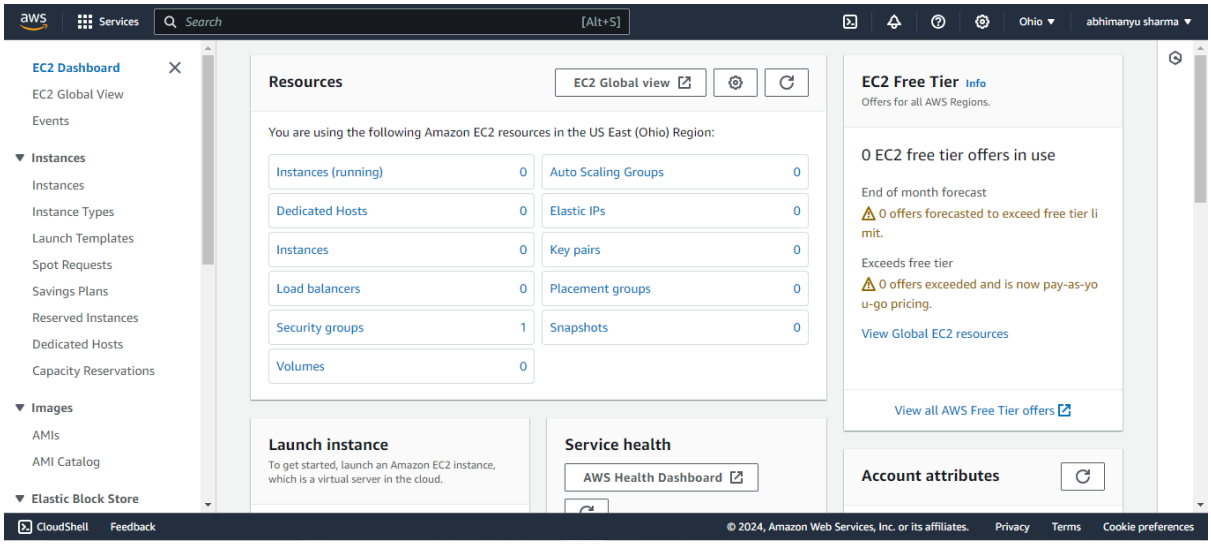
Host website on EC2-AWS

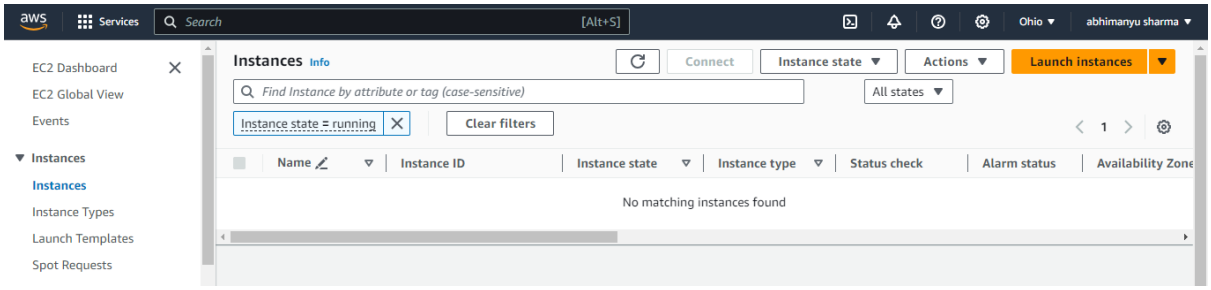
To launch a website, we must follow a three-stage process:
1) In the AWS Management Console, launch a web server (EC2 instance).
2) Connect the server to our remote client or shell.
3) Launch the website from the client or shell.

1) In AWS Console we need to launch one webserver (EC2)

