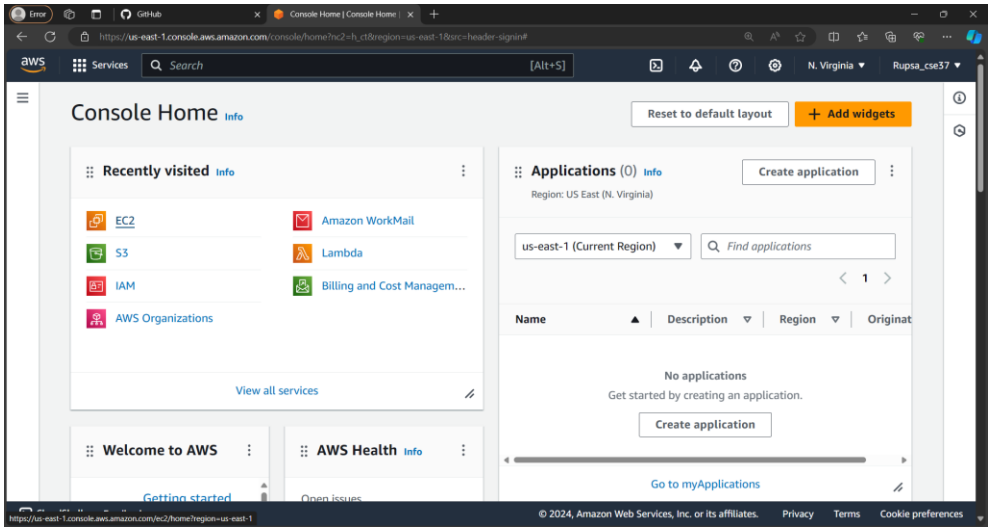
PROBLEM STATEMENT :

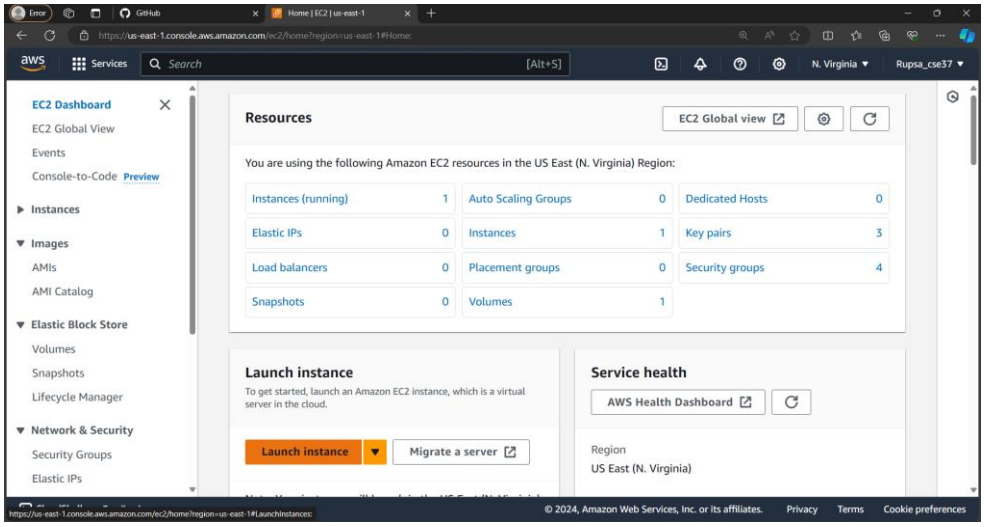
9) Deploy a project from GitHub to EC2.

