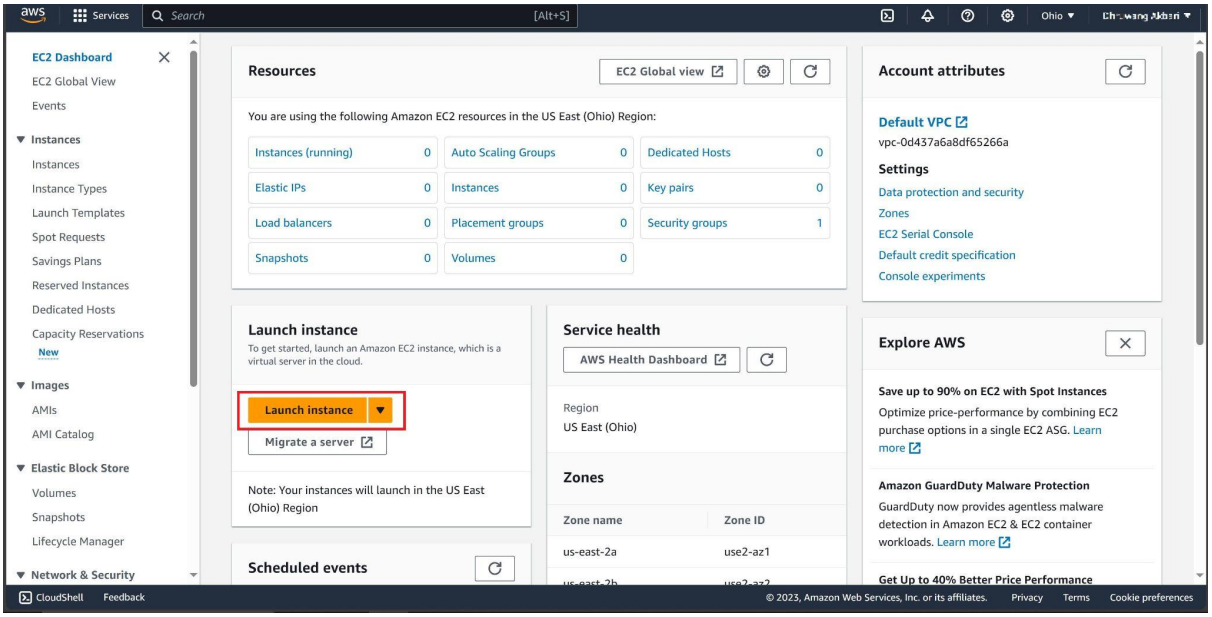
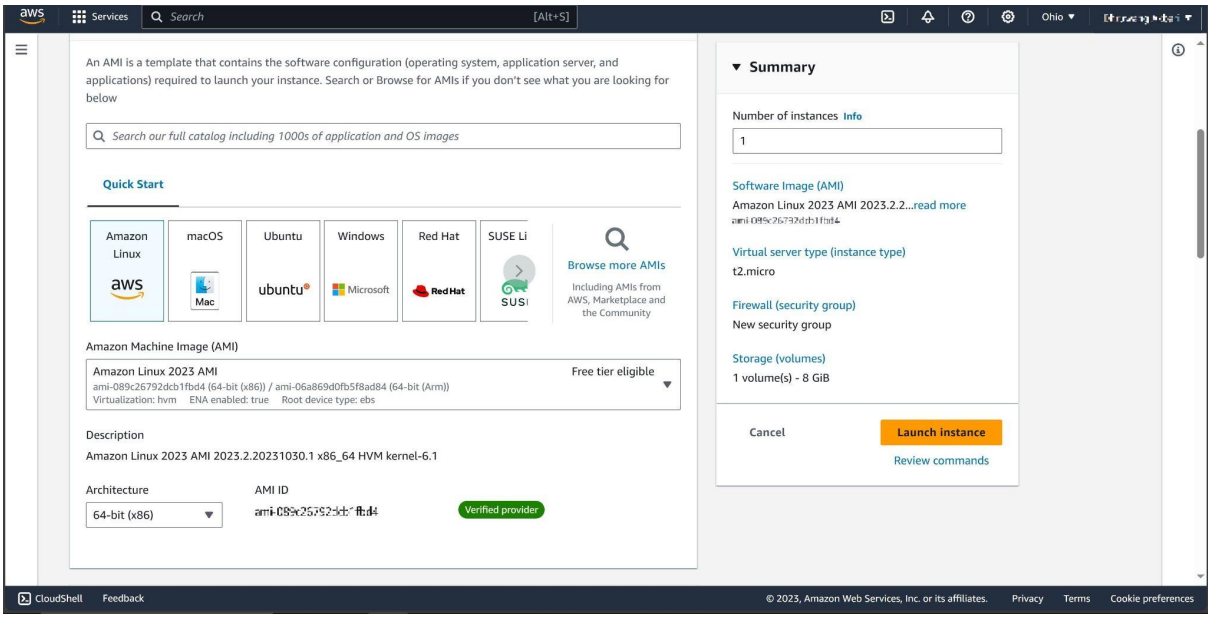
Steps to follow for How to set up and AWS EC2 Instance

