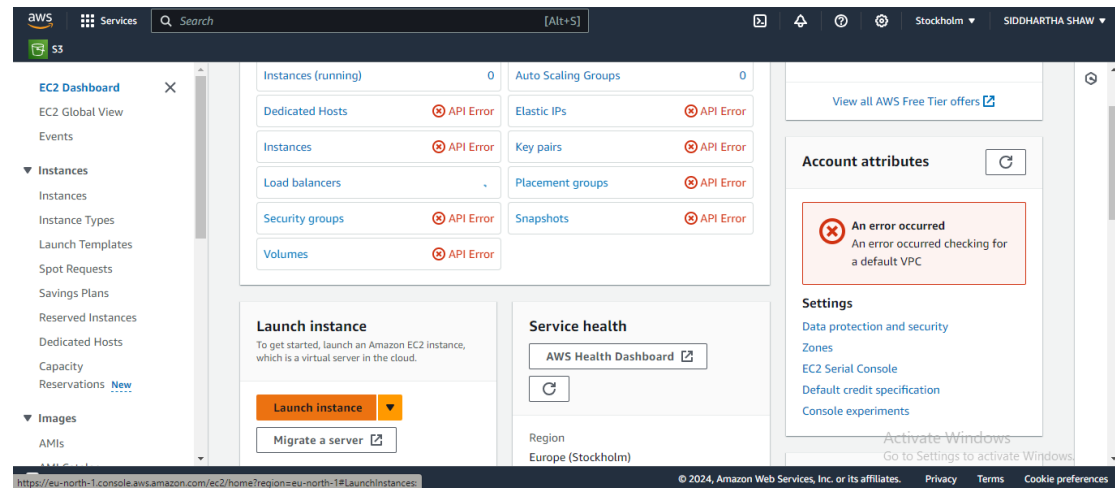# PROBLEM STATEMENT :

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.
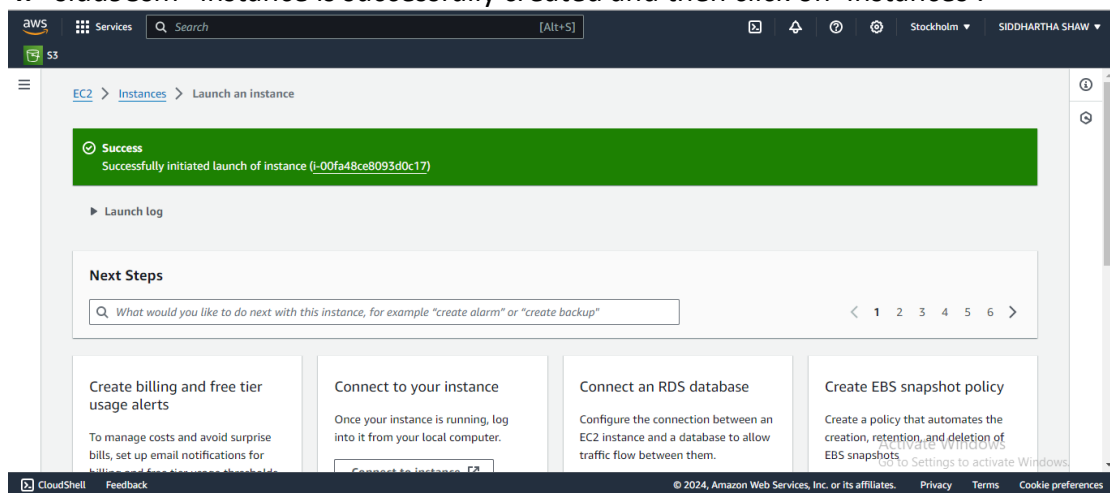
2. Click on 'Launch instance'.

