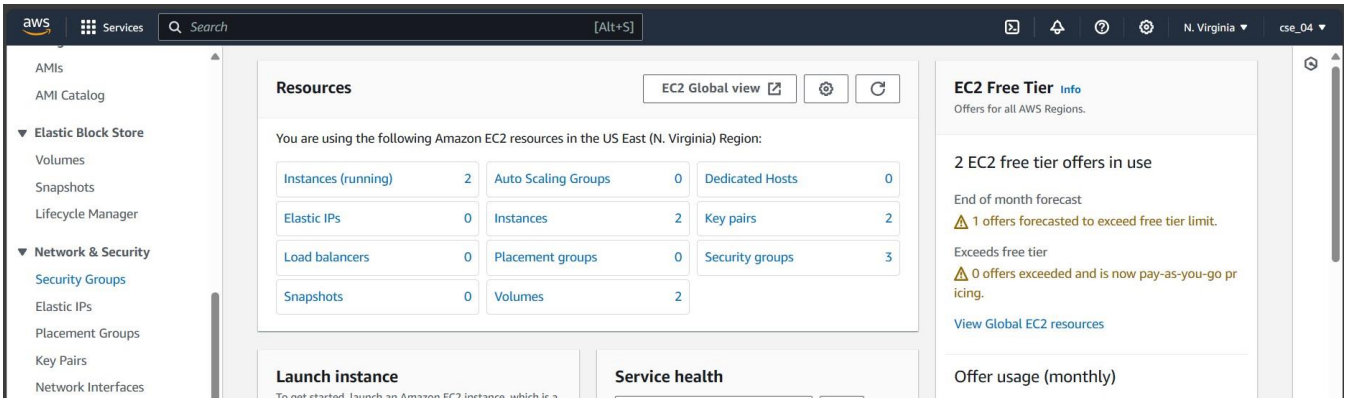
Assignment No: 10

Problem Statement:

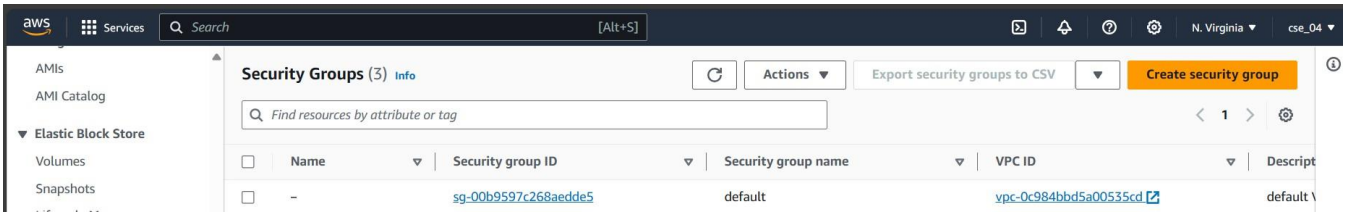
Deploy a project from GitHub to EC2 by creating a new security group and user data.

Steps:

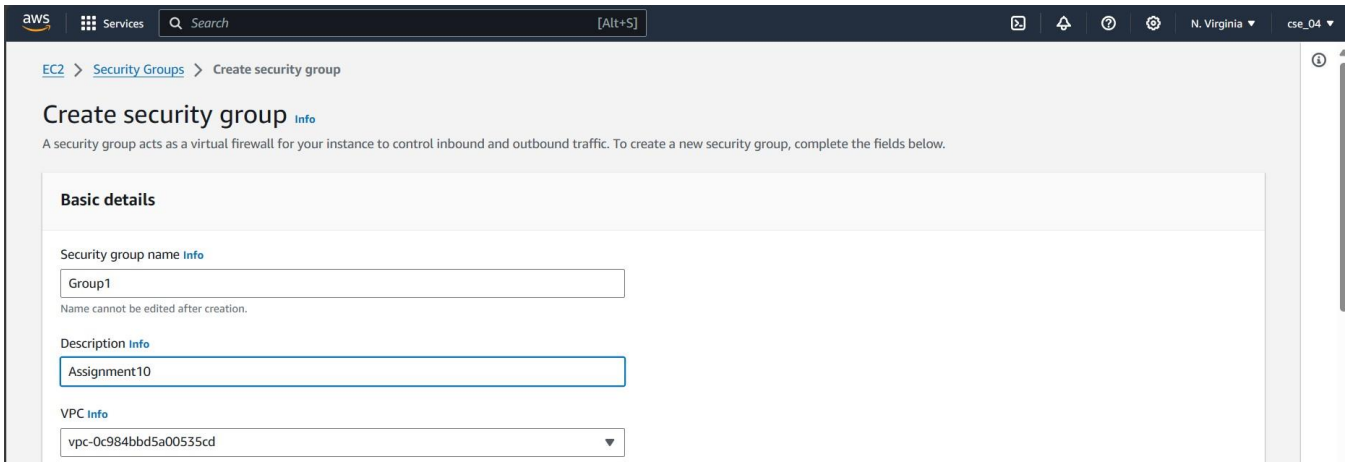
1. Access your AWS console and search for EC2, then proceed to click on the first option.Now, Click on "Security Groups".



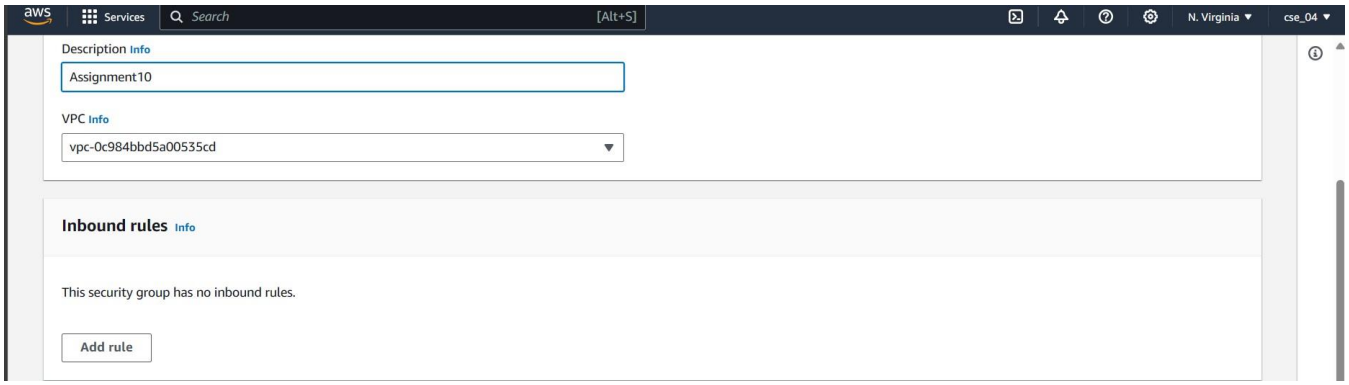
2. Now click on **Create Security Group**.



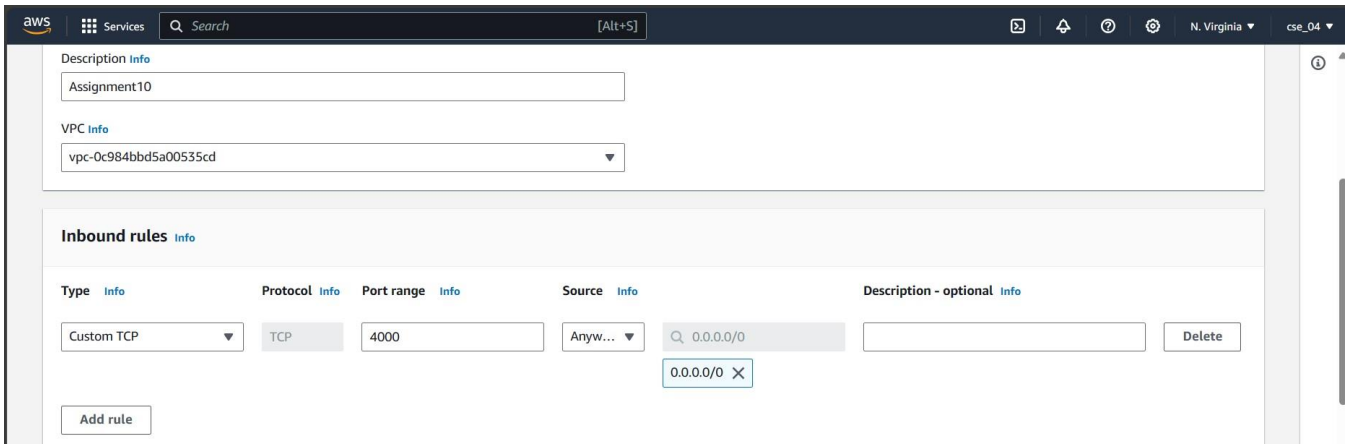
3. Fill up the **name** and description of the **security group**.