Steps to deploy project :

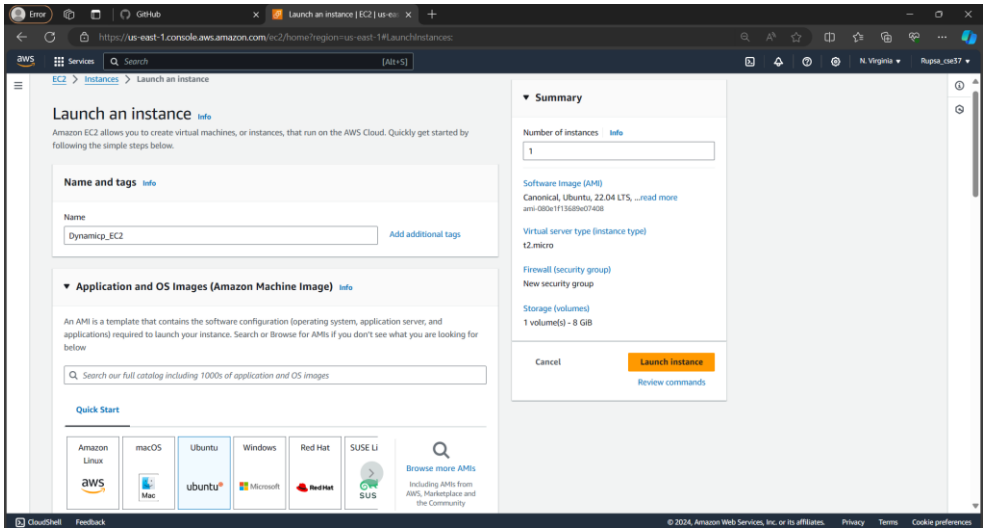
1. Sign up for an AWS account, search for ‘EC2’ then click on it.



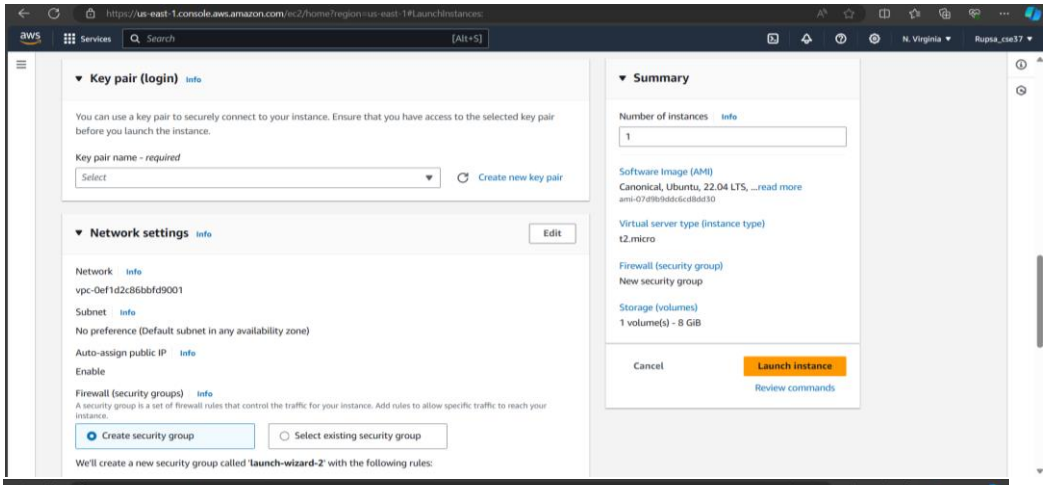
2. Click on ‘Launch instance’.