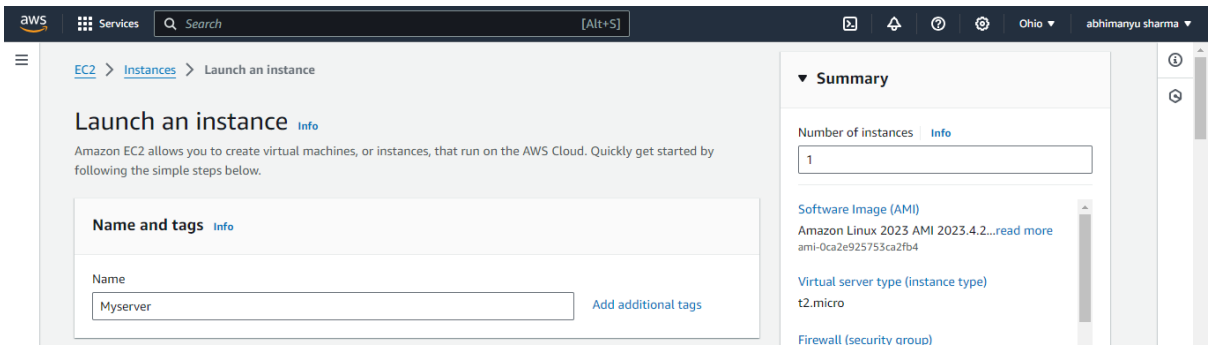
a) Sign into the AWS Management Console using your credentials



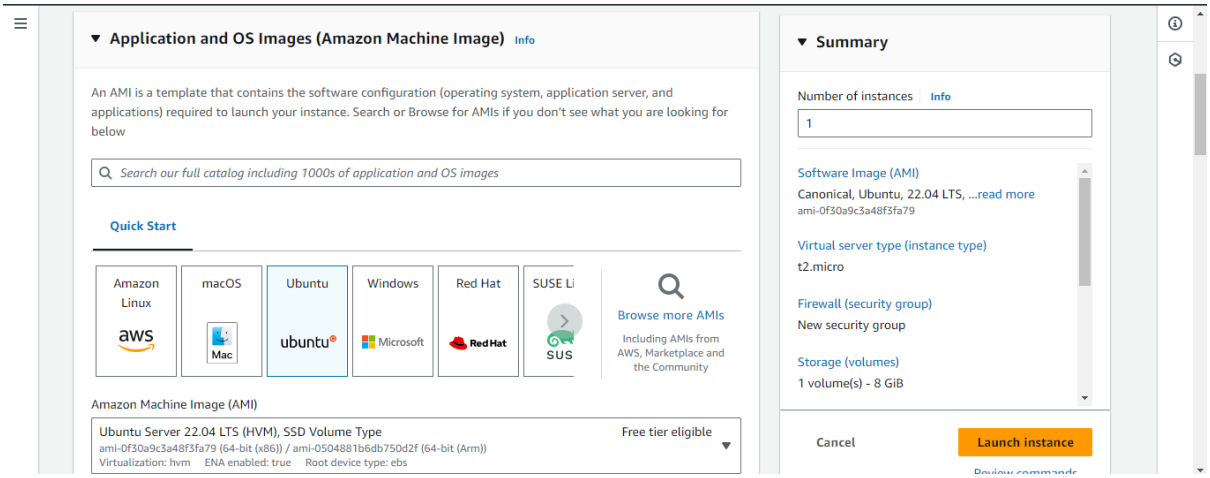
b) Launch Instances by clicking the Launch Instances



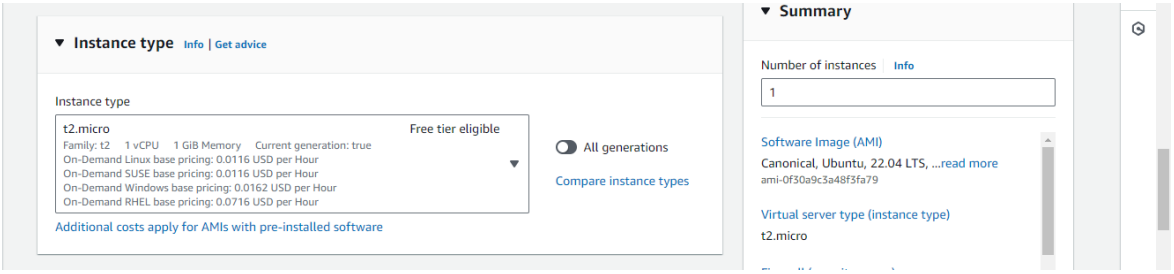
c) Give Name to the instance



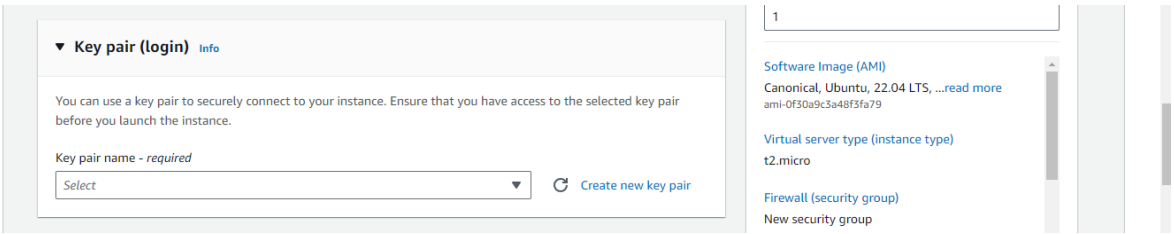
d) Select AMI right now I am going for Ununtu 22.04 LTS version and make sure you are selecting for free tier only