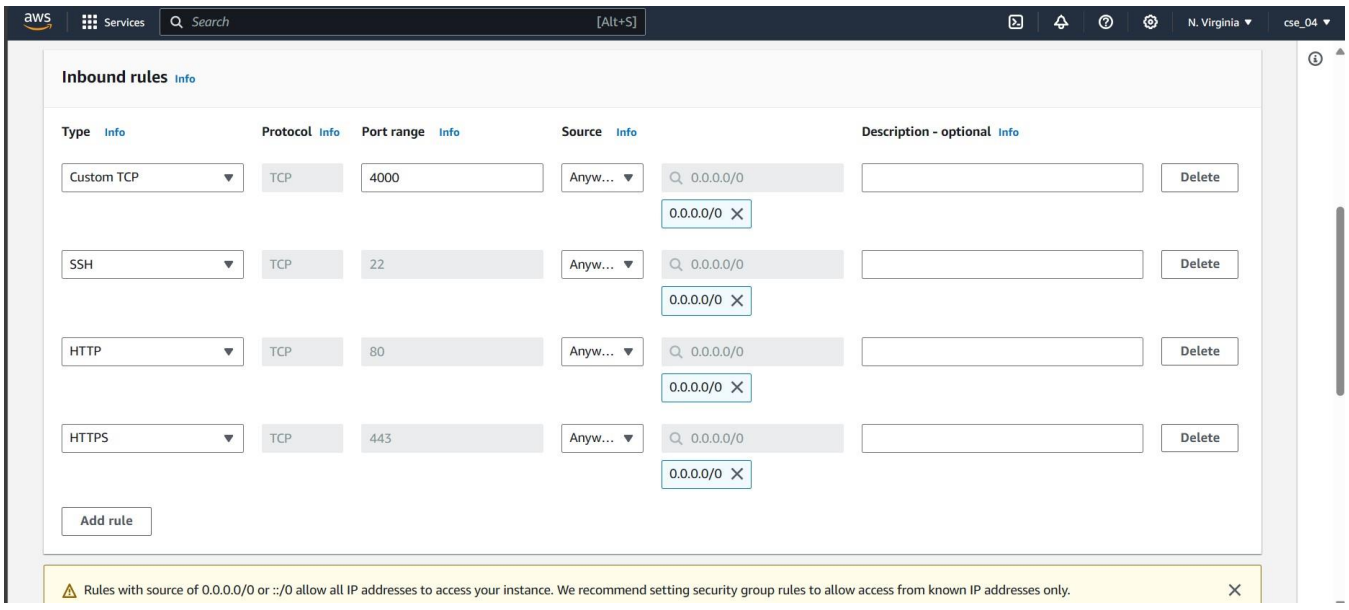
4. Now, scroll down to **Inbound Rules** and click on **Add rule**.



