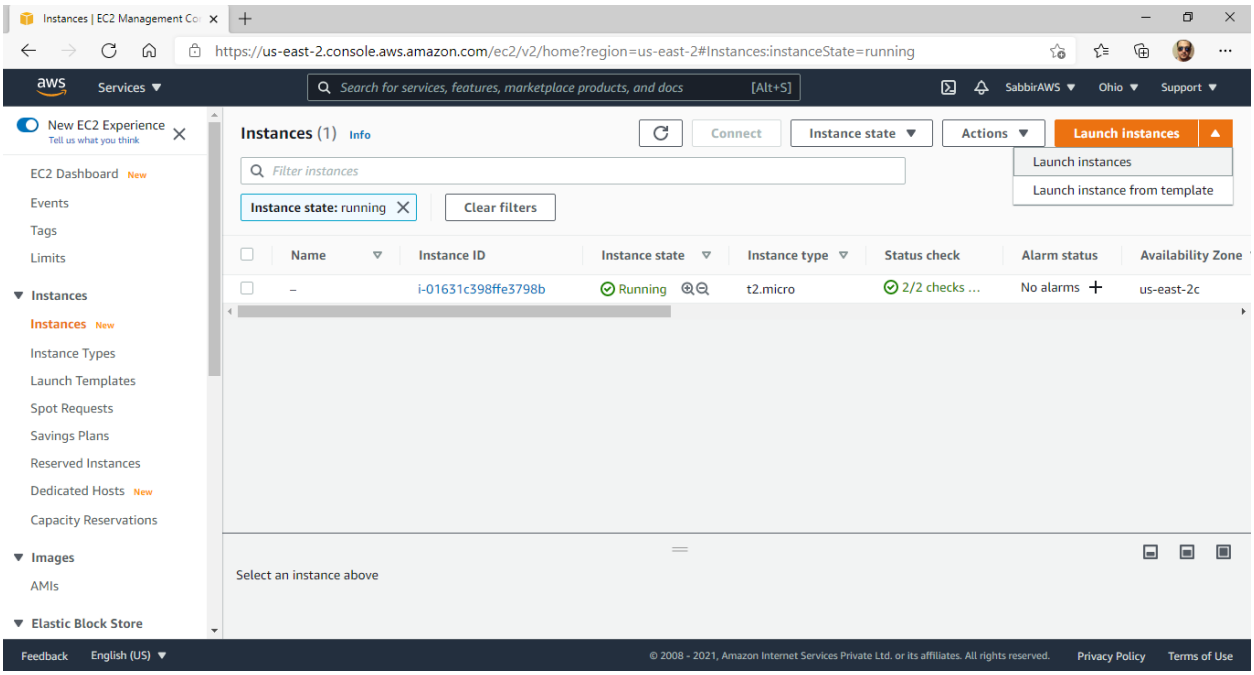
Step 3: In all services click on EC2



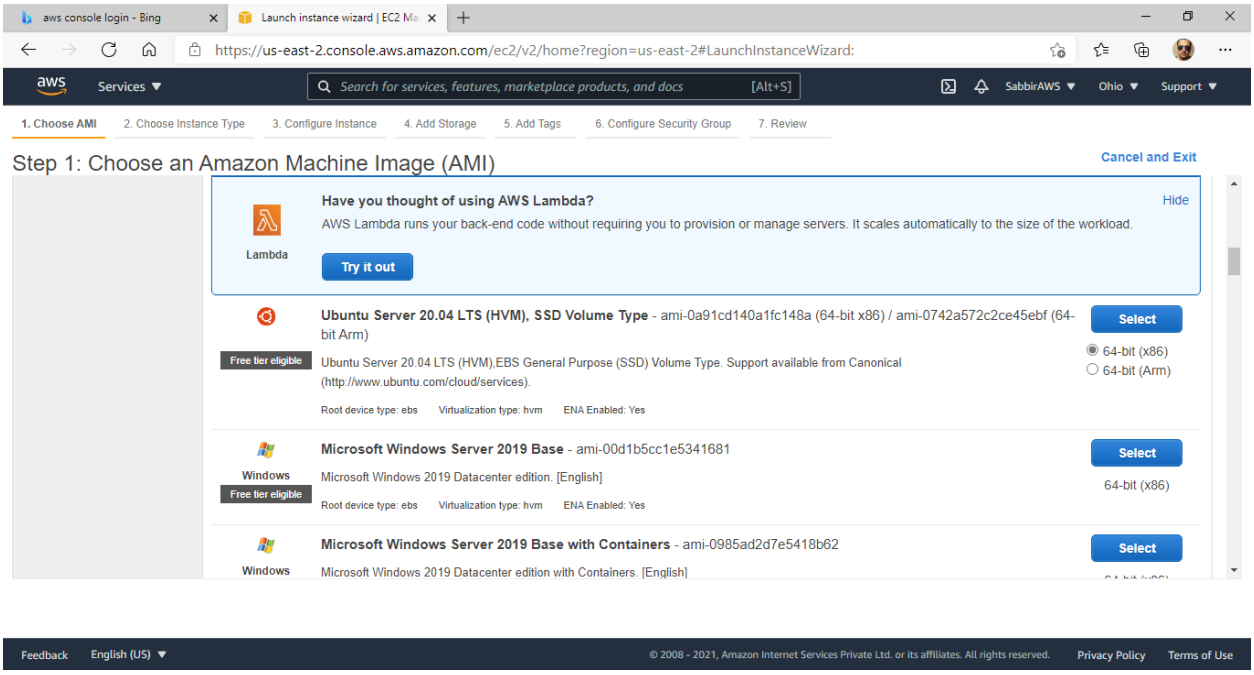
Step 4: In resources click on Instances(Running) or Launch Instance button