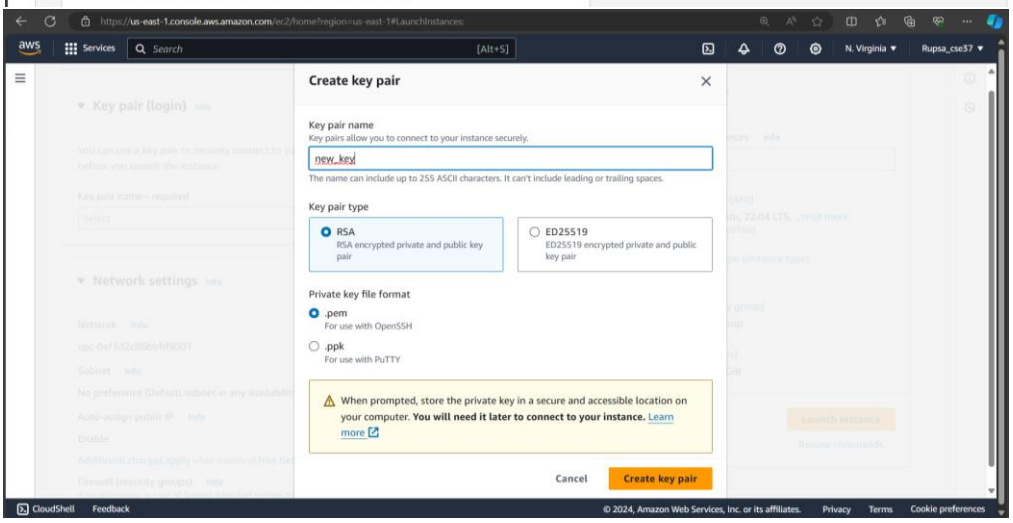


3. Fill up the required details->’Name’, in ‘Application and OS Images’ select ‘ubuntu’.

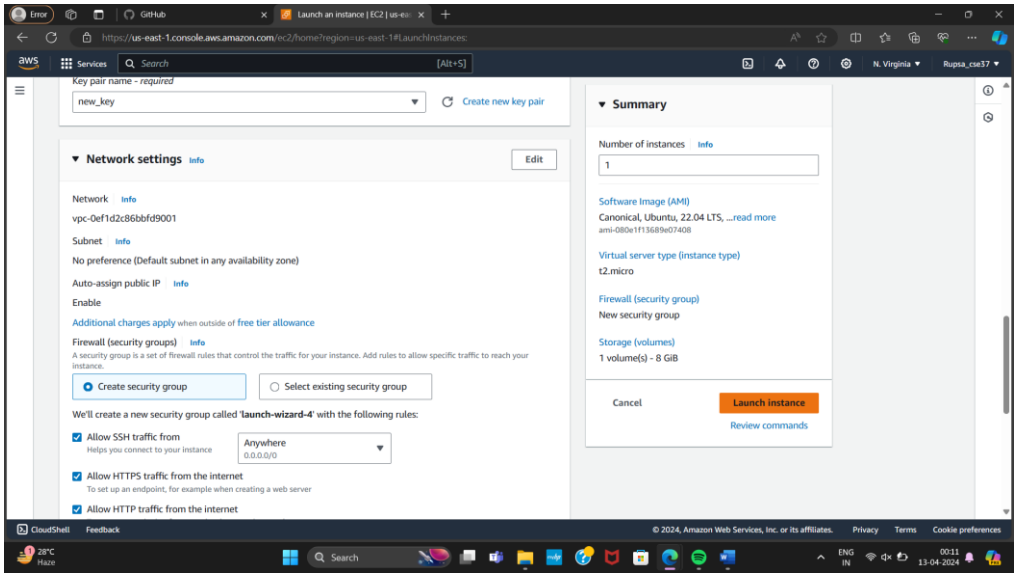


In ‘Key pair(login)’, click on ‘Create new key pair’, give ‘key pair name’ and click on ‘Create key pair’.