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'.
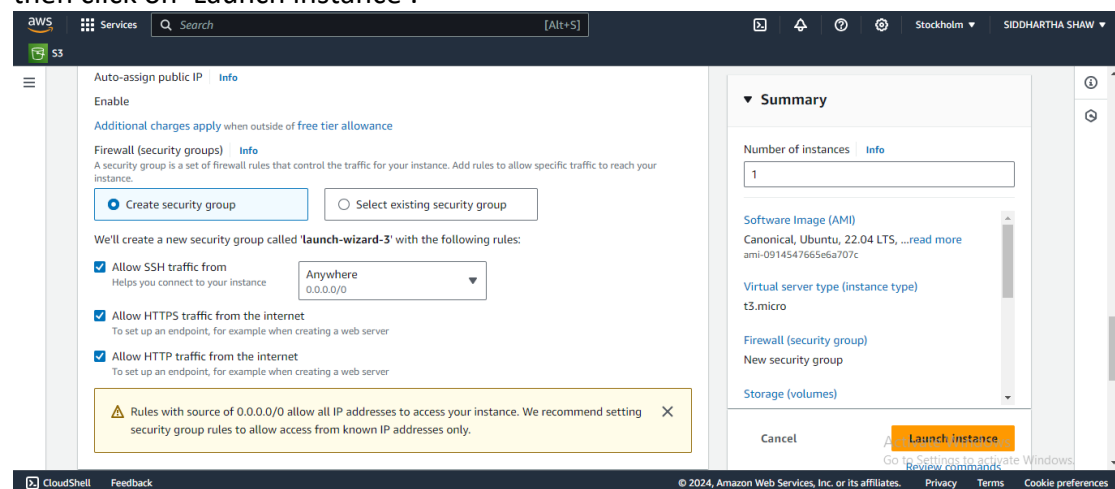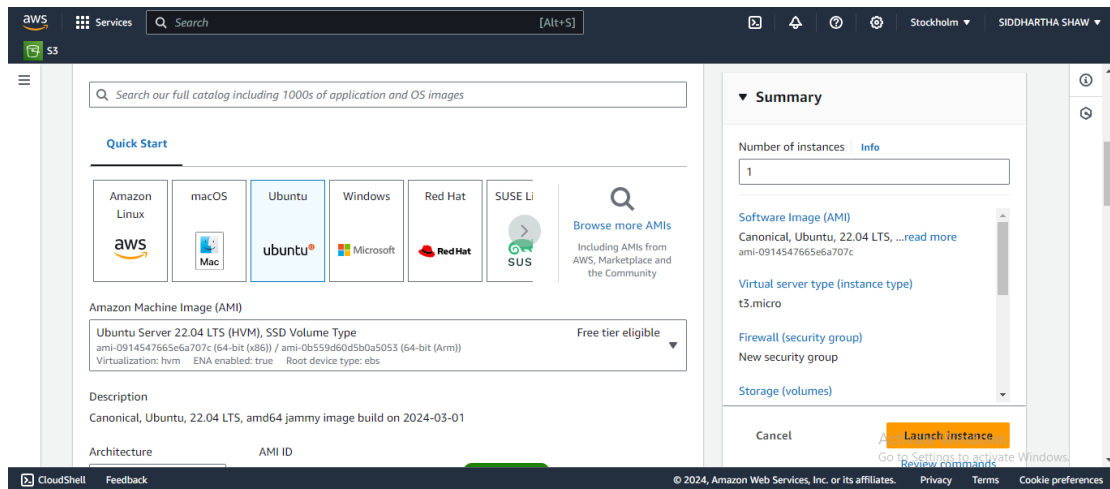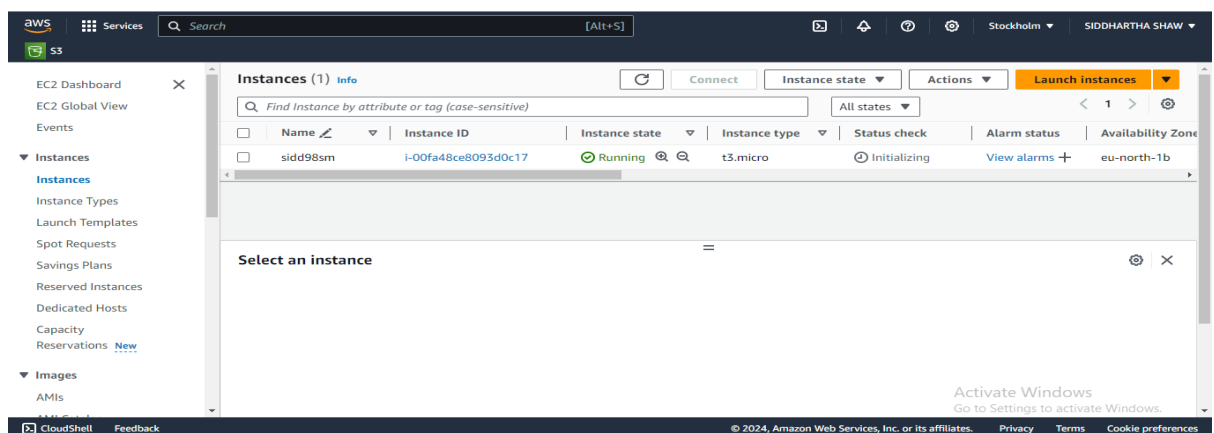
4. "sidd98sm" instance is successfully created and then click on 'Instances'.