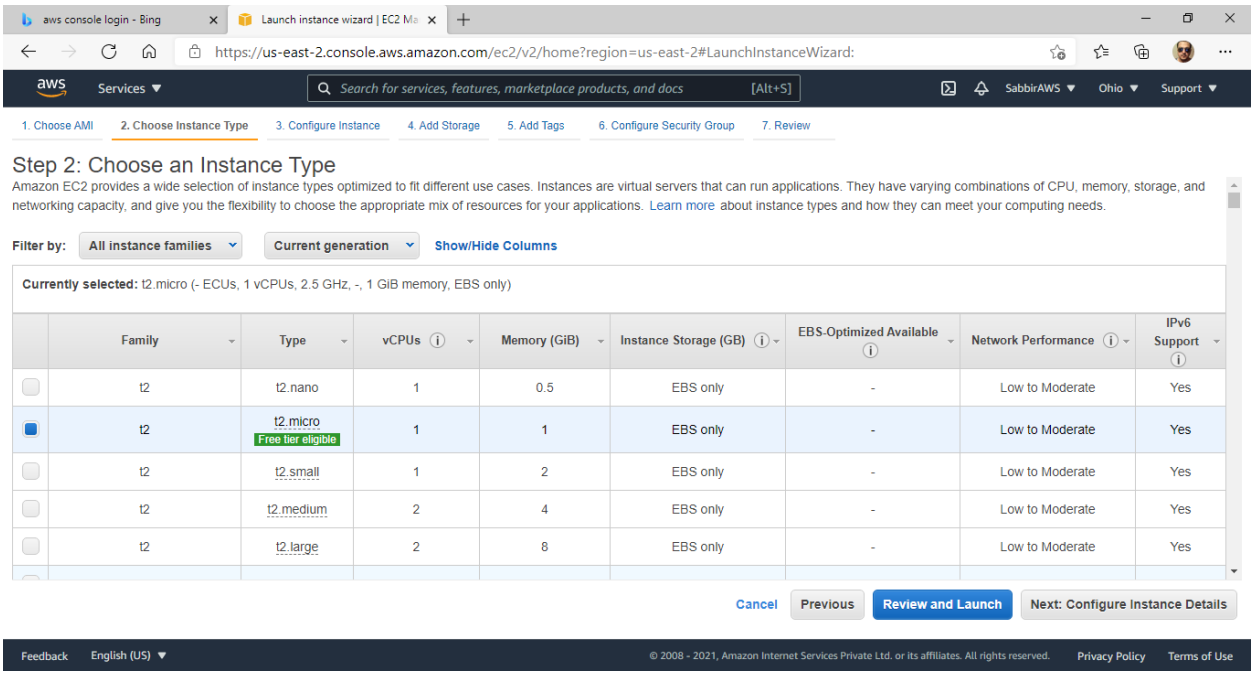
Step 5: On Lanch instances button options select Launch Instances



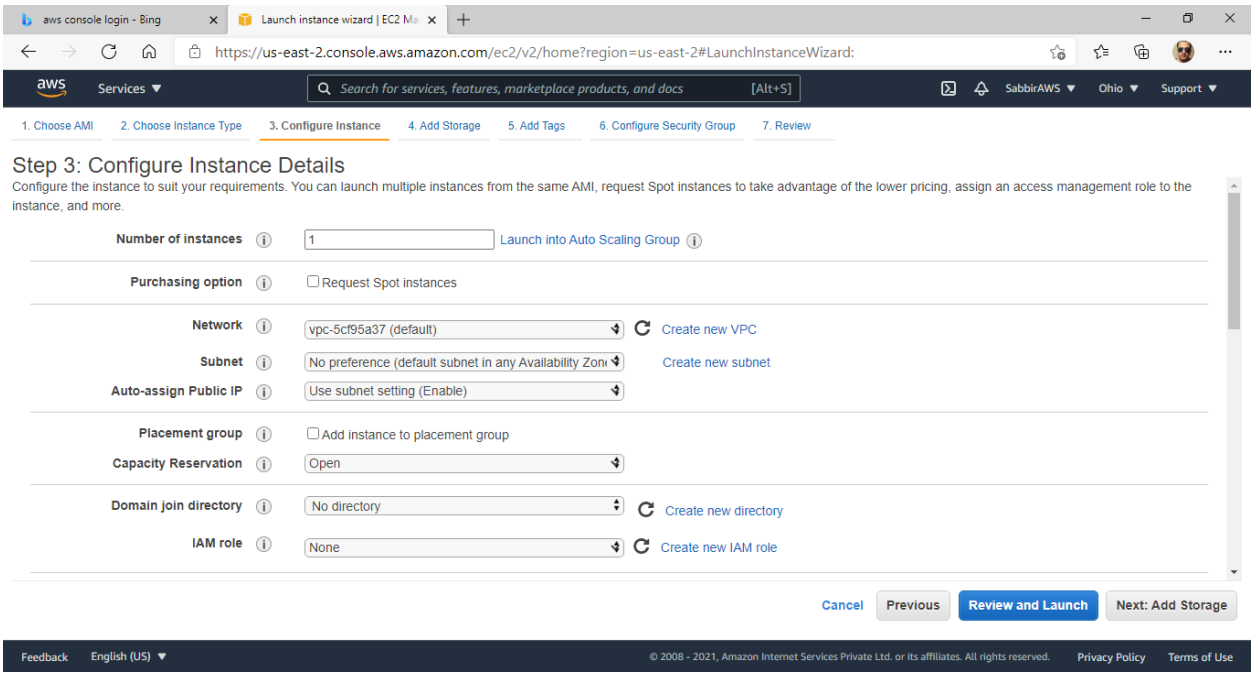
Step 6: Make sure to select Ubuntu Server 20.04 LTS (Free tier eligible)



