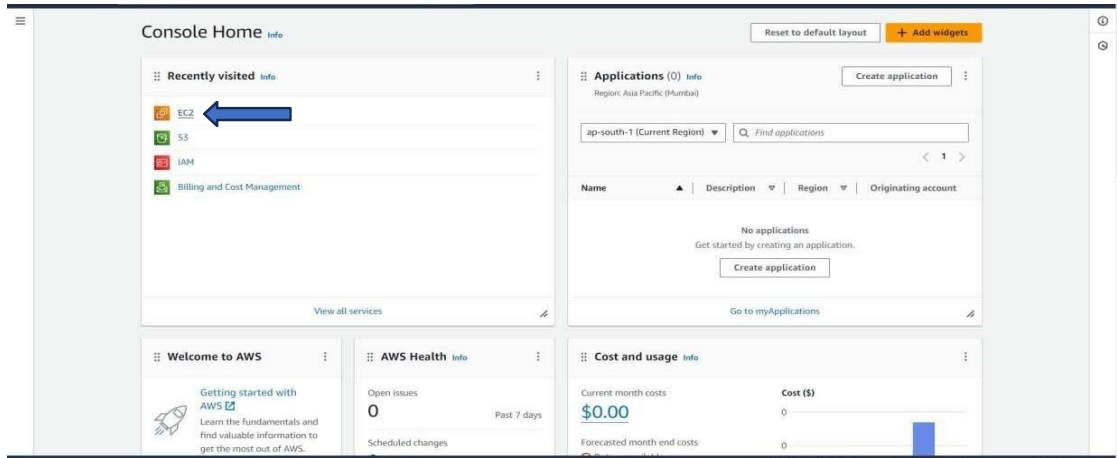


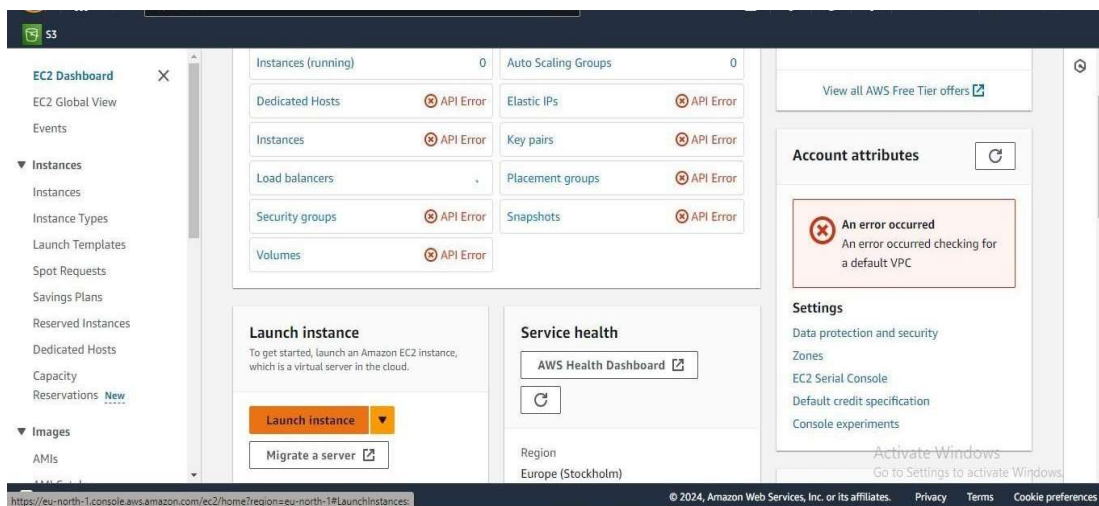
ASSIGNMENT-12

Problem Statement: Deploy and run the project in AWS without using port.