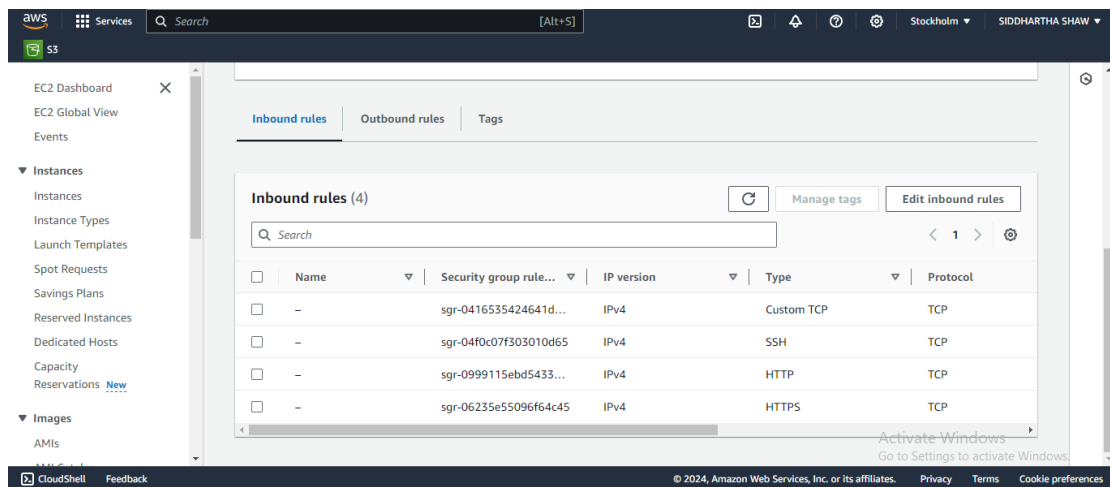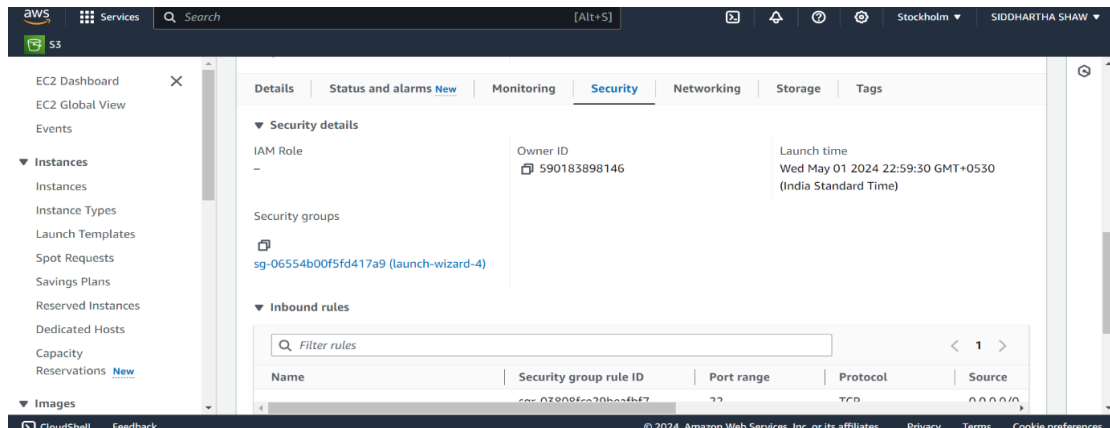**5.** Now check whether "Dynamicp_EC2"is running or not then click on "Instance ID".