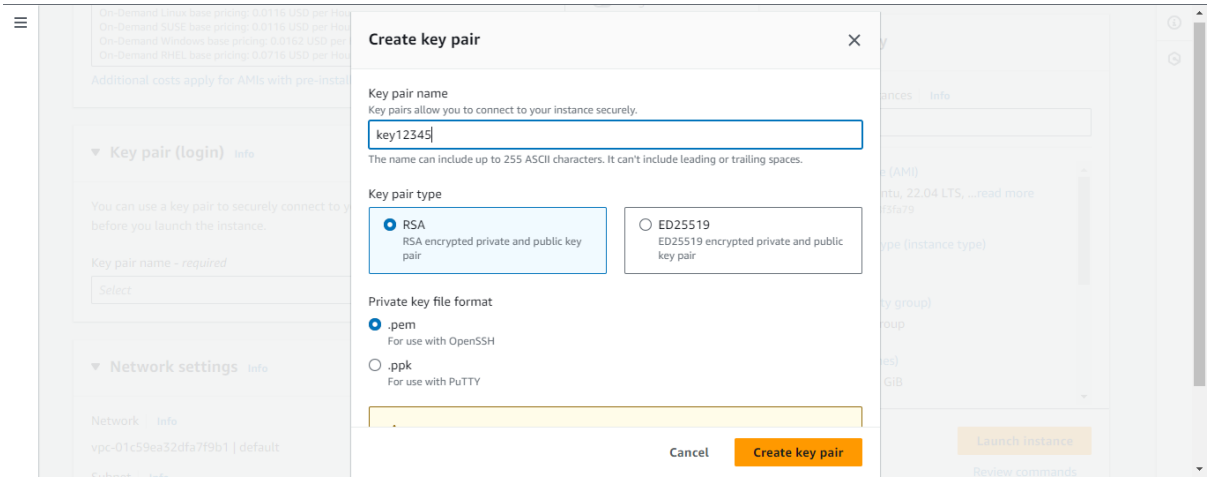
e) Select Instance Type and I am going for t2.micro and select free tier only otherwise it will generate bill to your account