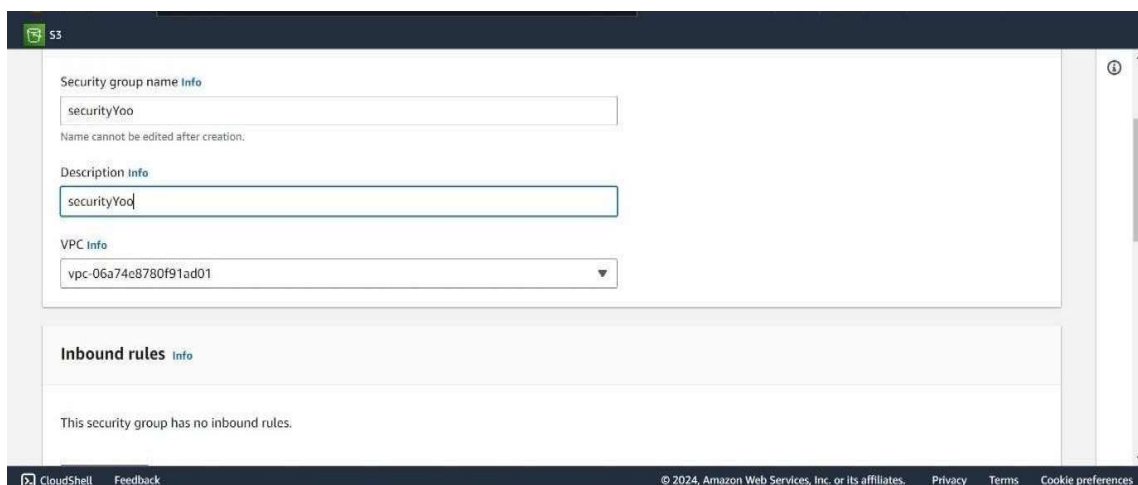
Step 1: Login to the console and click on EC2.



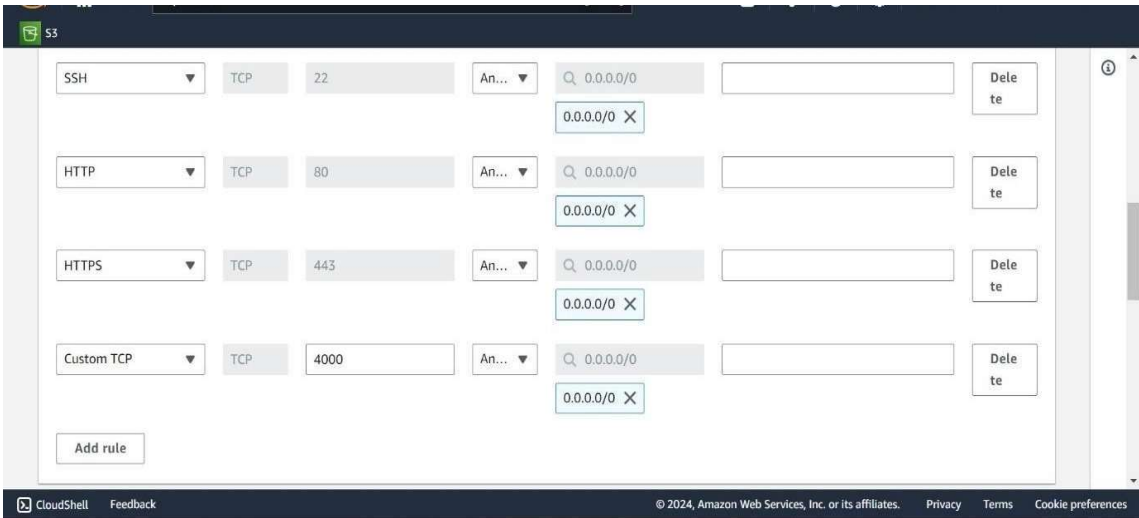
Step 2: Then click on Security Groups.