6. Then go to "Security" and click on "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".
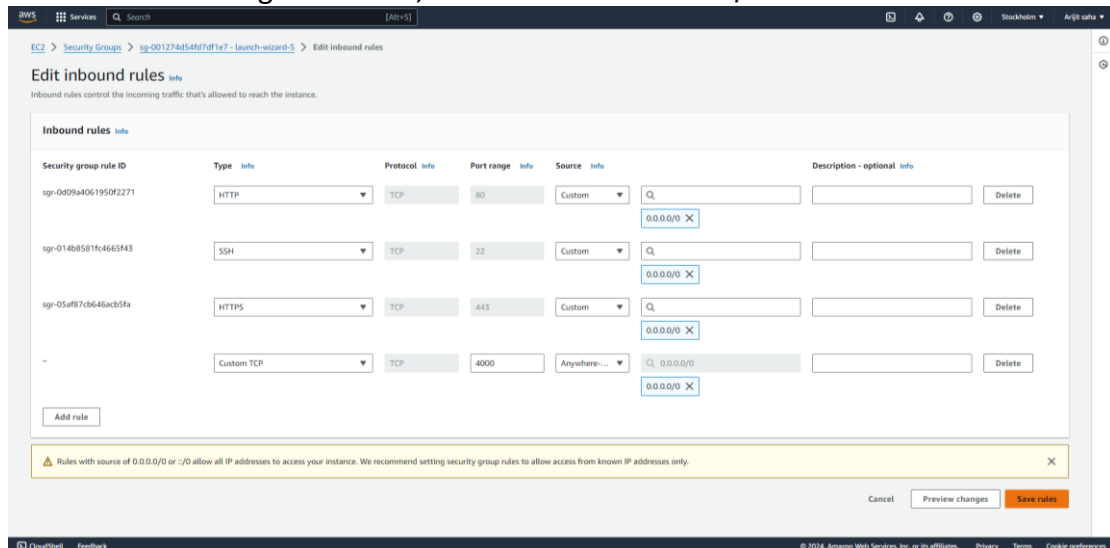
10. Rule have been successfully saved.
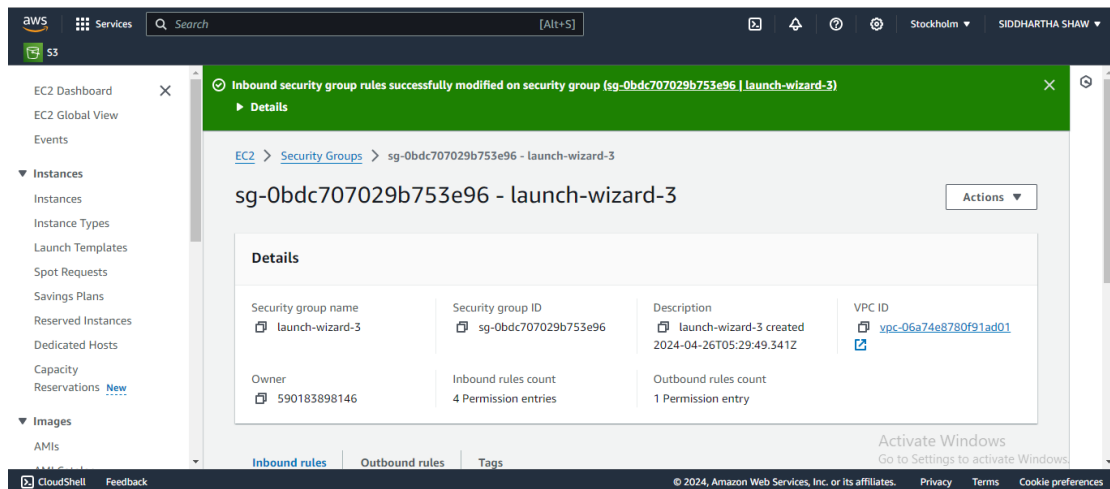
11. Go back to the Instance, copy the "Public IPv4 address".