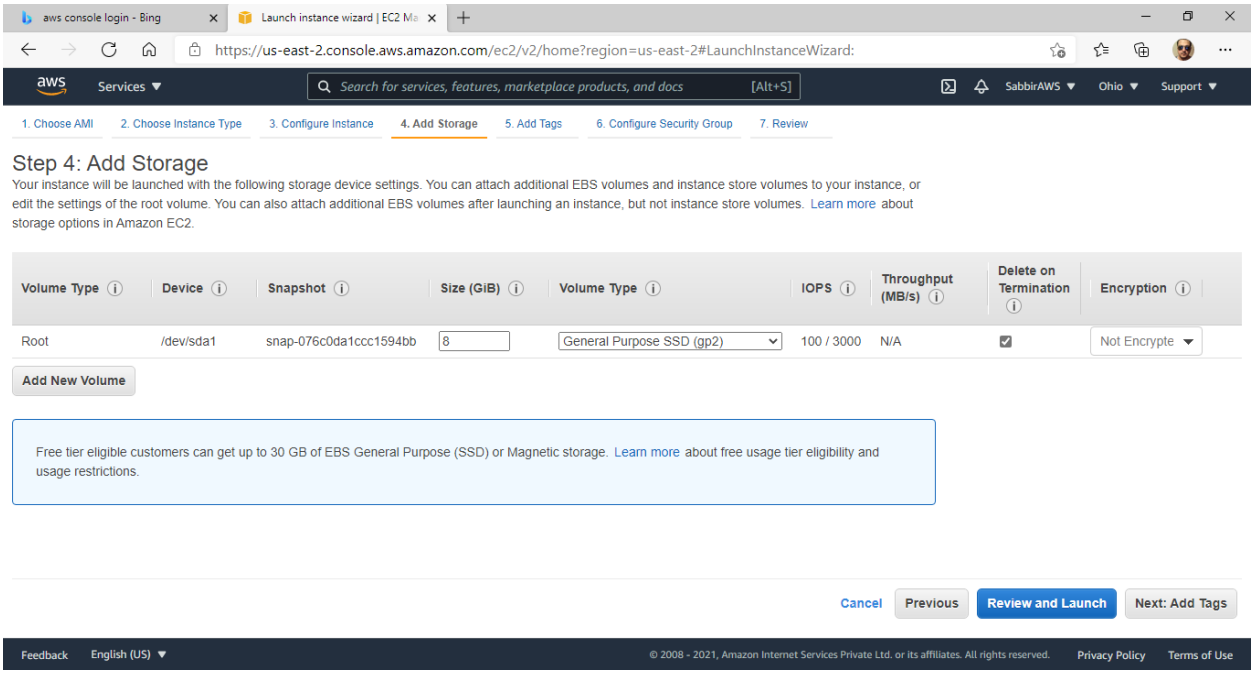
Step 7: Choose instance type (Keep default selected), Click on Next Configure instance details