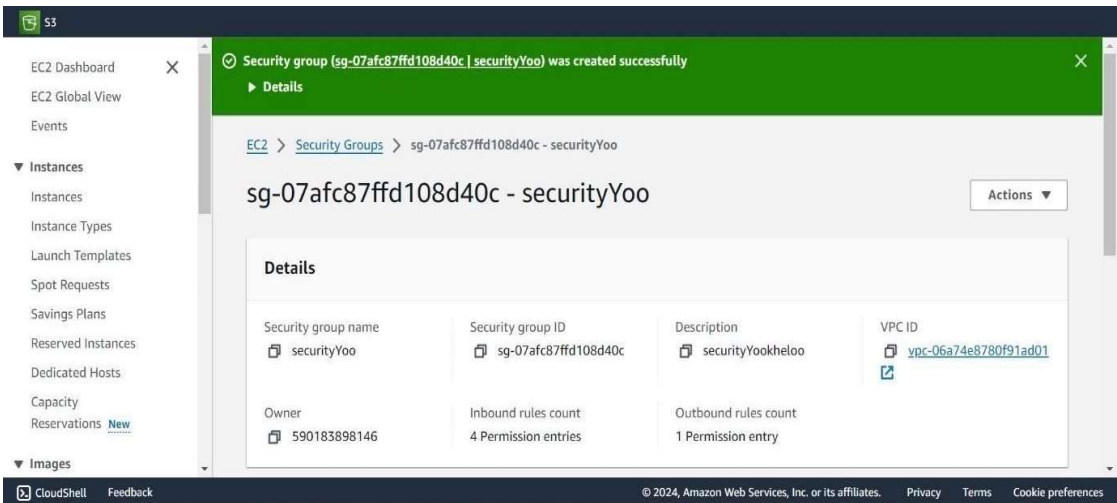
Step 3: Then go to the “Create Security group”



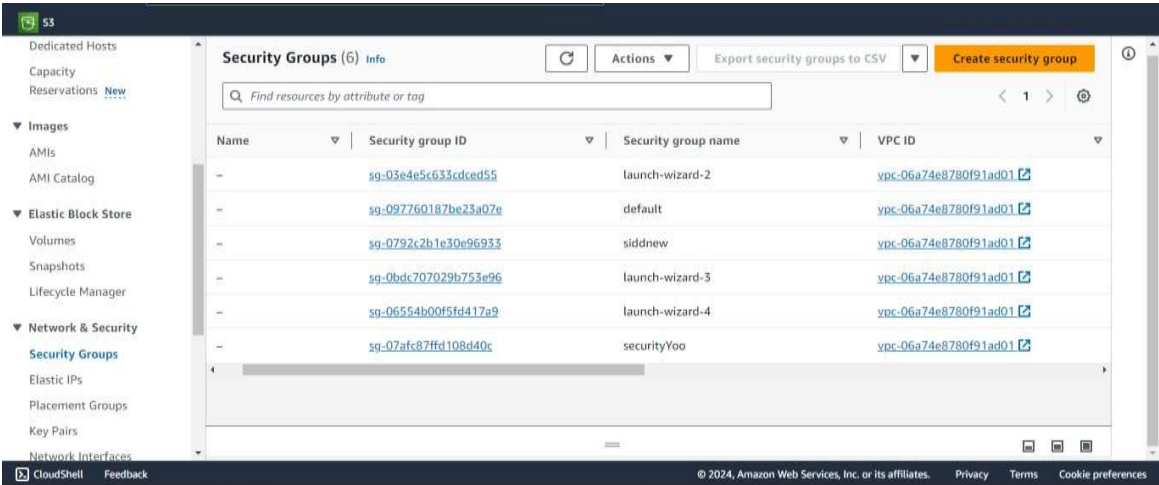
Step 4: Write security group name, add inbound rules and click on “Create security group”.