12. In "**Bitvise SSH Client**", paste the "Public IPv4 address" in "Host" and under "Authentication tab" give the username as Ubuntu. Then click on "Client Key Manager".

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

Location	Algorithm	Size	Passp...	SHA-256 Fingerprint	MD5 Fingerprint	Bubble Babble	Comment
Client keys supported by the current crypto provider (1):							
Global 1	RSA	2048	no	svQQ3clYmY7PJpLZ8nTeM4T+bP...	d3:98:17:83:b2:ad:4...	xigom-nypeh-hikum-...	

Comment:

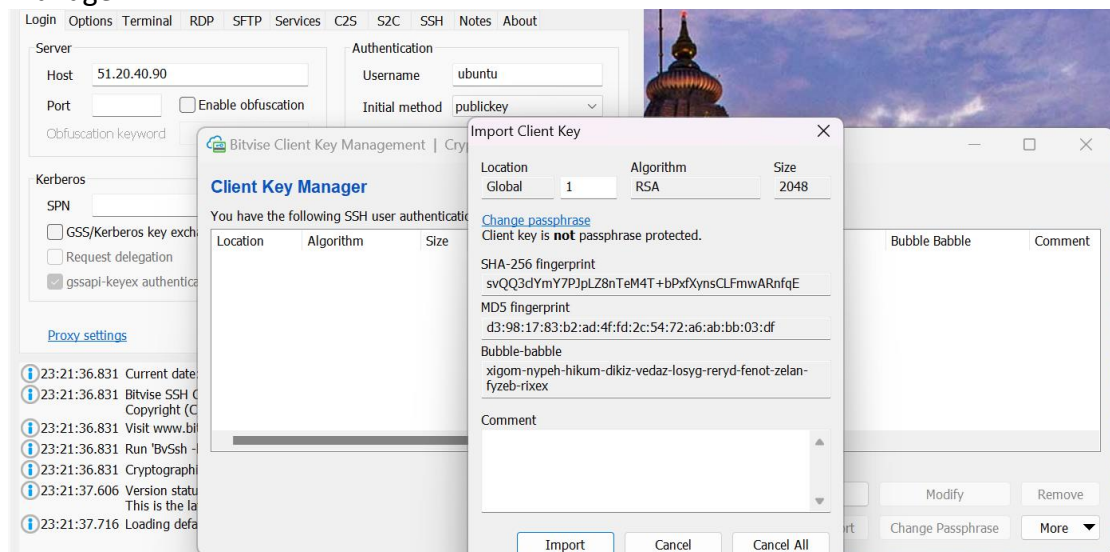SHA-256 fingerprint: svQQ3clYmY7PJpLZ8nTeM4T+bPxfXynsCLFmwARnfqE
MD5 fingerprint: d3:98:17:83:b2:ad:4f:fd:2c:54:72:a6:ab:bb:03:df
Bubble-babble: xigom-nypeh-hikum-dikiz-vedaz-losyg-reryd-fenot-zelan-fyzeb-rixex