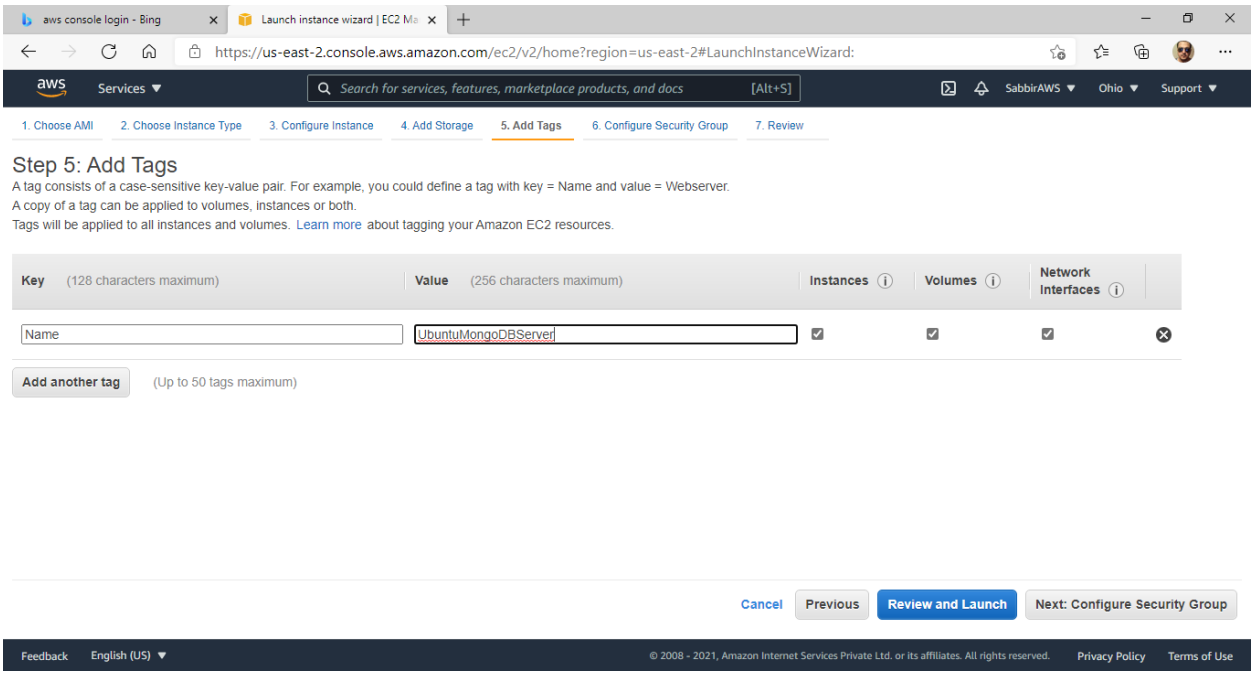
Step 8: Click on Next Add Storage keeping all details as default



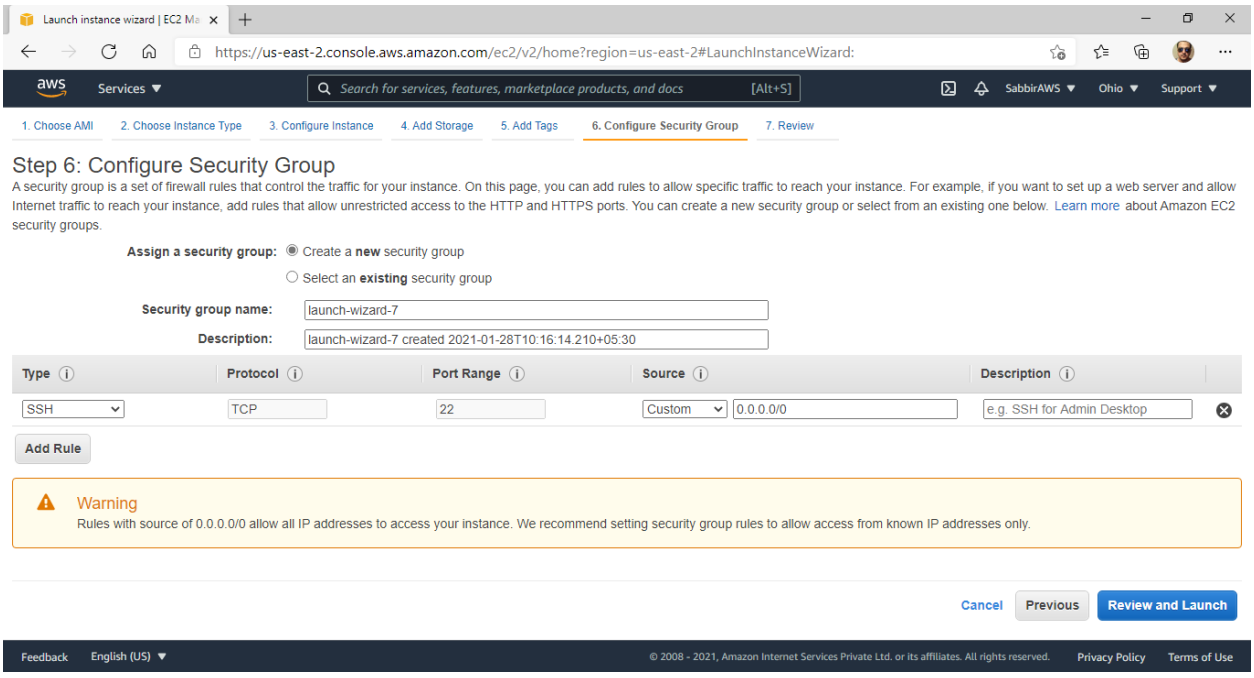
Step 8: Click on Next Add Tags keeping all details as default(unless required)