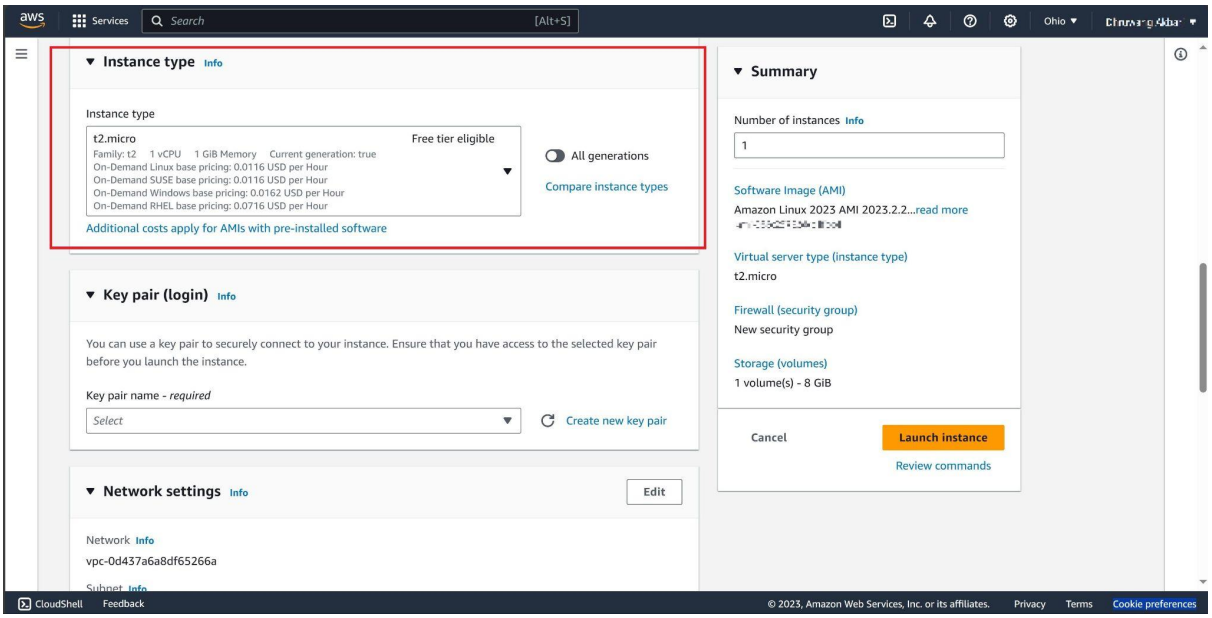
Step 1: Create an AWS EC2 account. Go to the EC2 dashboard and click on Launch Instance.



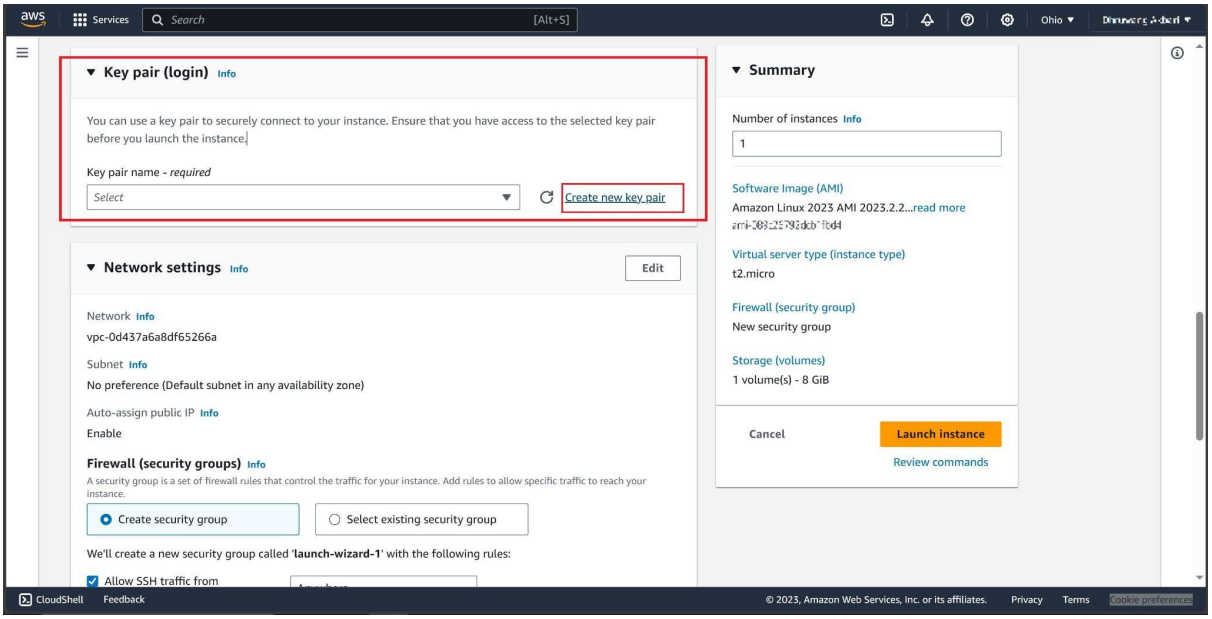
Step 2: We will choose an Amazon Linux AMI (Amazon Machine Image), and use the free tier version with 64-bit architecture. After this scroll down to choose an Instance Type.