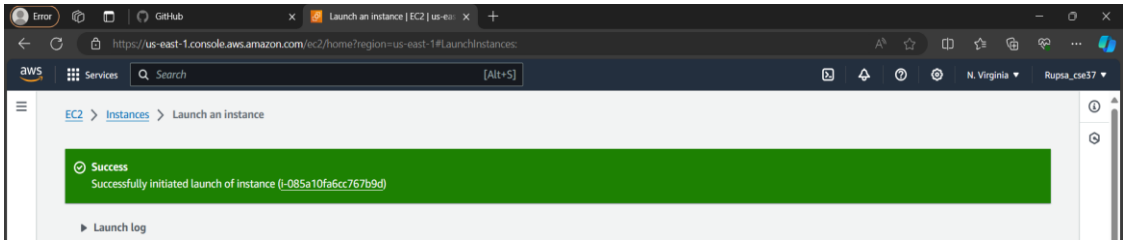




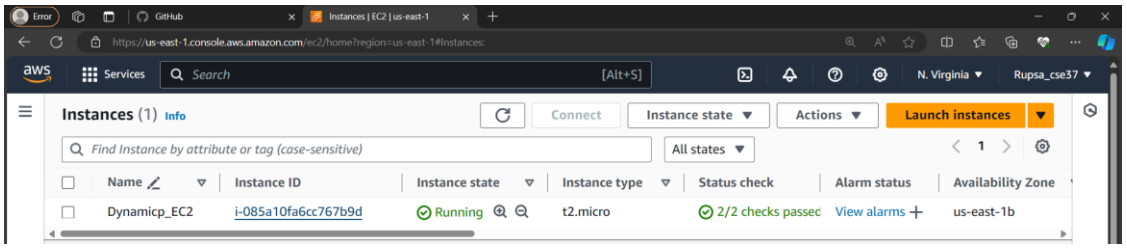
Under ‘Network settings’, tick off all the three checkboxes then click on ‘Launch instance’.



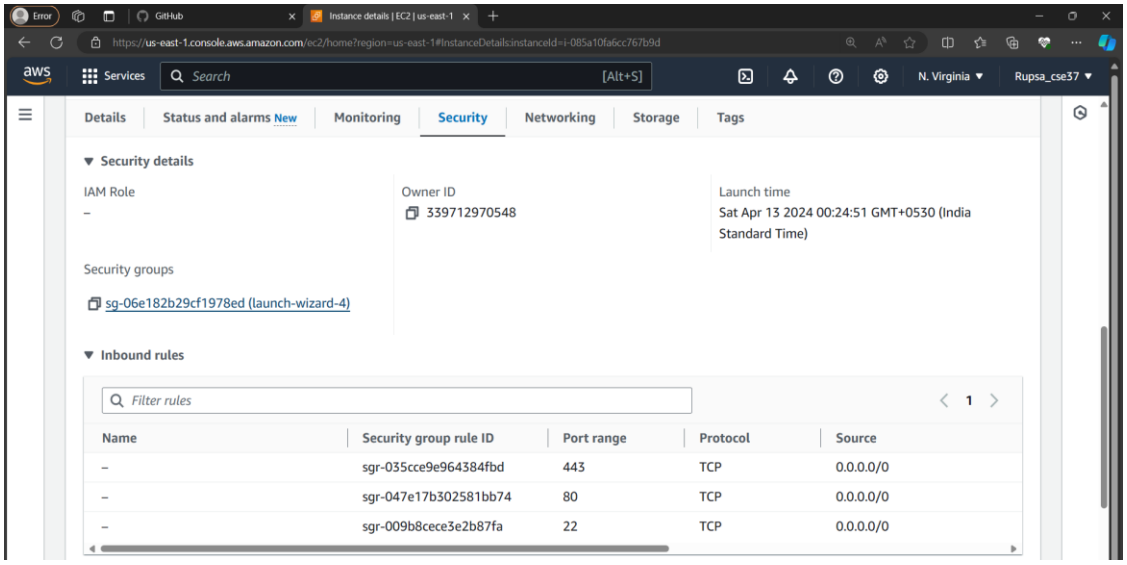
4. “Dymanicp_EC2” instance is successfully created and then click on ‘Instances’.