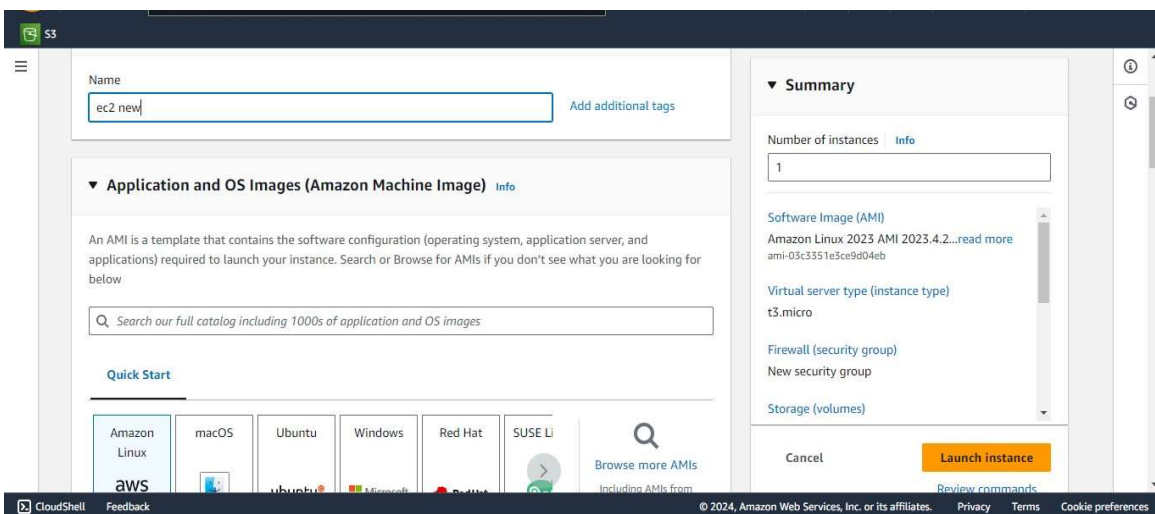
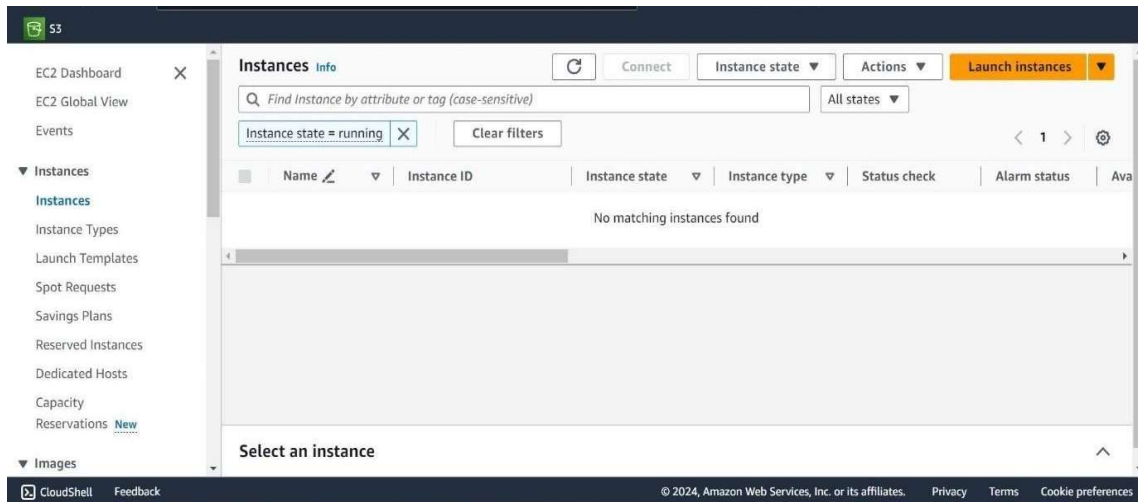
Step 5: after that security group is created successfully.