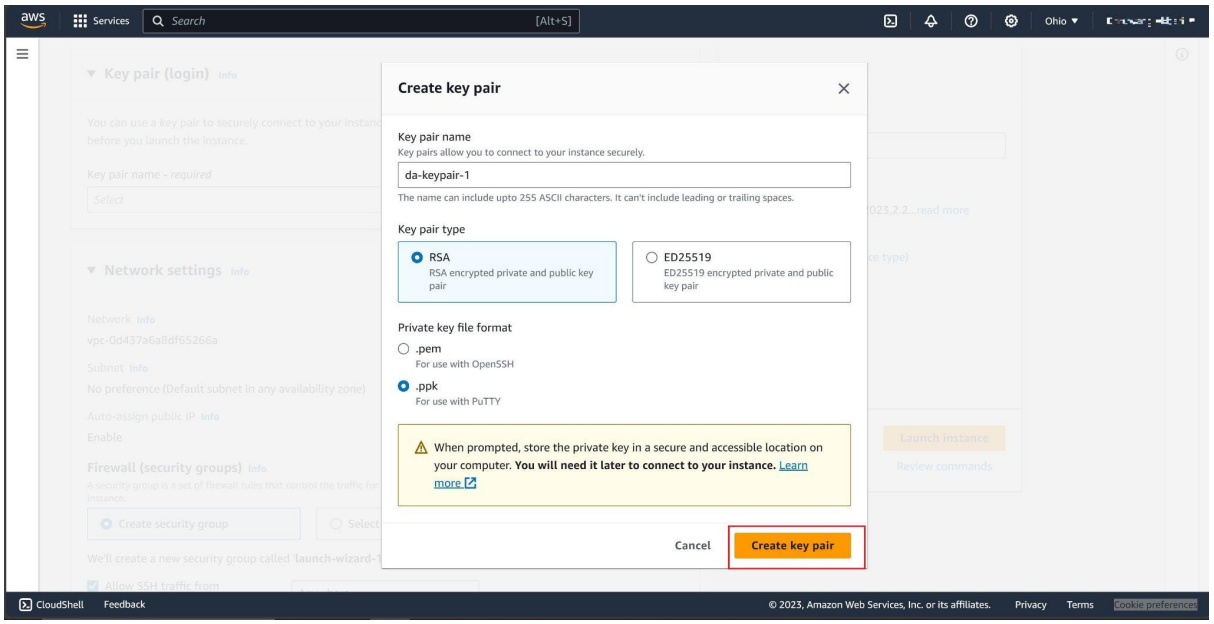
Step 3: Choose a t2.micro instance which is available for free. You can choose the other instances based on your workload, for our project we will use t2.micro as it meets our workload needs.



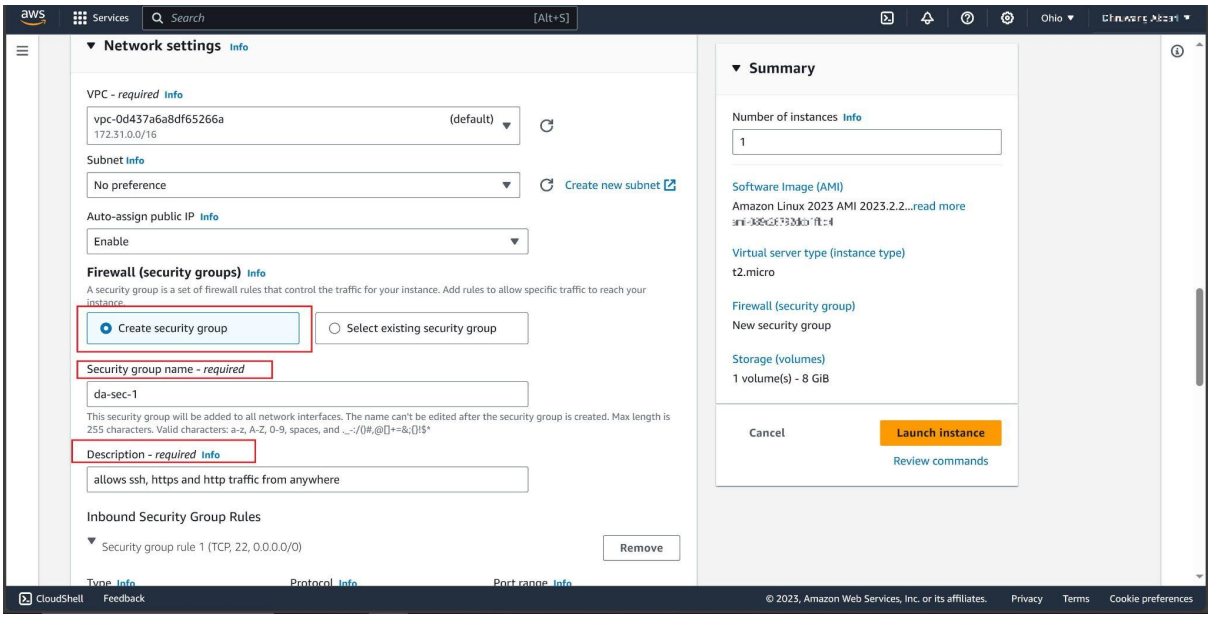
Step 4: Now set up a key pair to connect to the instance remotely through SSH protocol. Click on the 'Create new key pair' button to create a new key pair.