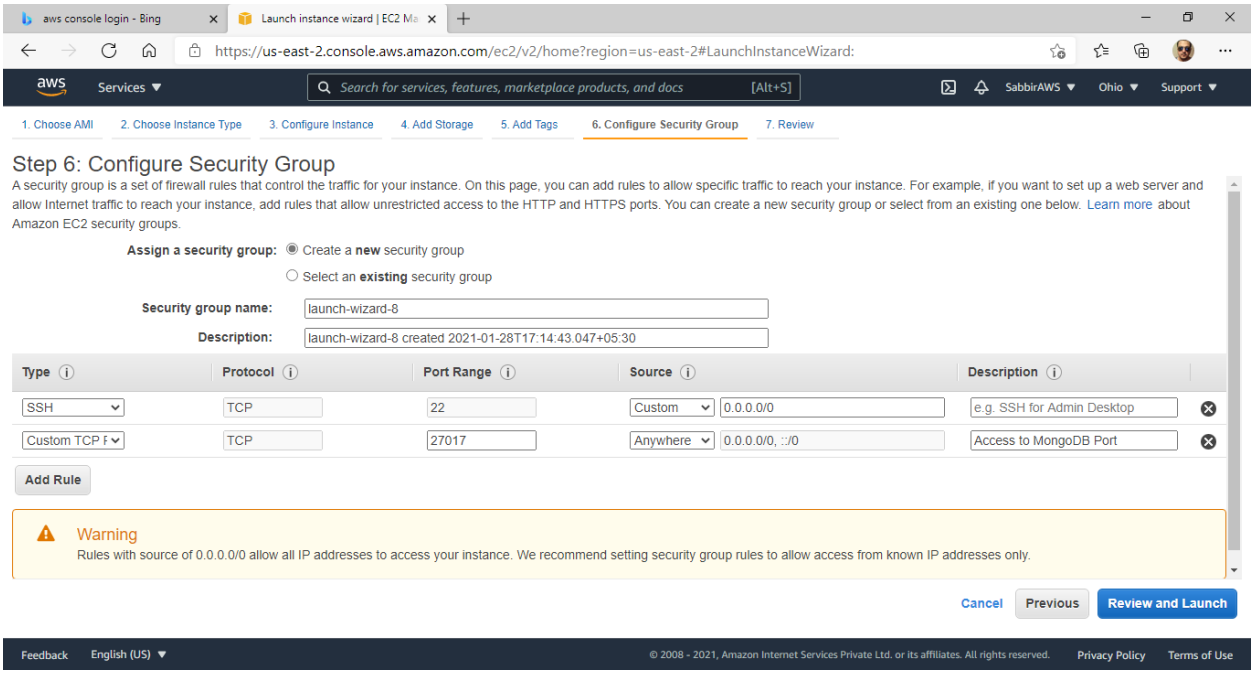
Step 8: Add key as “Name” and value as “UbuntuMongoDBServer” and click on Next Configure Security group