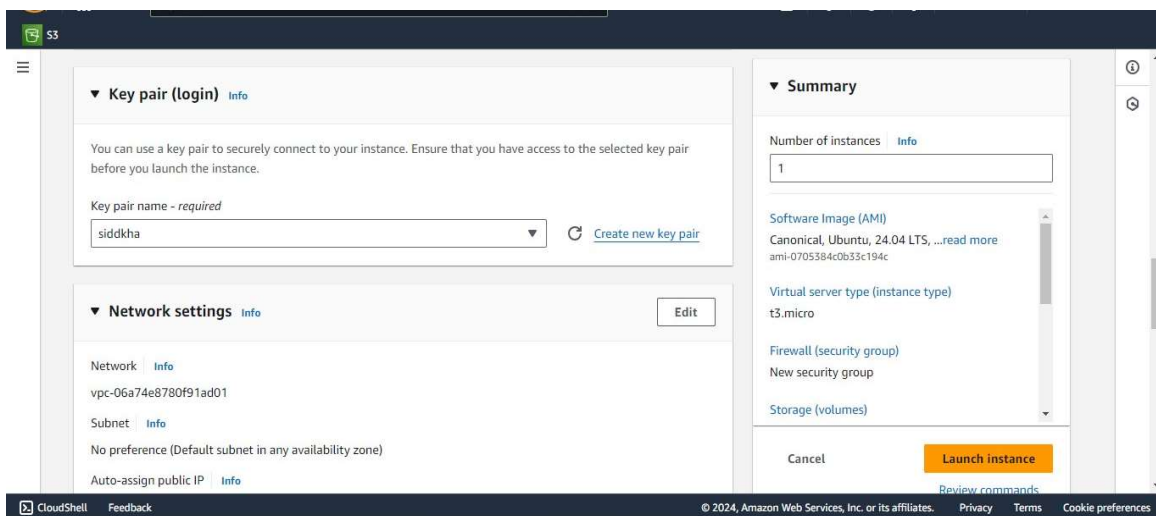
Step 6: Now check the security group activity whether its shows all port number or not.



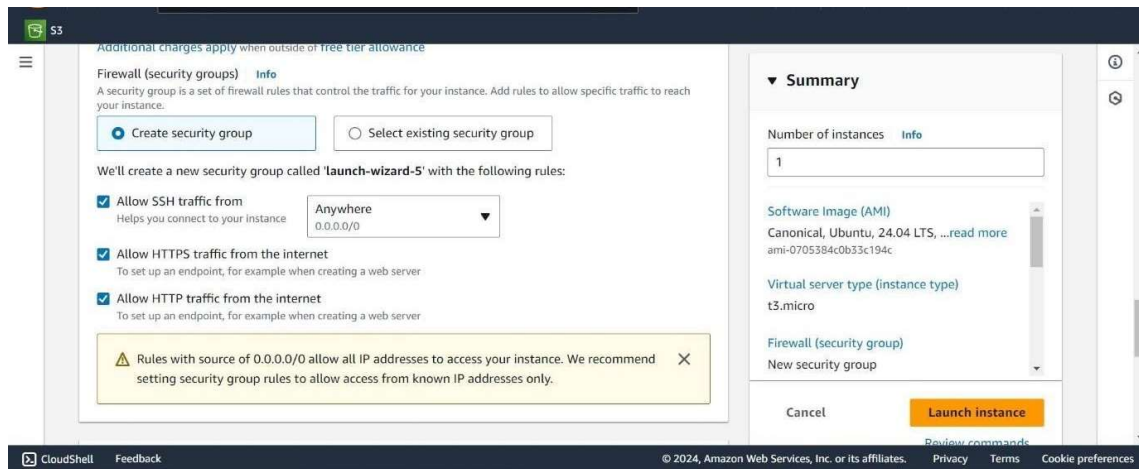
Step 7: The security group is created. Now go to the EC2 and click on “Launch Instances”.