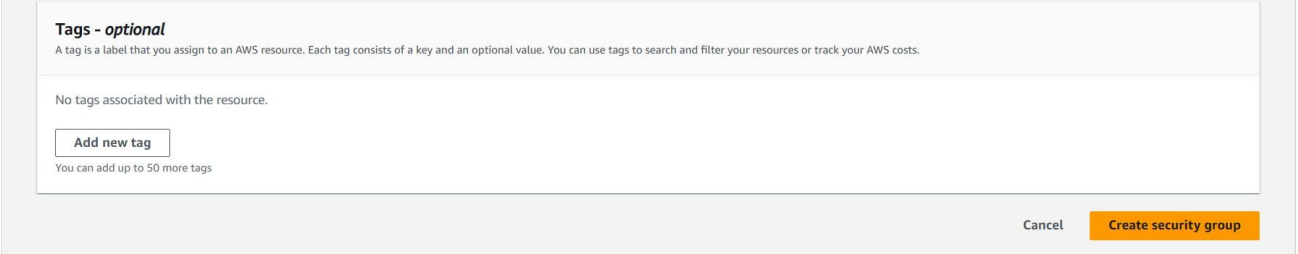
5. Set the **port number** as 4000 and select first option in **CIDR blocks** i.e. “0.0.0.0/0”.



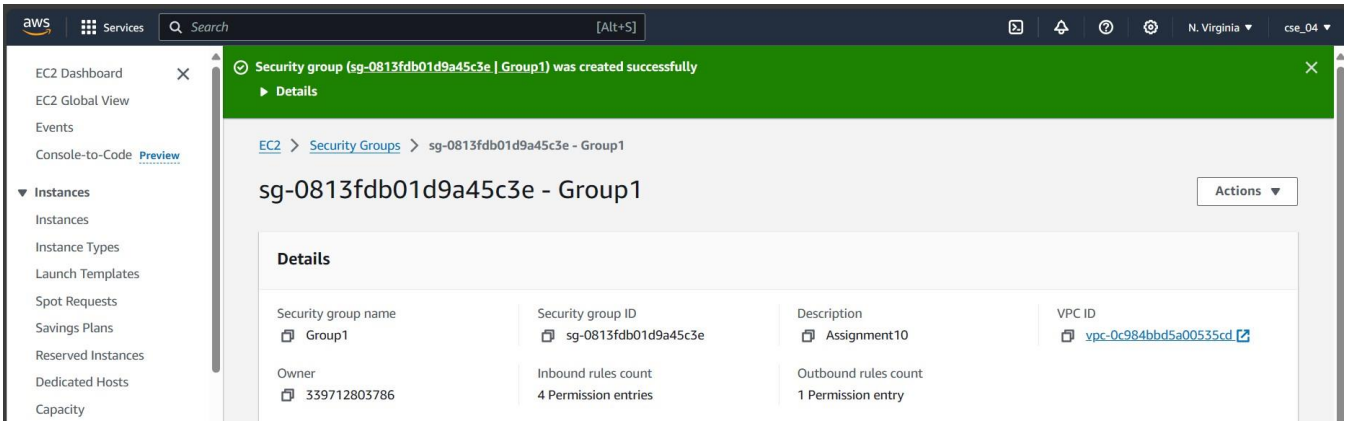
6. Click on **Add rule** again and set type as **SSH** and select first option in **CIDR blocks**. Repeat this two more times and add rules of type **HTTP** and **HTTPS.**