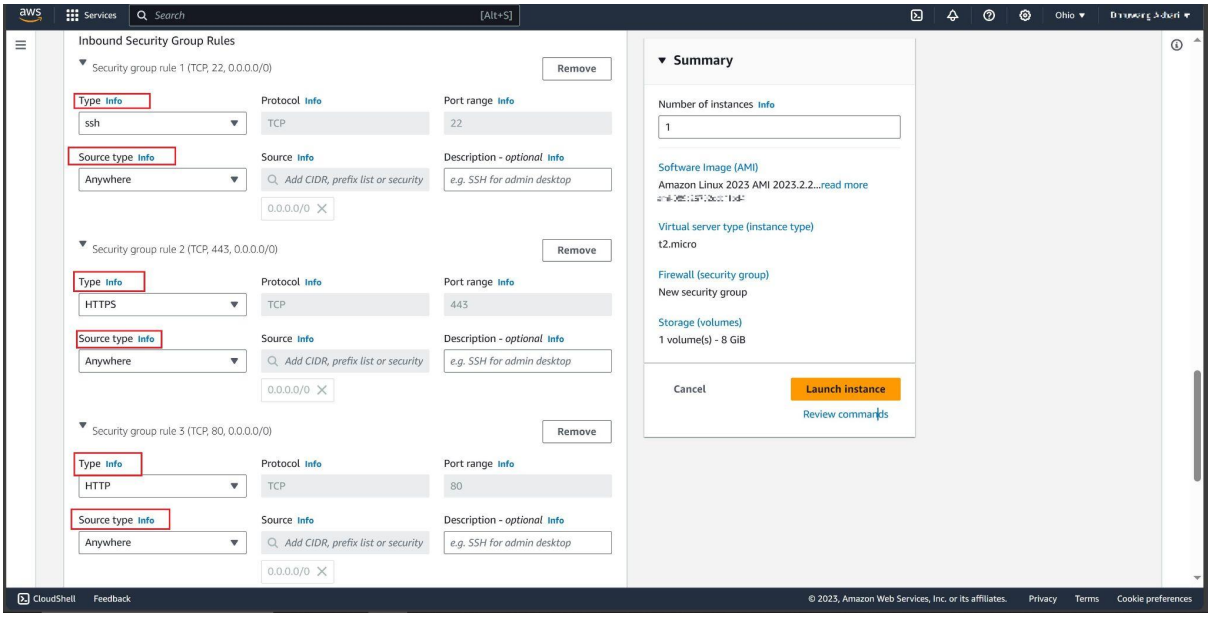
Step 5: Input a “Key pair name” and select a “Key pair type” either RSA or ED25519, both are industry standards. Then choose the key format either .pem (MAC) or .ppk (Windows) depending upon your operating system. Then click on “Create key pair”. Save the key in a safe location on your system.