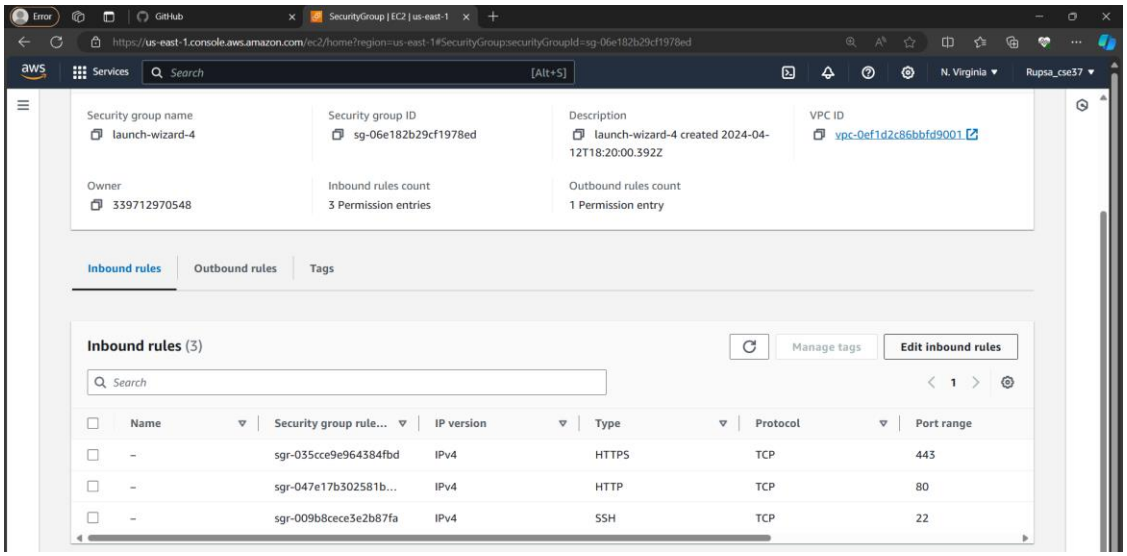
5. Now check whether “Dynamicp_EC2”is running or not then click on “Instance ID”.



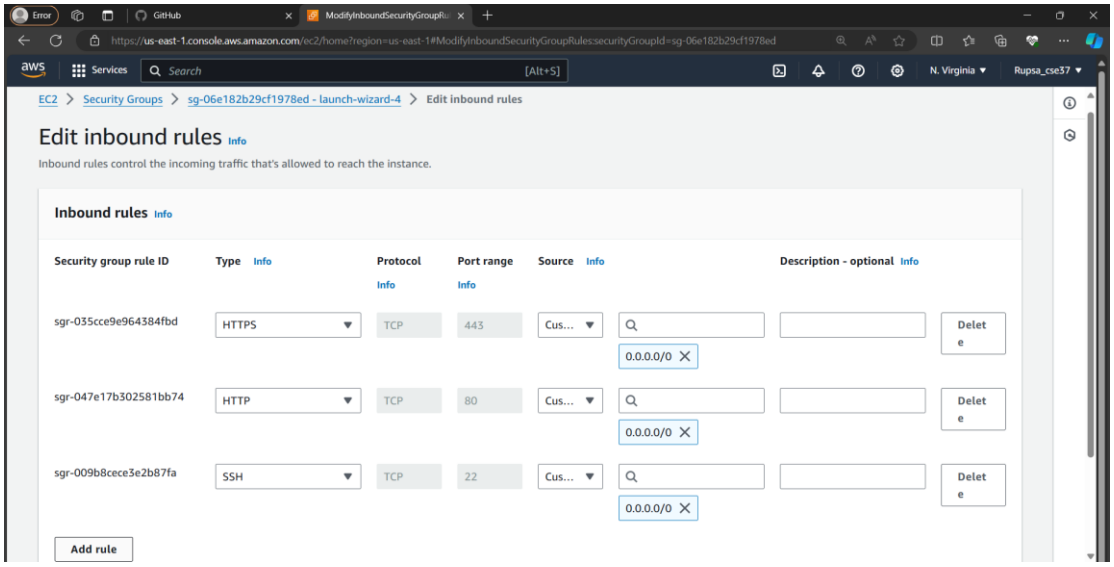
6. Then go to “Security” and click on link under “Security groups” to get the edit option.