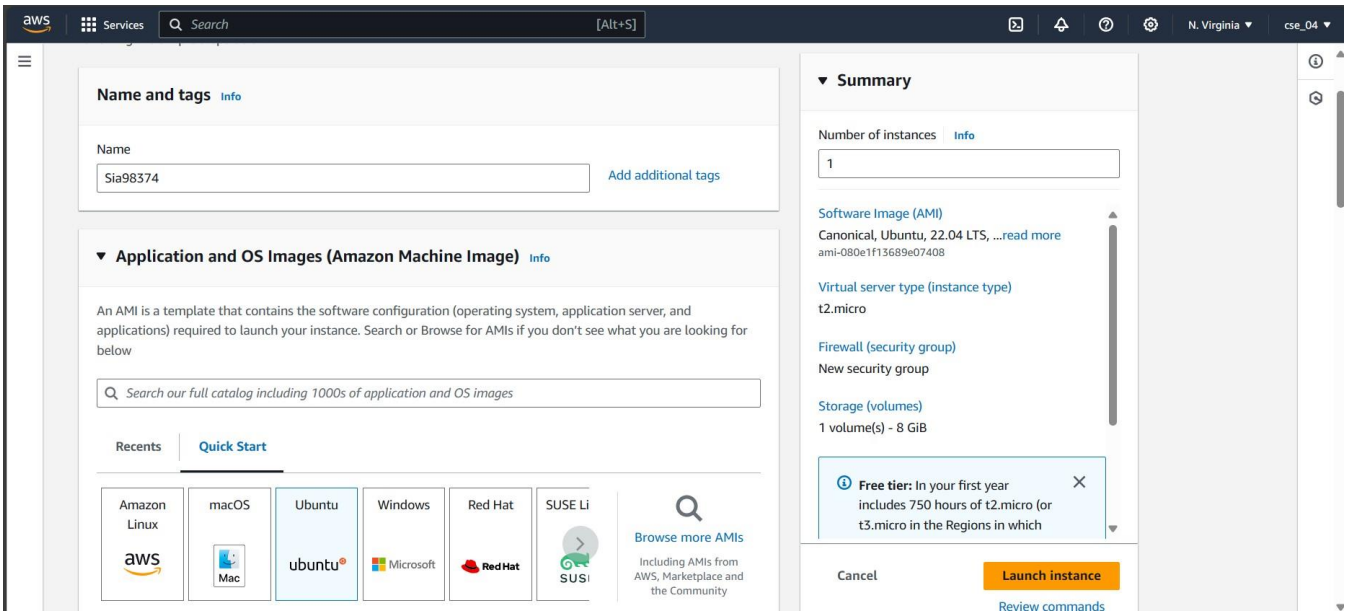
7. Click on **Create security group**.



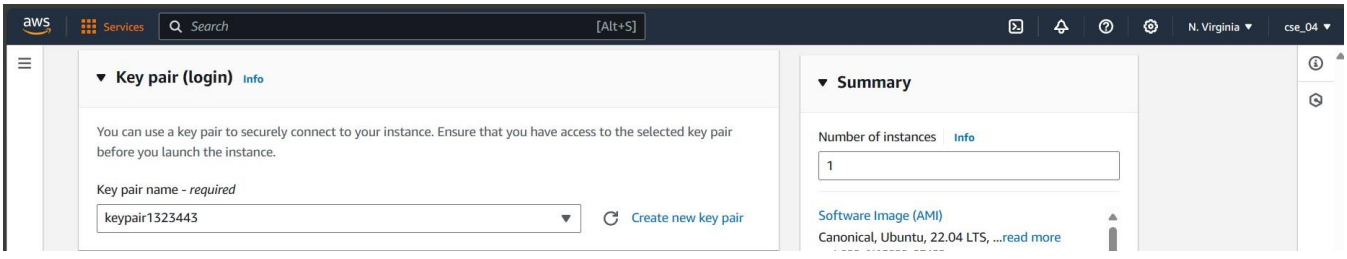
8. Now, go to EC2 dashboard and click on **Launch instance**.