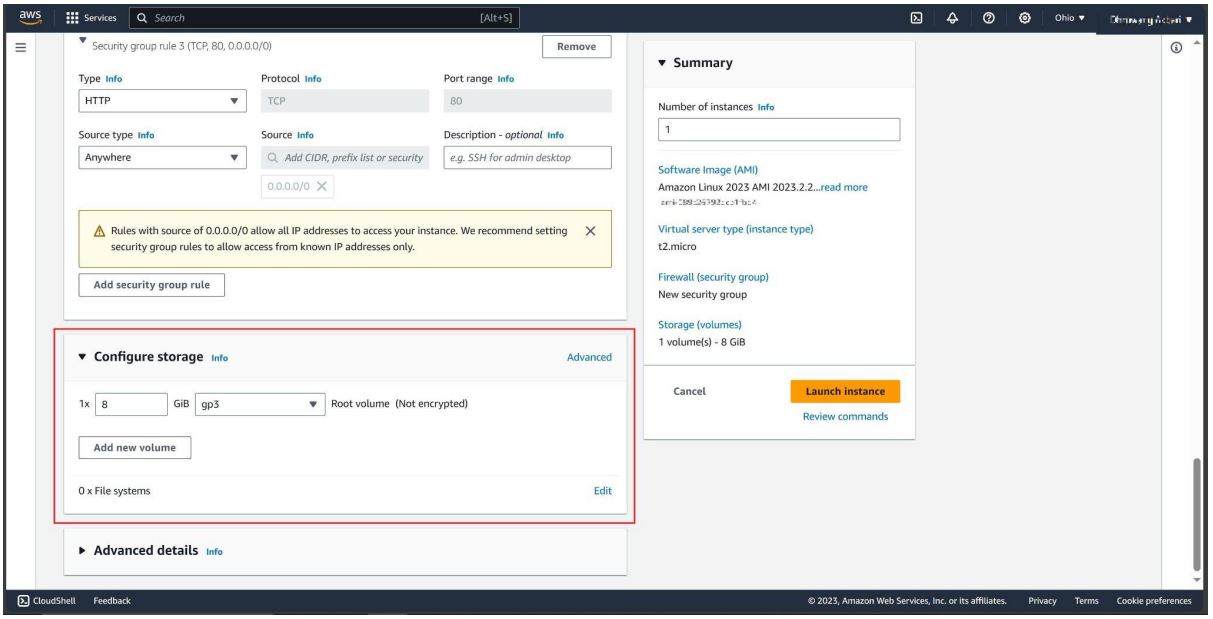
Step 6: Now configure the network settings. Click on “Create new security group” and name your security group and add a small description for it. Using the default names is also fine.



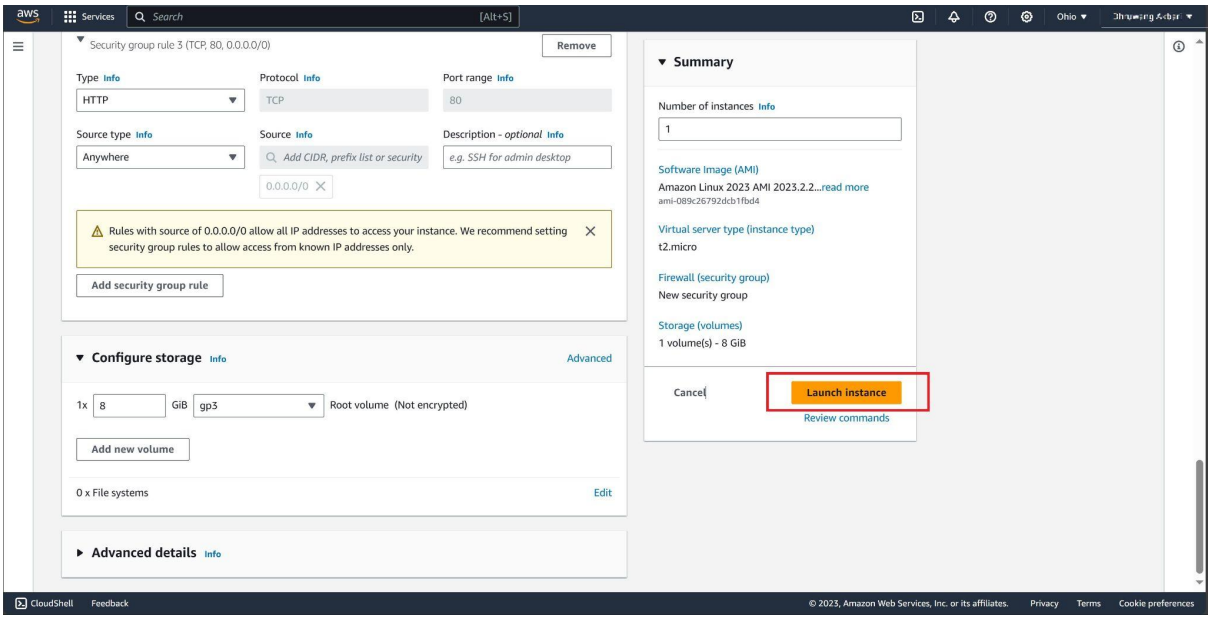
Step 7: Scroll down and set the ‘Inbound Security Group Rules’, for ‘Type’ select whatever traffic you want to allow on the EC2 instance and select the ‘Source Type’, i.e from where the traffic is allowed, can set it to ‘Anywhere’ or a specific IP address.



Step 8: Now configure the storage for the EC2 instance. Choose the volume and the type of the storage for the instance as per your needs, we will be using the 8GB gp3 storage.