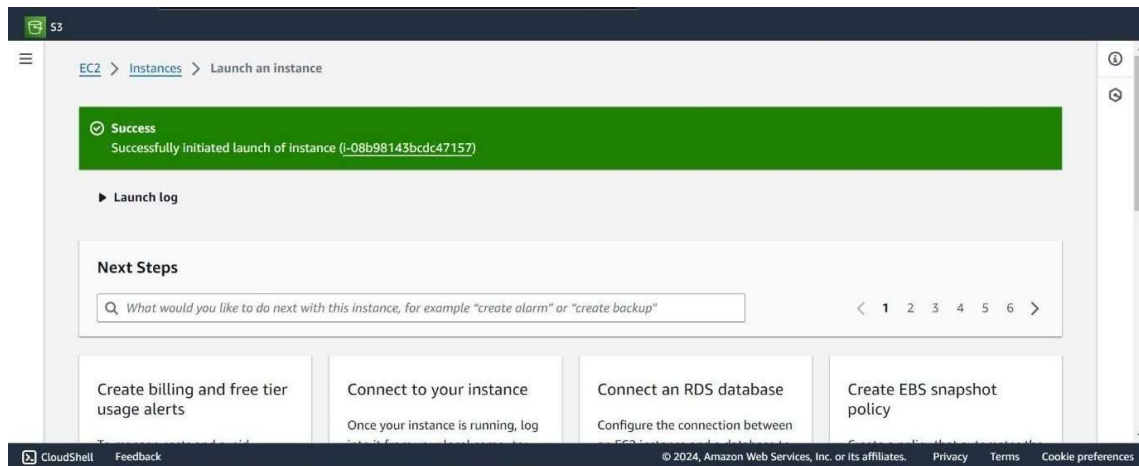
Step 8: search the existing key pair whether its already created.



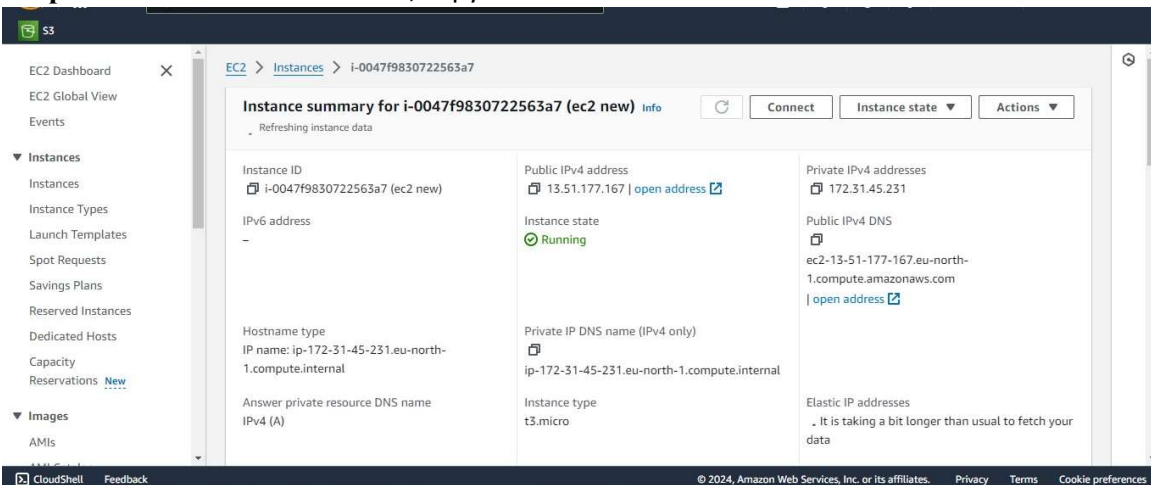
Step 9: select the SSH, HTTPS,HTTP and move it.



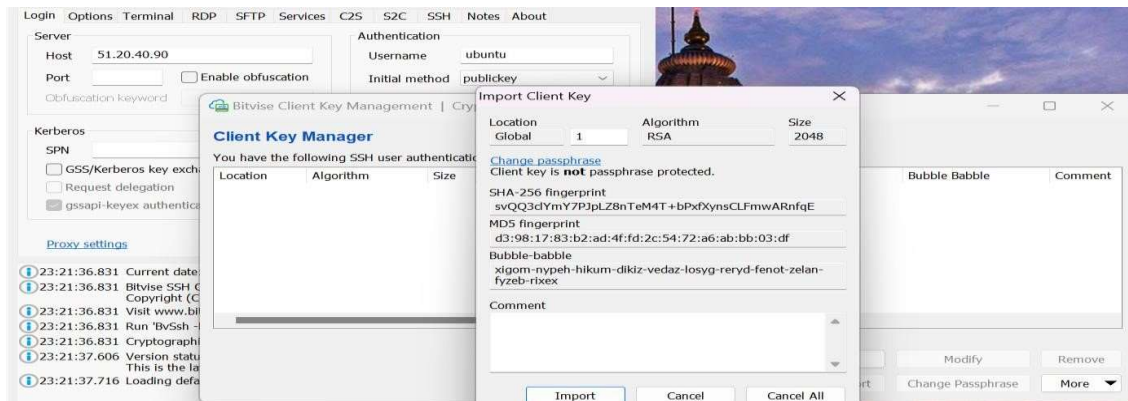
Step 10: after that the instance lunch successfully.