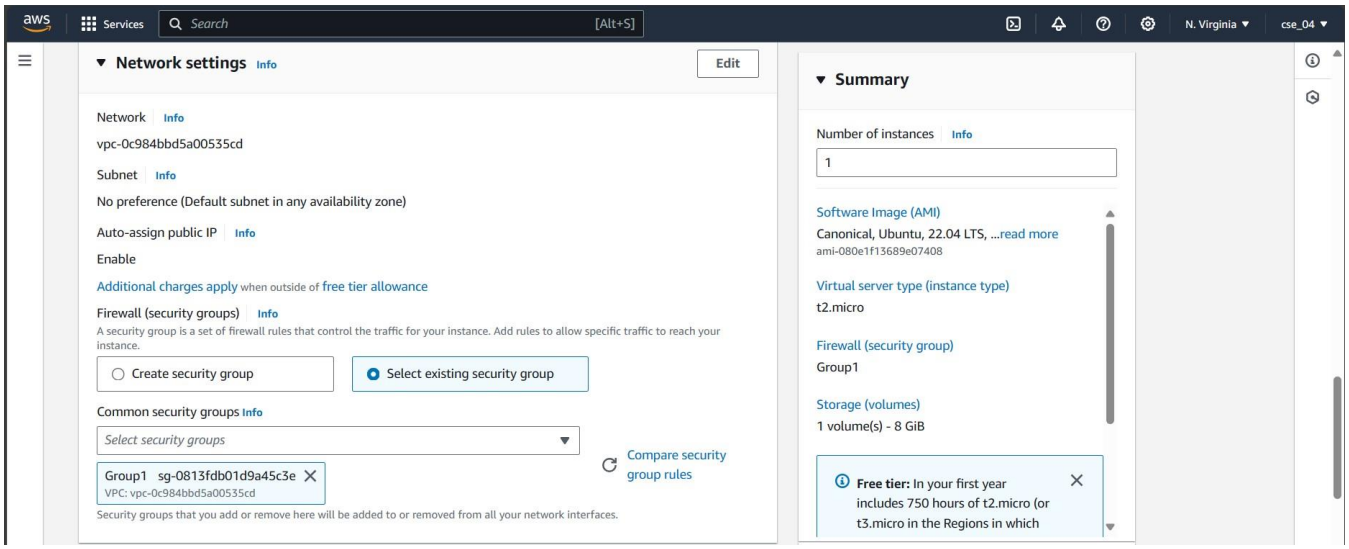
9. Fill up the **instance name** and select **Ubuntu** as the AMI.