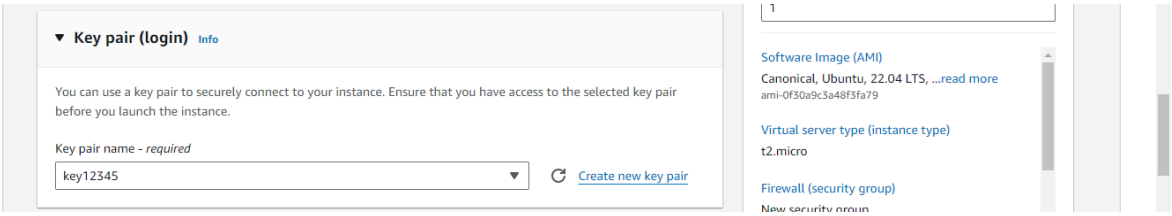


f) Create New key pair or select your key pair

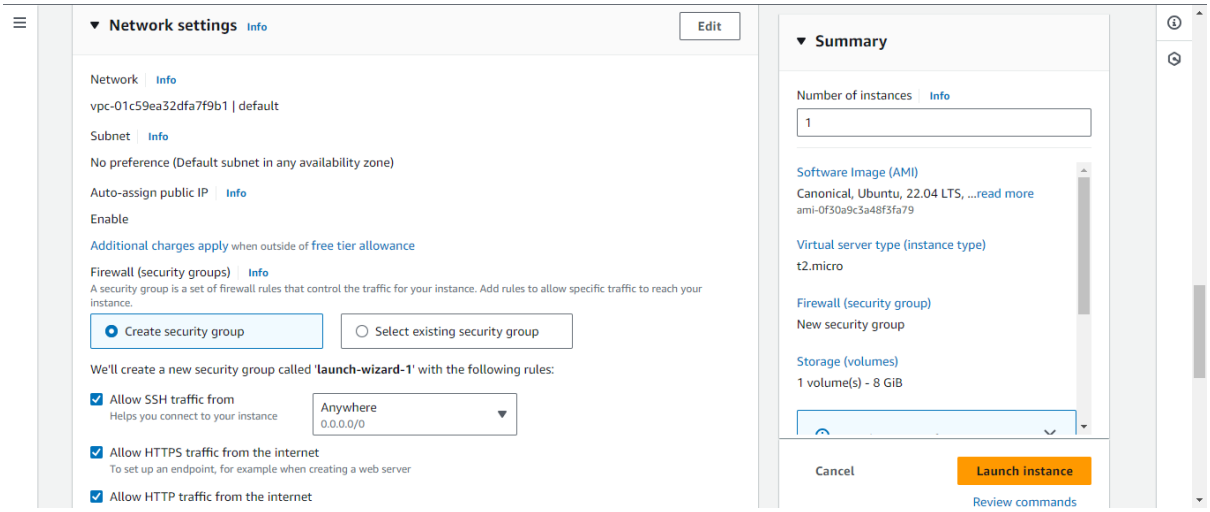


select .pem only when you are using openSSH or having higher version of windows like 8,9,11 if you having less then these version then you need to use .ppk or when you are using putty.

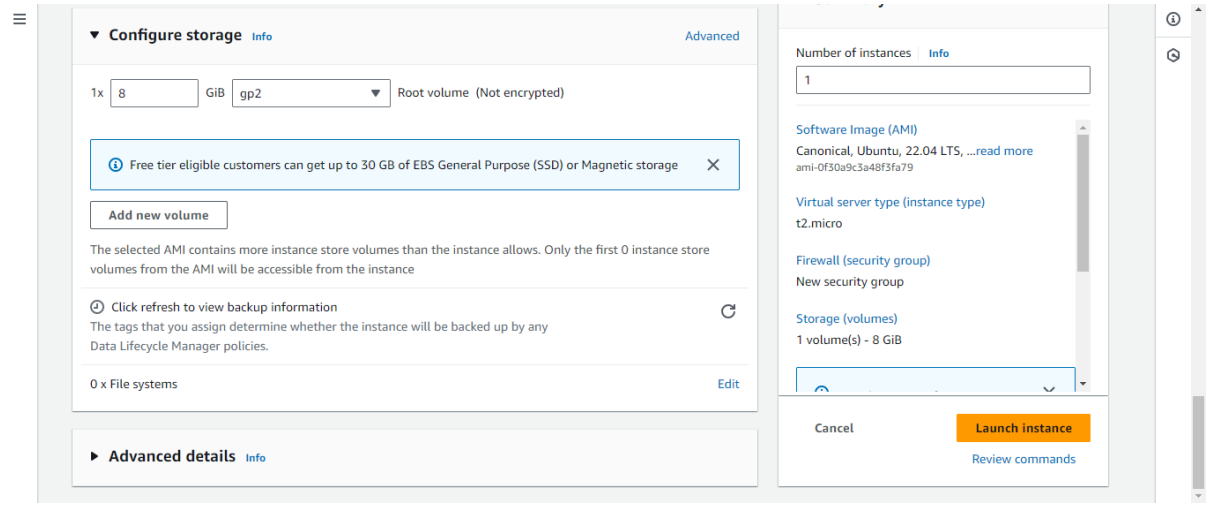


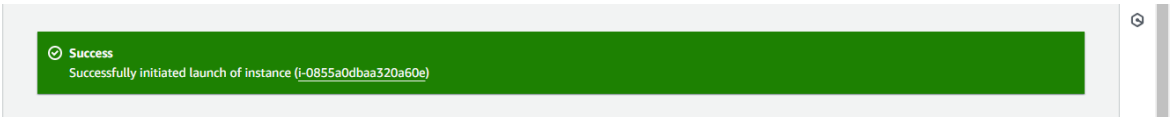


g) In Network Setting allow HTTPS, HTTP and SSH traffic to connet to the server

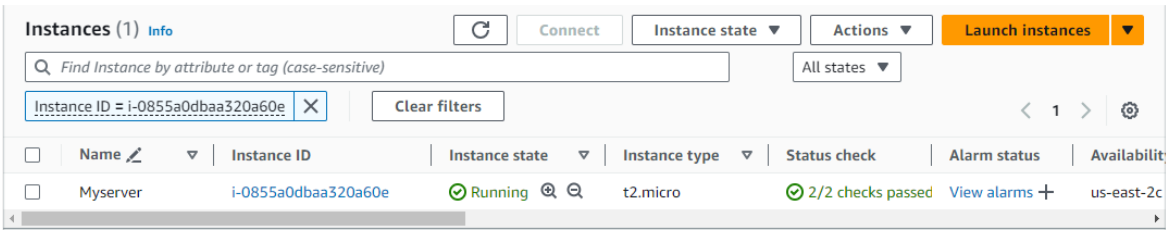


h) leave the configure storage and advanced section by default and Launch Instance