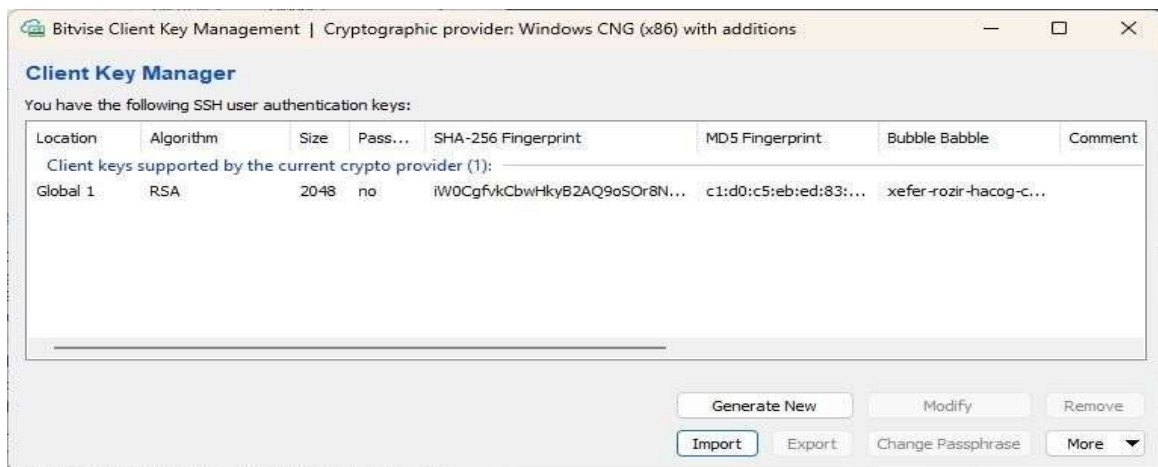
Step 11: Go back to the Instance, copy the "Public IPv4 address".



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



Step 13: after that “bitwise ssh client” creation process done.



Step 14: steps of further processes which is done in command pannel in “bitwise ssh client”.

- Remove any previously selected key if any, then click on “Import” & select the key which instance was created.
- In “Bitwise SSH Client”, click on “Log in”.
- After successful “Log in” open a “New Terminal Console”.
- 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-172-31-31-91:~$ sudo apt-get update
Get:1 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble InRelease [286 kB]
Get:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [89.7 kB]
Get:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [90.8 kB]
Get:4 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 Packages [1401 kB]
Get:5 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/main Translation-en [513 kB]
Get:6 http://security.ubuntu.com/ubuntu noble-security InRelease [89.7 kB]
Get:7 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:8 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [21.5 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [6544 B]
Get:11 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [8248 B]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [3672 B]
Get:14 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [112 B]
Get:15 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [116 B]
Get:16 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:17 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/restricted amd64 Packages [93.9 kB]
Get:18 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/restricted Translation-en [18.7 kB]
Get:19 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:20 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
```