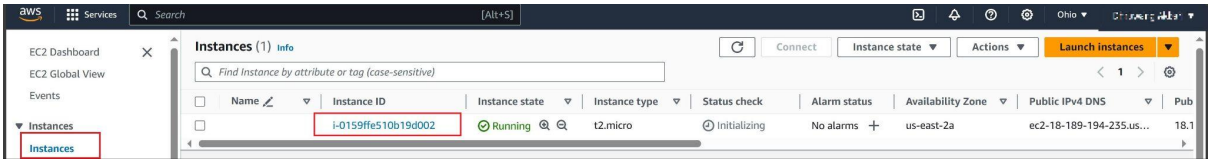


Step 9: Review the configured settings and click on the ‘Launch instance’ button.

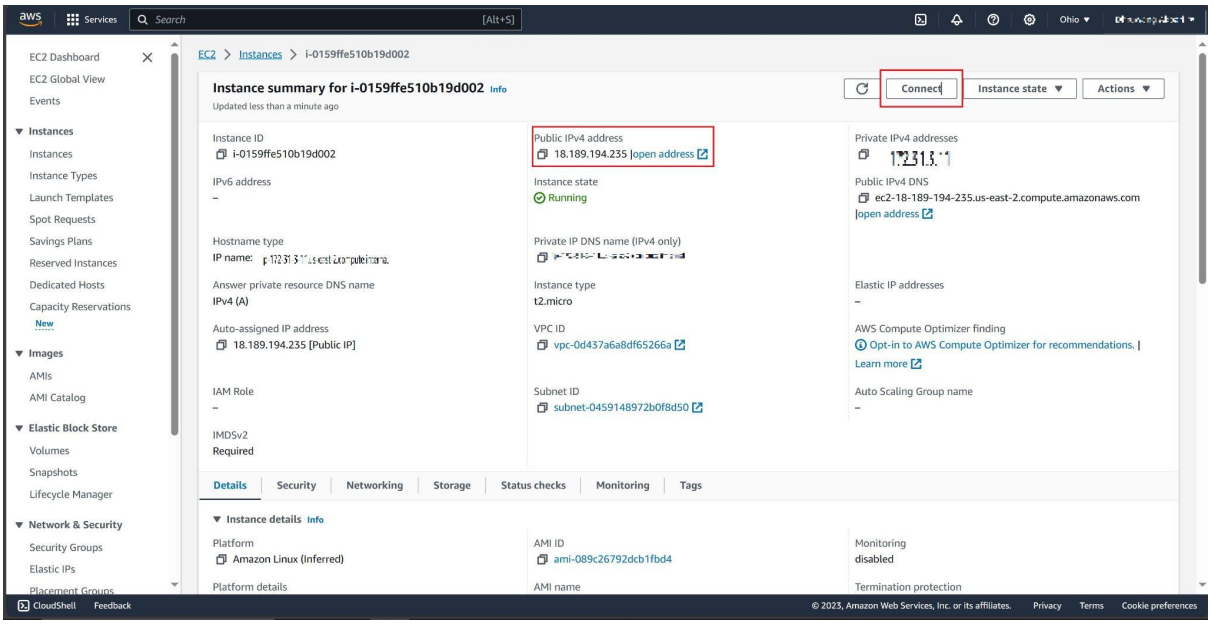


Step 10: You should land on this page and to view the instance running

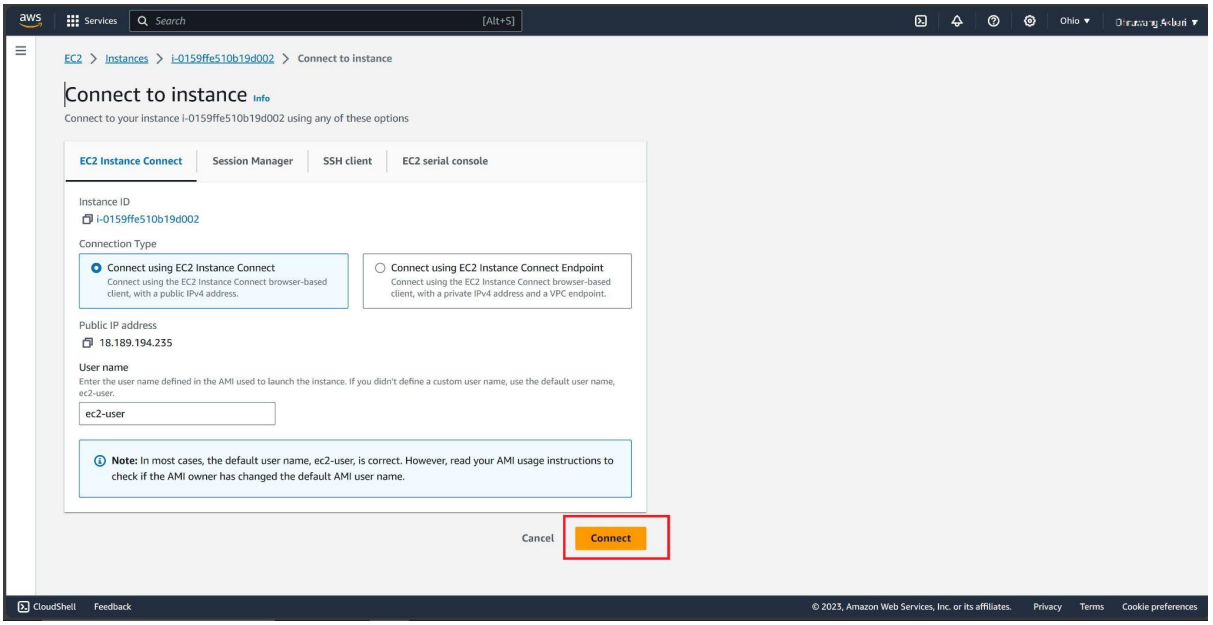
Step 11: Go to the EC2 dashboard and on the left panel click the ‘Instances’ button to view the instance. Then click on the “Instance ID” to view the details of the instance