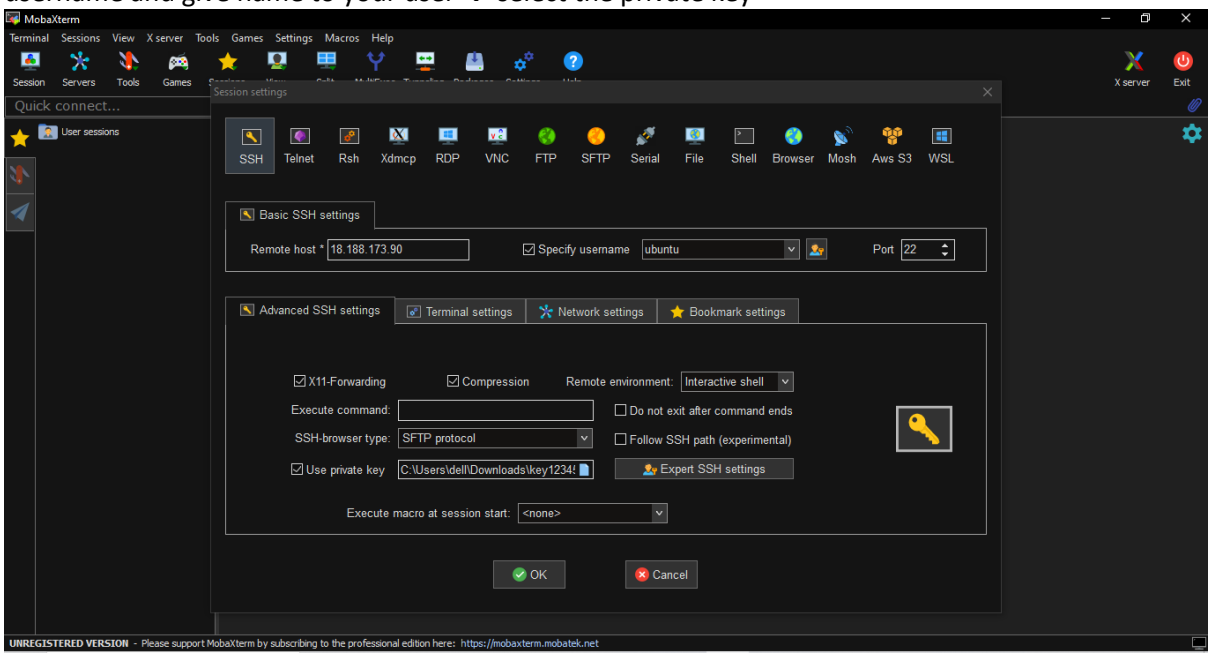


g) just wait for 1-2 min. your server will be live

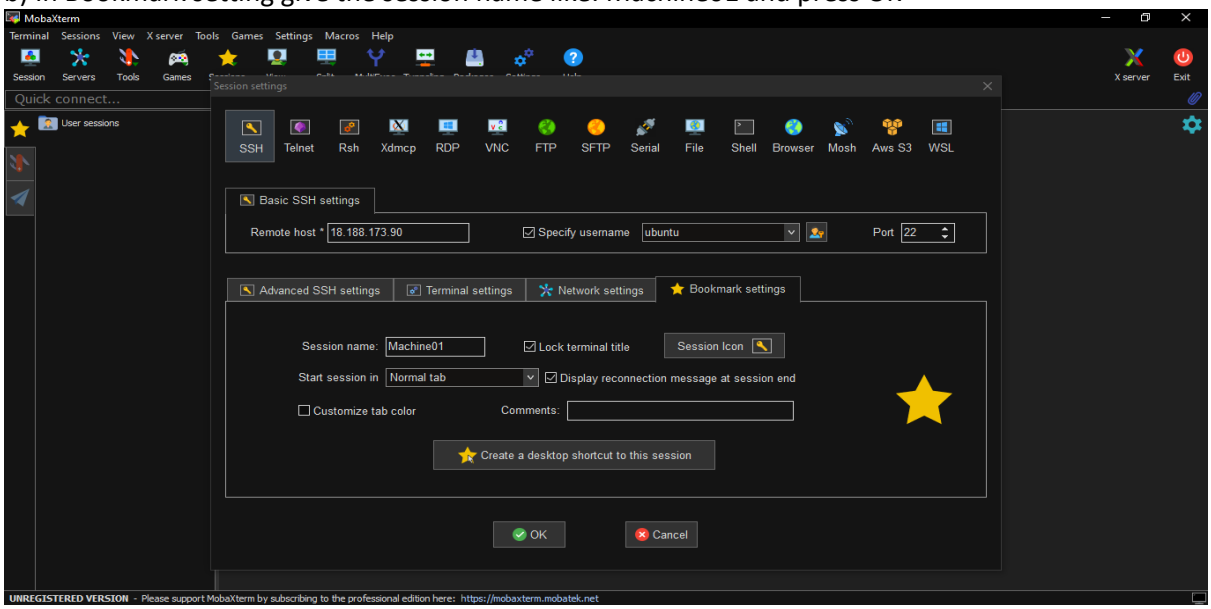


2) We need to connect server to our remote client (MobaXterm) or shell

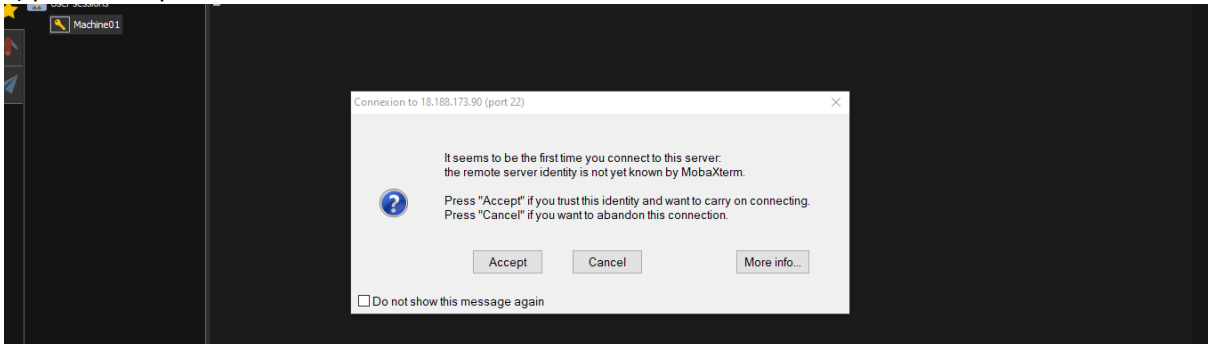