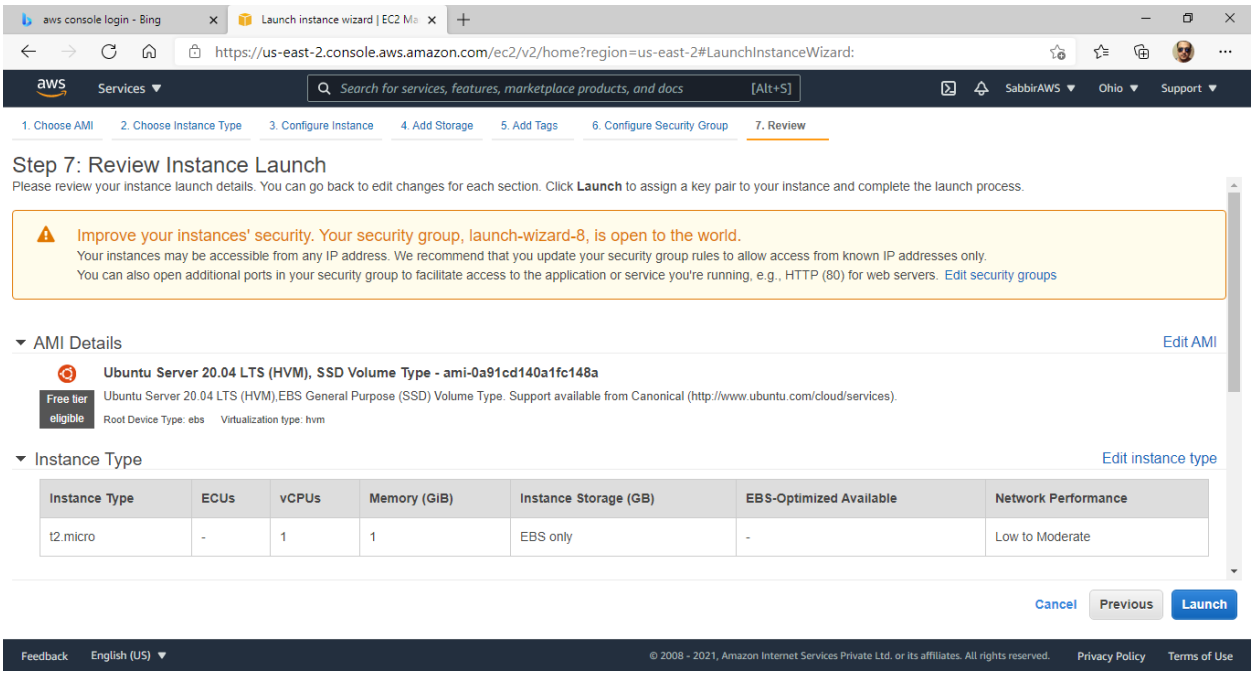
Step 9: Click on Add Rule



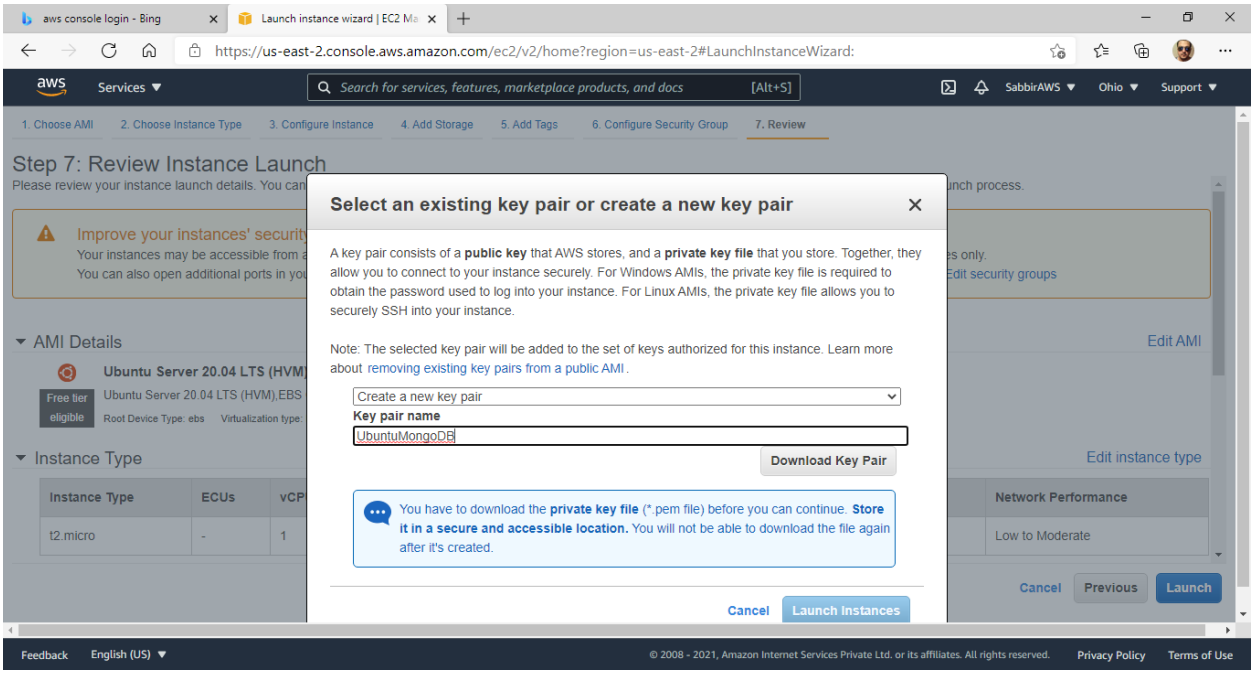
Step 9: From Type drop down box select “Custom TCP”,Port Range as “27017” Source as “Anywhere” and description as “Access to MongoDB Port”