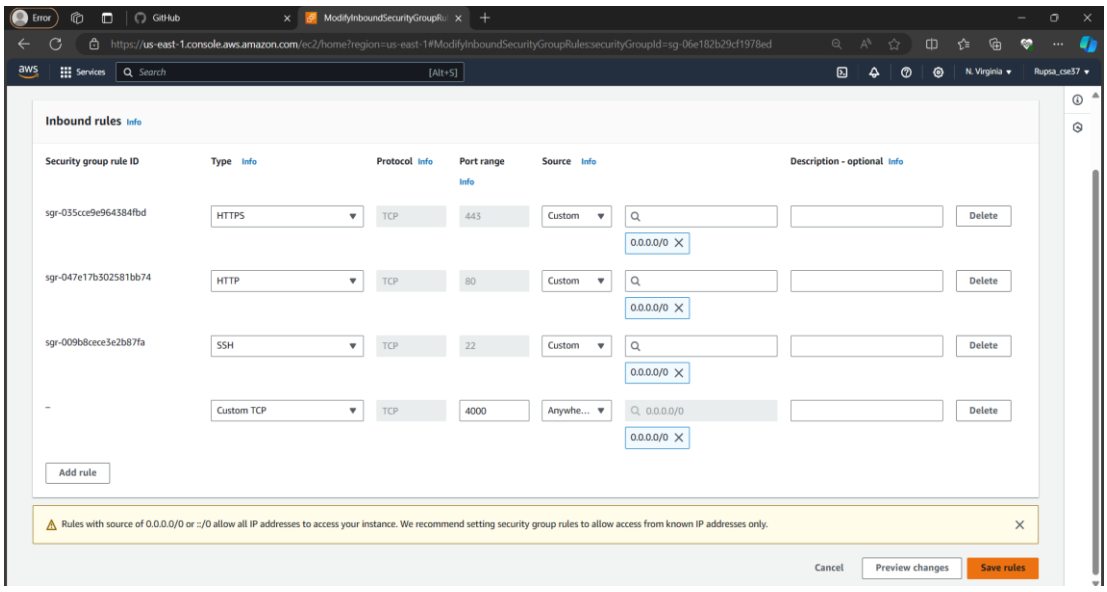
7. Then in “Inbound rules”, click on “Edit inbound rules”.



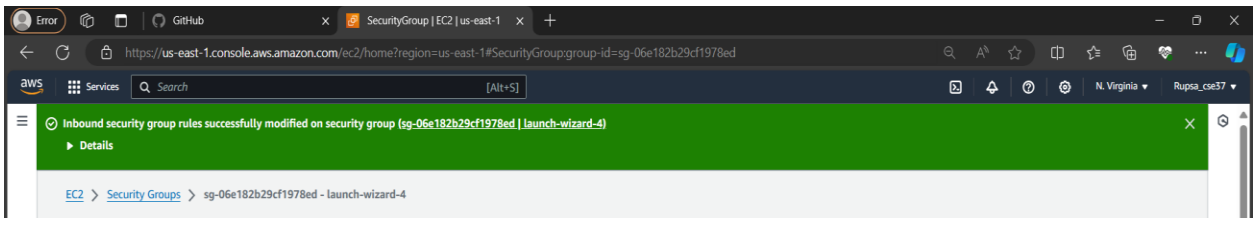
8. Click on “Add rule”.



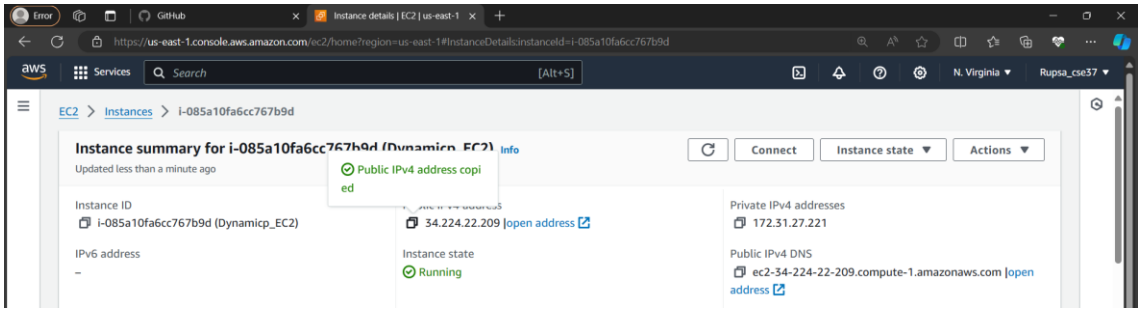
9. Set the “Port range” to 4000 , in “Source” set “0.0.0.0/0” & click on “Save rules”.