a) Click on Session → SSH → In Remote host give **public IP** from your EC2 server → select Specify username and give name to your user → select the private key



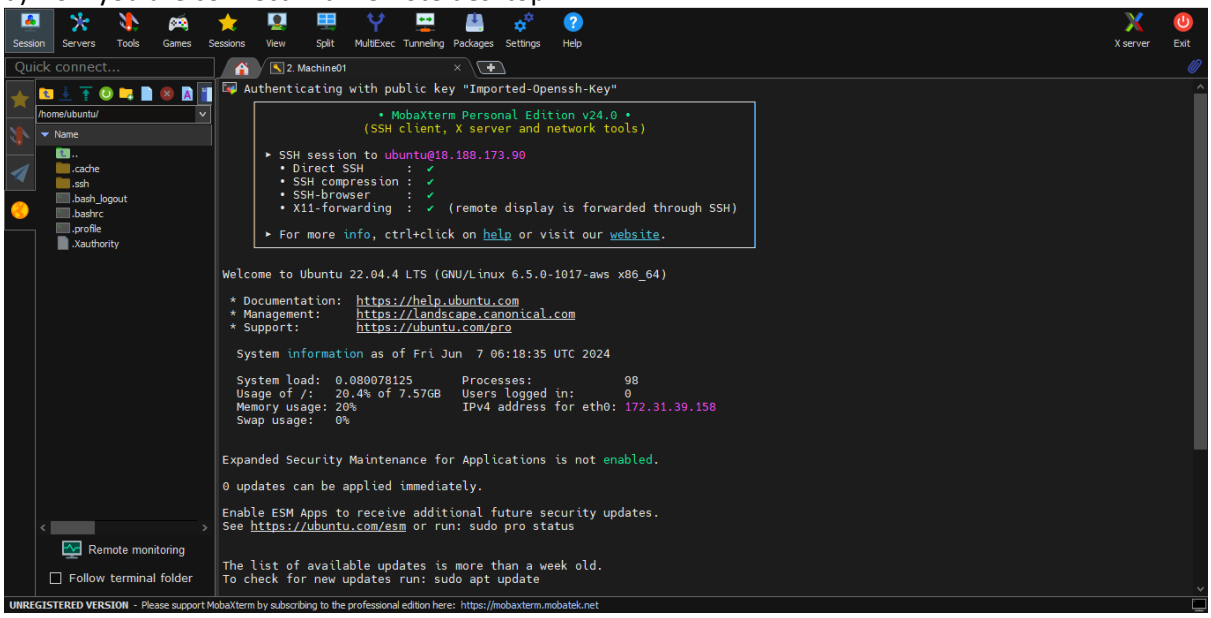
b) In Bookmark setting give the session name like: Machine01 and press OK