Step 10: Click on Review and Launch

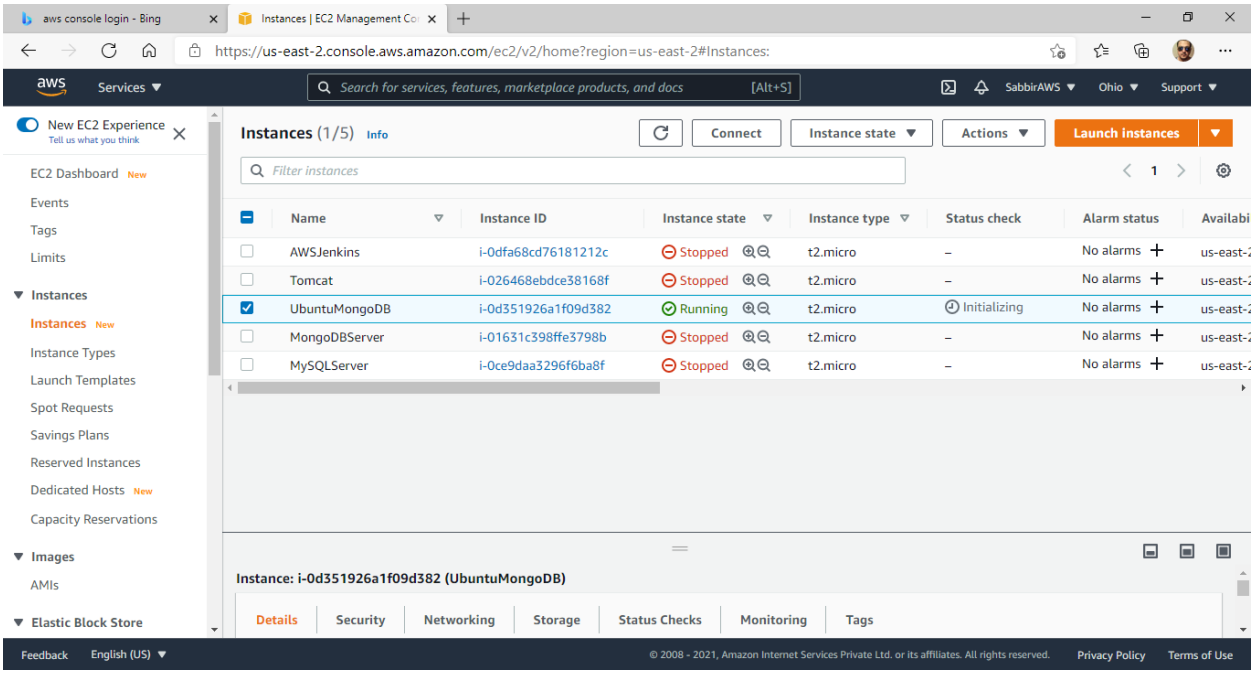


Step 11: From drop down box select “Create a new key pair” and give key pair name as “UbuntuMongoDB” and click on download key pair on desktop(This file will be required later)