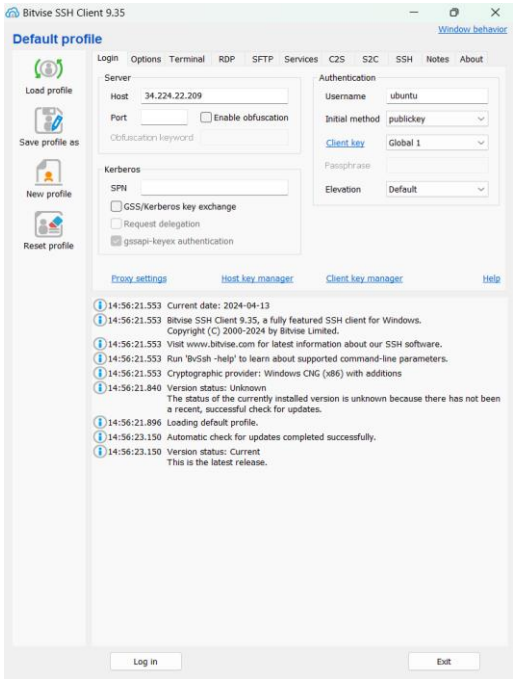
10. Rule has been successfully saved.



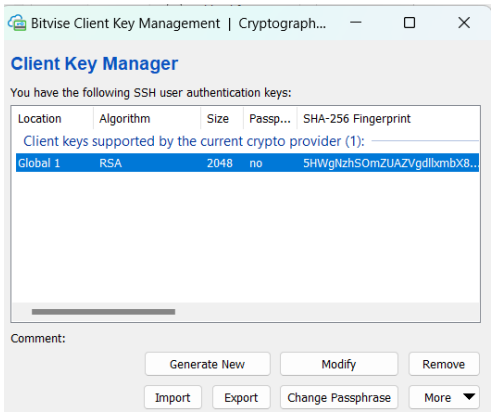
11. Go back to the Instance, copy the “Public IPv4 address”.



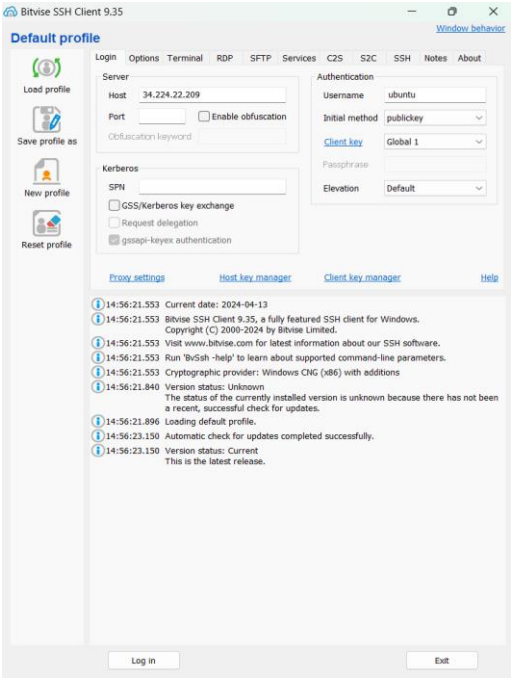
12. In “Bitvise SSH Client”, paste the “Public IPv4 address” in “Host” and under “Authentication tab” give the username as Ubuntu, Initial method as “Public key”, Client key as “Global1”.Then click on “Client key manager”.