[Generate New] [Modify] [Remove]
[Import] [Export] [Change Passphrase] [More ▼]

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.

```
ubuntu@ip-172-31-27-221:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-27-221:~$ sudo apt-get update
Fetched 30.7 MB in 6s (5382 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-27-221:~$ sudo apt-get upgrade
ubuntu@ip-172-31-27-221:~$ sudo apt-get install nginx

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 n
odejs -y
ubuntu@ip-172-31-27-221:~$ sudo apt install nodejs
ubuntu@ip-172-31-27-221:~$ nodejs -v
v16.20.2
```

```
ubuntu @ session #3: sshd[1054,1180]
ubuntu @ user manager service: systemd[1073]

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-31-91:~$ curl -SL https://deb.nodesource.com/setup_18.x|sudo -E bash-
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
    0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--      0sudo: bash-: command not found
100  3154  100  3154    0     0  52153      0 --:--:-- --:--:-- --:--:-- 52566
curl: Failed writing body
ubuntu@ip-172-31-31-91:~$ curl -SL https://deb.nodesource.com/setup_18.x|sudo -E bash-
sudo: bash-: command not found
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  3154  100  3154    0     0  56170      0 --:--:-- --:--:-- --:--:-- 56321
curl: Failed writing body
ubuntu@ip-172-31-31-91:~$ ^C
ubuntu@ip-172-31-31-91:~$ curl -SL https://deb.nodesource.com/setup_18.x|sudo -E bash-
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
    0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--      0sudo: bash-: command not found
100  3154  100  3154    0     0  40946      0 --:--:-- --:--:-- --:--:-- 41500
curl: Failed writing body
ubuntu@ip-172-31-31-91:~$ curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -
2024-05-01 18:01:50 - Installing pre-requisites
Hit:1 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
```



```
warning: redirecting to https://github.com/SIDDHARTHA-yooku/newrepo3.git/
remote: Enumerating objects: 15, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 15 (delta 6), reused 15 (delta 6), pack-reused 0
Receiving objects: 100% (15/15), done.
Resolving deltas: 100% (6/6), done.
ubuntu@ip-172-31-31-91:~$ cd /
ubuntu@ip-172-31-31-91:/$ pwd
/
ubuntu@ip-172-31-31-91:/$ cd ~
ubuntu@ip-172-31-31-91:~$ ls
newrepo3
ubuntu@ip-172-31-31-91:~$ cd newrepo3/
ubuntu@ip-172-31-31-91:~/newrepo3$ ls
'New Text Document.txt'   index.js   package.json
ubuntu@ip-172-31-31-91:~/newrepo3$ sudo npm i
npm WARN deprecated uuid@3.4.0: Please upgrade  to version 7 or higher.  Older versions may use Math.random() in certain circumstances, which is
known to be problematic.  See https://v8.dev/blog/math-random for details.

added 251 packages, and audited 252 packages in 28s

24 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New minor version of npm available! 10.5.0 -> 10.7.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.7.0
npm notice Run npm install -g npm@10.7.0 to update!
npm notice
ubuntu@ip-172-31-31-91:~/newrepo3$ node index.js
Started server
```

17. Now copy the "Public IPv4 address" & paste it on a new tab.
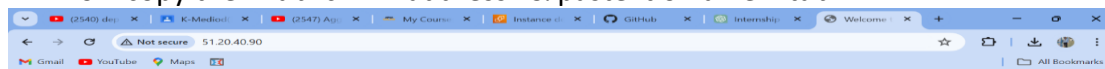
Welcome to nginx!

If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.