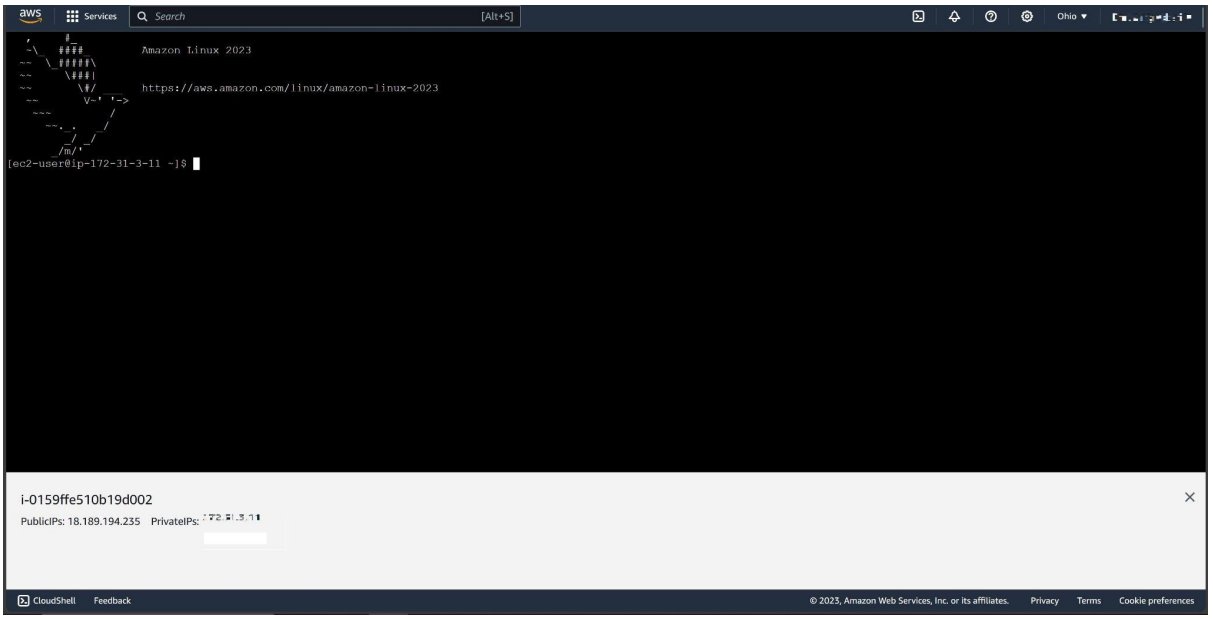
Step 12: The public IPv4 address is a public IP address showing whatever is on the EC2 instance currently. Clicking on it now will open a new tab with a server error because there is nothing to display as we have not added anything to the instance. Click on ‘Connect’ to connect to the EC2 instance.