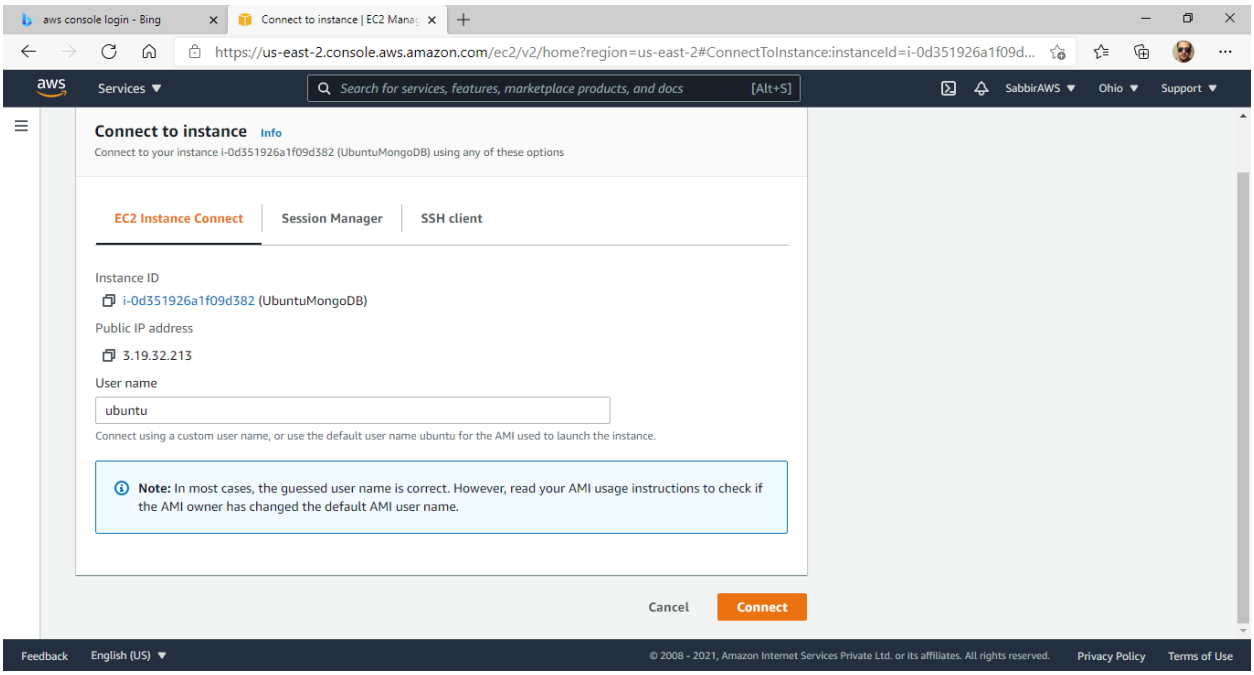


And Click on Launch Instance

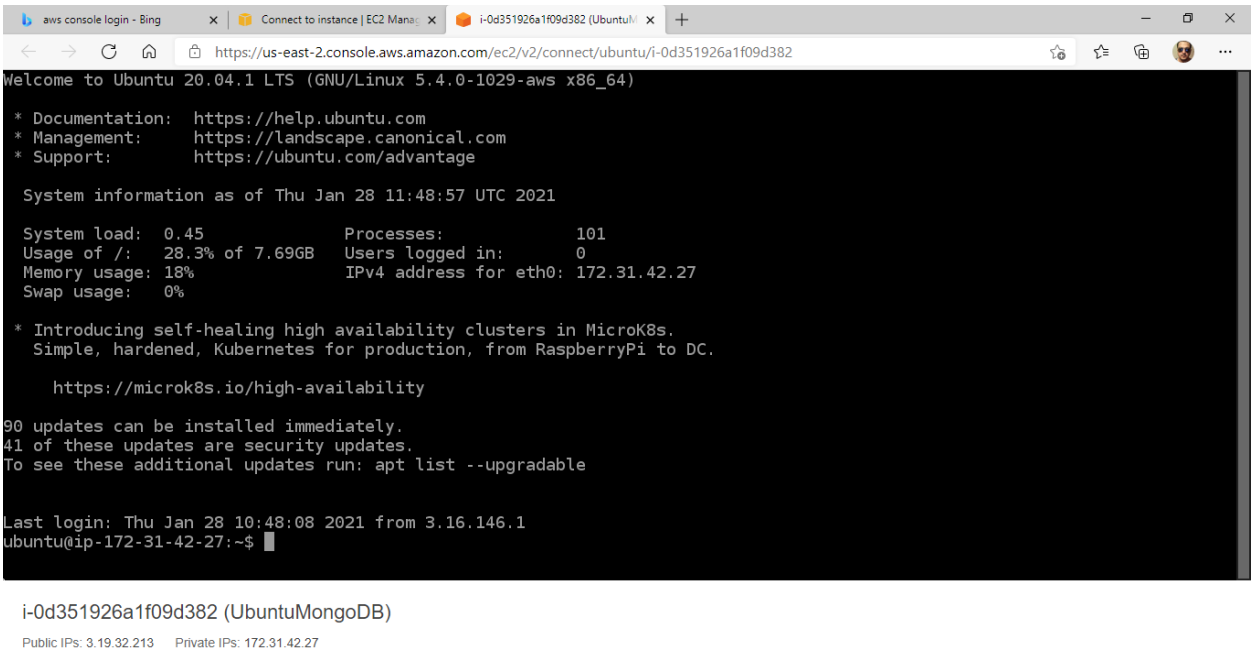
Step 12: We will use AWS CLI (Another option is to connect using putty refer to appendix) Select checkbox for instance MongoDBServer and click on connect



Step 13: Click on connect



Step 14: Ensure you are successfully connected to Ubuntu Server



i-0d351926a1f09d382 (UbuntuMongoDB)

Public IPs: 3.19.32.213 Private IPs: 172.31.42.27

Install MongoDB

Import the public key used by the package management system.

```
wget -qO - https://www.mongodb.org/static/pgp/server-4.4.asc | sudo apt-ke
y add -
```

The operation should respond with an OK

Create a list file for MongoDB.

```
echo "deb [ arch=amd64,arm64 ] https://repo.mongodb.org/apt/ubuntu bionic/
mongodb-org/4.4 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org
-4.4.list
```

Reload local package database.

```
sudo apt-get update
```

Install the MongoDB packages.

```
sudo apt-get install -y mongodb-org
```

Start MongoDB.

```
sudo systemctl start mongod
```

Verify that MongoDB has started successfully.

```
sudo systemctl status mongod
```

How to connect to your remote MongoDB server

1. Set up your user

```
mongo

>use OrderDB

db.createUser({
    user: ‘mongouser’,
    pwd: 'mongouser',
    roles: [{ role: 'readWrite', db:'OrderDB'}]
})
```

2. Enable auth and open MongoDB access up to all IPs

`sudo vi /etc/mongod.conf`

- Look for the `net` line and comment out the `bindIp` line under it, which is currently limiting MongoDB connections to *localhost*:

```
# network interfaces
net:
  port: 27017
  bindIp: 0.0.0.1
```

- Scroll down to the `#security:` section and add the following line. Make sure to un-comment the `security:` line.

```
security

  authorization: 'enabled'
```

3. Open port 27017 on your EC2 instance

Go to your EC2 dashboard: https://console.aws.amazon.com/ec2/

Go to Instances and scroll down to see your instance's Security Groups. Eg, it will be something like launch-wizard-4

Go to Netword & Security -> Security Groups -> Inbound tab -> Edit button.

Make a new Custom TCP on port 27017, Source: Anywhere, 0.0.0.0/0

3. Last step: restart mongo daemon (mongod)

```
sudo service mongod restart
```

```
Logging in using the mongo shell on your laptop
```

```
mongo -u mongouser -p mongouser 18.219.63.21/OrderDB
```

```
C:\Program Files\MongoDB\Server\4.4\bin>mongo -u mongouser -p mongouser 18.219.63.21/OrderDB
```

```
C:\Program Files\MongoDB\Server\4.4\bin>mongo -u mongouser -p mongouser 18.219.63.21/OrderDB
MongoDB shell version v4.4.3
connecting to: mongodb://18.219.63.21:27017/OrderDB?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("b9b9d11a-50d6-4605-900b-5155c97303a9") }
MongoDB server version: 4.4.3
>
```