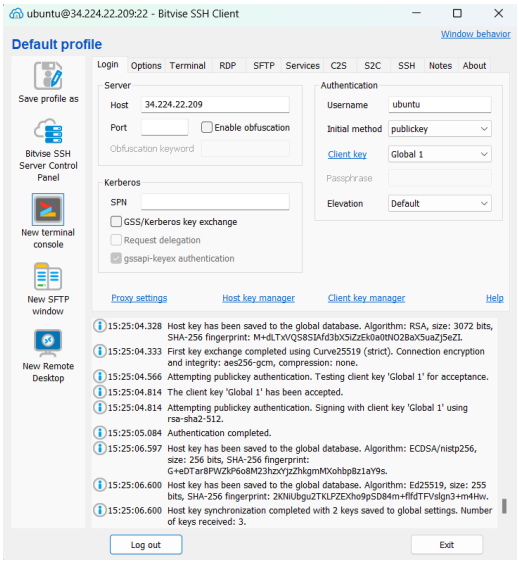
13. Remove any previously selected key if any, then click on “Import” & select the key with which instance was created.



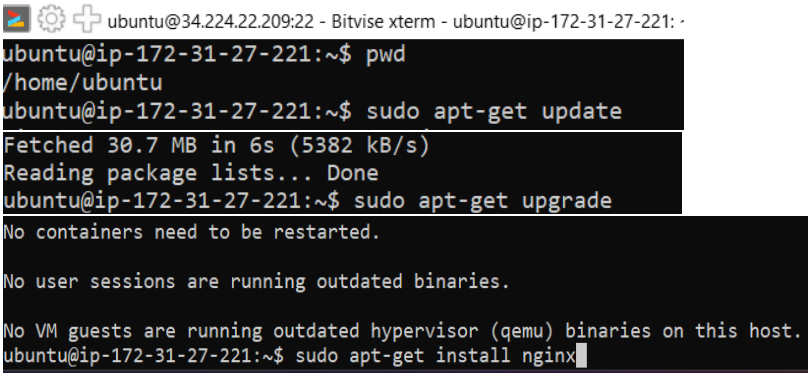
14. In “Bitvise SSH Client”, click on “Log in”.



15. After successful “Log in” open a “New Terminal Console”.



16. In the console, type the following commands in sequential order.



```
No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-27-221:~$ nginx -v
nginx version: nginx/1.18.0 (Ubuntu)
ubuntu@ip-172-31-27-221:~$ curl -SL https://deb.nodesource.com/setup_16.x|sudo -E bash
Fetched 19.6 kB in 1s (24.5 kB/s)
Reading package lists... Done
2024-04-13 10:28:31 - Repository configured successfully. To install Node.js, run: apt-get install
odejs -y
ubuntu@ip-172-31-27-221:~$ sudo apt install nodejs
```

```
No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-27-221:~$ nodejs -v
v16.20.2
```

```
ubuntu@ip-172-31-27-221:~$ git clone https://github.com/Rupsa1037/Rup_AWS1.git
Cloning into 'Rup_AWS1'...
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 0), reused 7 (delta 0), pack-reused 0
Receiving objects: 100% (7/7), 48.21 KiB | 8.03 MiB/s, done.
ubuntu@ip-172-31-27-221:~$ ls
Rup_AWS1
ubuntu@ip-172-31-27-221:~$ cd Rup_AWS1/
ubuntu@ip-172-31-27-221:~/Rup_AWS1$ ls
'New Text Document.txt'   index.js   package-lock.json   package.json
ubuntu@ip-172-31-27-221:~/Rup_AWS1$ npm install
```

```
Run `npm audit` for details.
npm notice
npm notice New major version of npm available! 8.19.4 -> 10.5.2
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.5.2
npm notice Run npm install -g npm@10.5.2 to update!
npm notice
ubuntu@ip-172-31-27-221:~/Rup_AWS1$ npm -v
8.19.4
ubuntu@ip-172-31-27-221:~/Rup_AWS1$ node index.js
Started server
```

17. Now copy the “Public IPv4 address” & paste it on a new tab.

18. Now add “:4000” at the end of the “Public IPv4 address” and press enter.