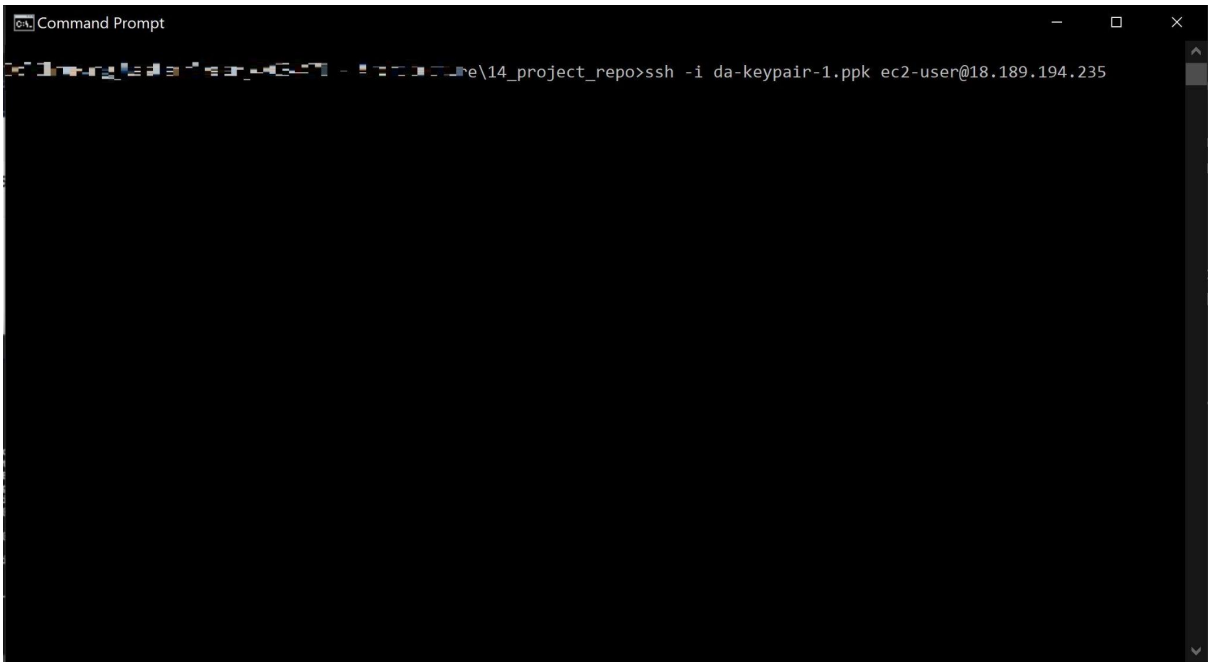
Step 13: You can connect to the EC2 instance through the EC2 Instance Connect using the default user-name as “ec2-user” and click on “Connect” or you can connect with SSH which is shown in Step 15.



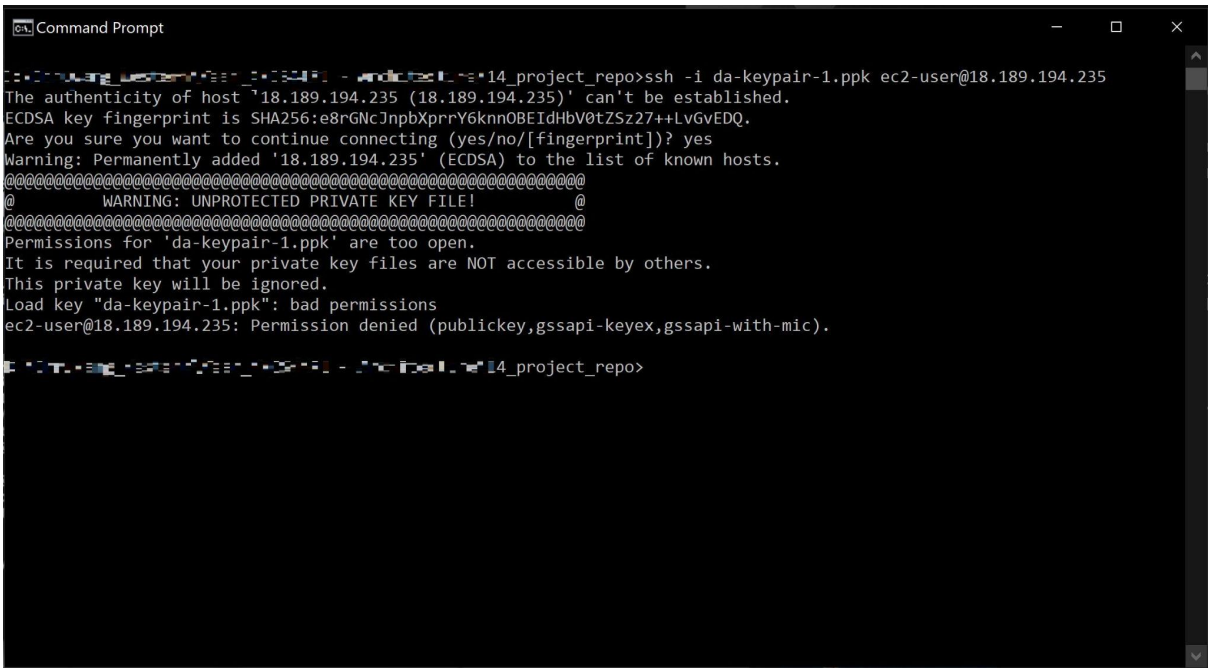
Step 14: Connected to the EC2 Instance.



Step 15: Connecting with SSH client to the EC2 Instance. Go to the file location where you saved the Key pair file and run the following command, ssh -i <key pair file name> ec2-user@<Public IPv4 address>. After this the terminal will ask, “Are you sure you want to continue?”, enter “yes” and follow the steps. You can find the Public IPv4 address in Step 12 when you view the details of the instance.



Step 16: You will encounter an error regarding some file permission, to resolve this error we need to change the file permission so it is accessible to only the root user. To do this just input the command, chmod 400 <key pair filename>, if you are on Linux.



Step 17: Now run the command in Step 15 again and you will be connected to the EC2 instance remotely.