10. Select an **existing key pair** or create a new one.

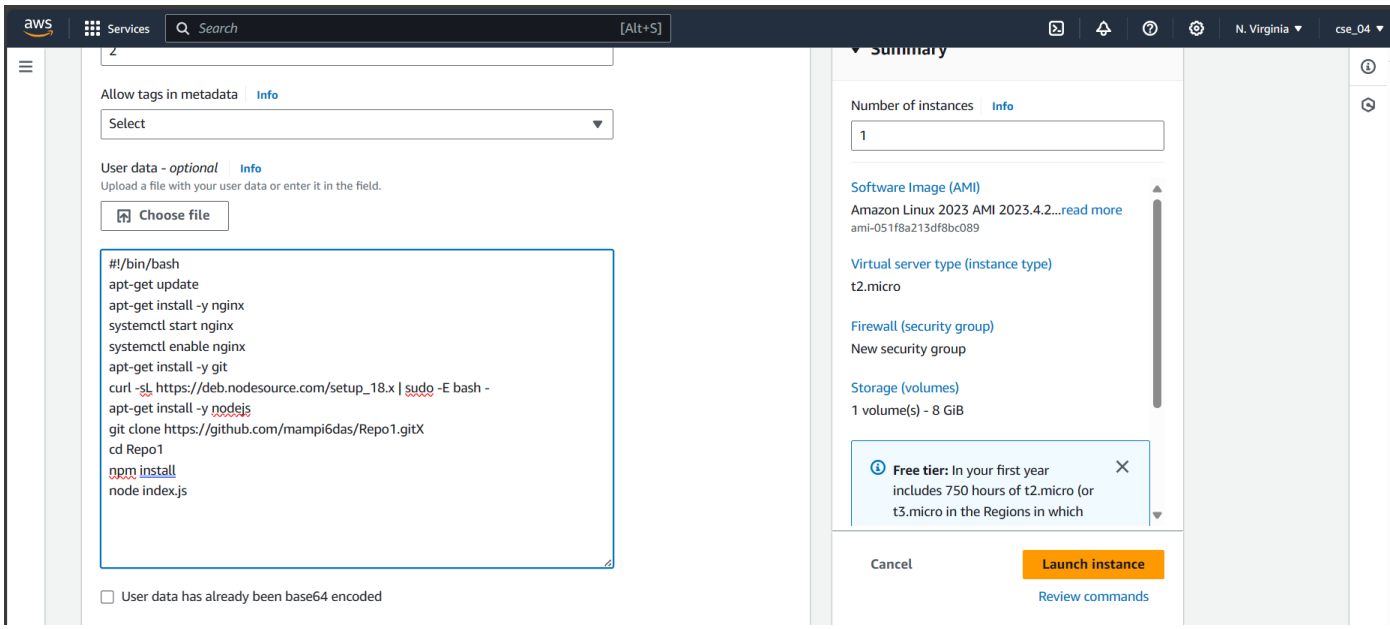


11. Now, click on **select Existing security group** and select the newly created security group.

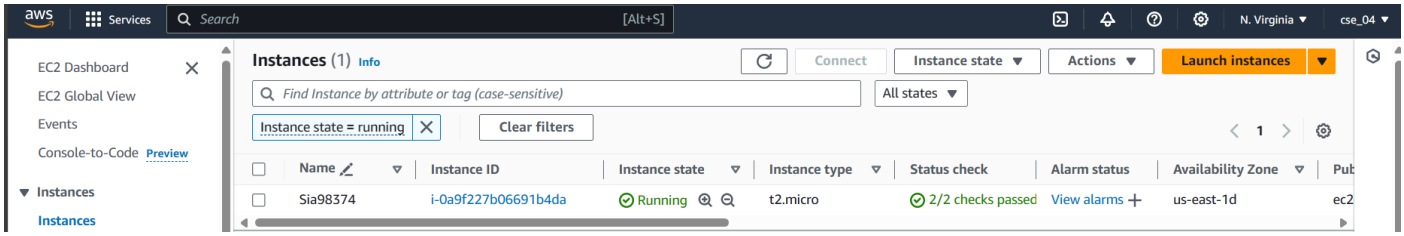


12. Expand the **Advanced details** section and Scroll down to the **User data** section and write the following script:

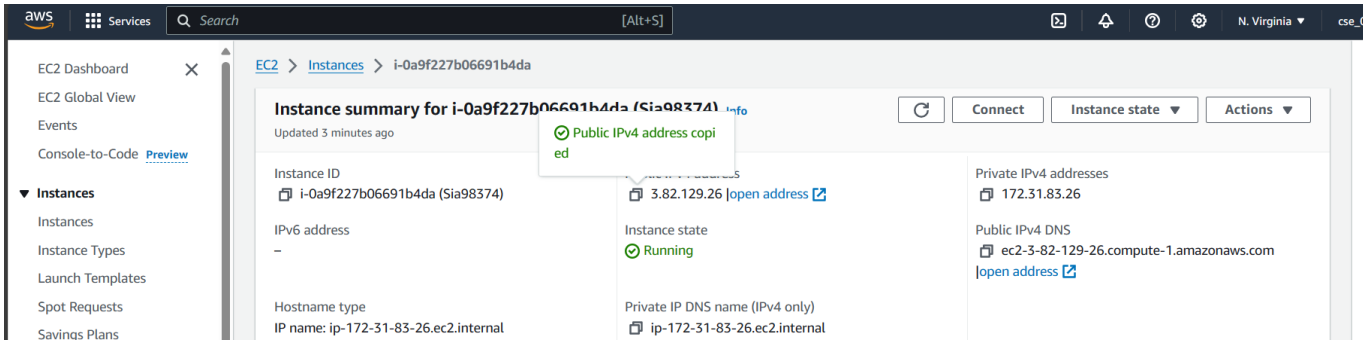
```
#!/bin/bash
apt-get update
apt-get install -y nginx
systemctl start nginx
systemctl enable nginx
apt-get install -y git
curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -
apt-get install -y nodejs
git clone <github repository cloning link>
cd Repo1
npm install
node index.js
```



13. Click on **Launch instance**. Now go to **Instances** and click on the **instance id** of the newly created instance.



14. Copy the **public IPv4 address**.



15. Open a new tab and paste the IPv4 address copied and add ":4000" to the end of it. This will display our intended website.