```
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 --:--:-- --:--:-- --:--:--
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 -
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload  Total   Spent    Left   Speed
  0     0     0     0     0     0      0      0 --:--:-- --:--:-- --:--:--
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 --:--:-- --:--:-- --:--:--
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
```

Step 15: after that we start the server and show that whether its running or not.

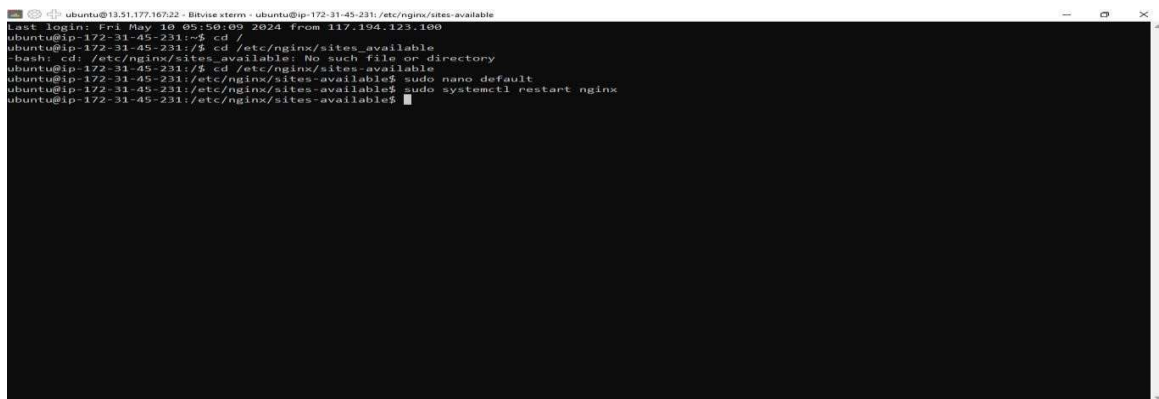


Welcome to nginx!

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.



Step 16: Now we open another command pannel and go to the further process.



Step 17: Now type the commands and then go to the further steps--

In this step edit the “**location**” part only with - location / {

proxy_pass <http://localhost:4000>; proxy_http_version 1.1;

proxy_set_header Upgrade \$http_upgrade; proxy_set_header

Connection 'upgrade'; proxy_set_header Host \$host;

proxy_cache_bypass \$http_upgrade; }

```
GNU nano 7.2 default
listen 80 default_server;
listen [::]:80 default_server;

# SSL configuration
#
# listen 443 ssl default_server;
# listen [::]:443 ssl default_server;
#
# Note: You should disable gzip for SSL traffic.
# See: https://bugs.debian.org/773332
#
# Read up on ssl_ciphers to ensure a secure configuration.
# See: https://bugs.debian.org/765782
#
# Self signed certs generated by the ssl-cert package
# Don't use them in a production server!
#
include snippets/snakeoil.conf;

root /var/www/html;

# Add index.php to the list if you are using PHP
index index.html index.htm index.nginx-debian.html;

server_name _;

location / {
    # First attempt to serve request as file, then
    # as directory, then fall back to displaying a 404.
    try_files $uri $uri/ =404;
}

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo       ^M Set Mark   ^_] To Bracket
^X Exit      ^R Read File  ^N Replace    ^U Paste      ^J Justify    ^_/ Go To Line  ^-E Redo      ^-G Copy      ^_- Where Was
```

```
GNU nano 7.2 default *
#
# Note: You should disable gzip for SSL traffic.
# See: https://bugs.debian.org/773332
#
# Read up on ssl_ciphers to ensure a secure configuration.
# See: https://bugs.debian.org/765782
#
# Self signed certs generated by the ssl-cert package
# Don't use them in a production server!
#
include snippets/snakeoil.conf;

root /var/www/html;

# Add index.php to the list if you are using PHP
index index.html index.htm index.nginx-debian.html;

server_name _;

#location / {
#    # First attempt to serve request as file, then
#    # as directory, then fall back to displaying a 404.
#    #try_files $uri $uri/ =404;
#}
location / {
    proxy_pass http://localhost:4000;
    proxy_http_version 1.1;
    proxy_set_header Upgrade $http_upgrade;
    proxy_set_header Connection 'upgrade';
    proxy_set_header Host $host;
    proxy_cache_bypass $http_upgrade;
}

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo       ^M Set Mark   ^_] To Bracket
^X Exit      ^R Read File  ^N Replace    ^U Paste      ^J Justify    ^_/ Go To Line  ^-E Redo      ^-G Copy      ^_- Where Was
```

Step 18: Now we saw that after one more time copy the **ipv4 address** of instance its running without using port(4000).