c) press Accept

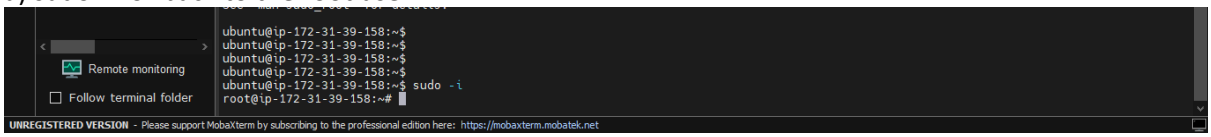


d) Now you are connect with remote desktop

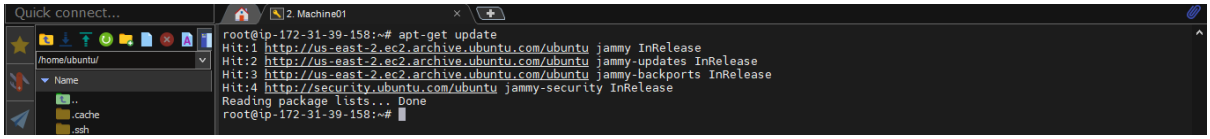


3) From client/shell we will launch website

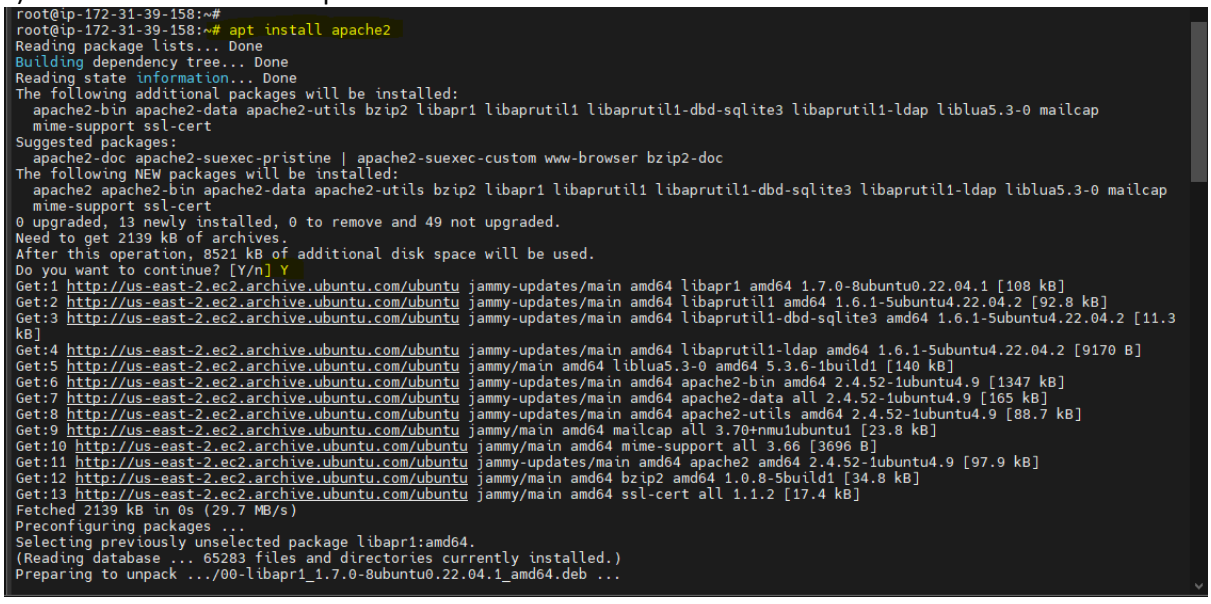
a) sudo -i for back to the root user



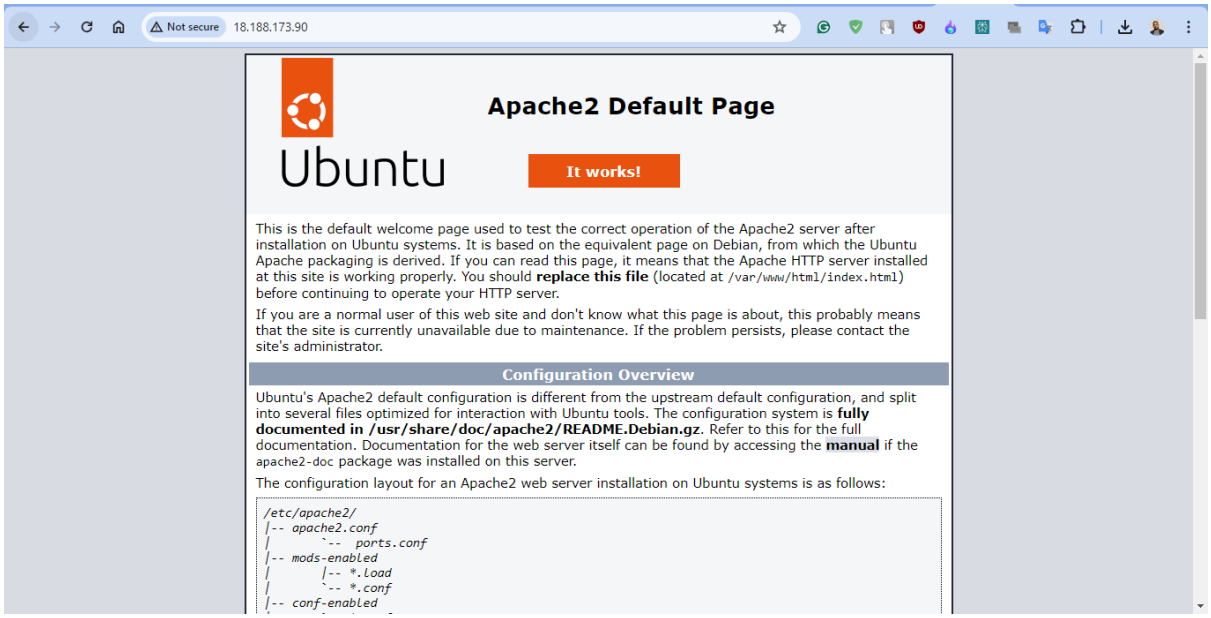
b) update the system



c) now we need to install apache webserver to our instance



d) copy your publi IP and paste in new tab your will able to see apache webser is install successfully.



e) we need to start our demain and enable it then check the status

```
root@ip-172-31-39-158:~# systemctl restart apache2
root@ip-172-31-39-158:~# systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
root@ip-172-31-39-158:~# systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2024-06-07 06:56:55 UTC; 45s ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 3096 (apache2)
      Tasks: 55 (limit: 1121)
     Memory: 4.8M
        CPU: 28ms
     CGroup: /system.slice/apache2.service
             ├─3096 /usr/sbin/apache2 -k start
             ├─3097 /usr/sbin/apache2 -k start
             └─3098 /usr/sbin/apache2 -k start

Jun 07 06:56:55 ip-172-31-39-158 systemd[1]: Starting The Apache HTTP Server...
Jun 07 06:56:55 ip-172-31-39-158 systemd[1]: Started The Apache HTTP Server.
root@ip-172-31-39-158:~#
```

f) we need one website to host so we are downloading for internet

```
2. Machine01
root@ip-172-31-39-158:~# wget https://www.free-css.com/assets/files/free-css-templates/download/page296/finexo.zip
--2024-06-07 07:04:43--  https://www.free-css.com/assets/files/free-css-templates/download/page296/finexo.zip
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:f000::28f
Connecting to www.free-css.com (www.free-css.com)|217.160.0.242|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2094048 (2.0M) [application/zip]
Saving to: 'finexo.zip'

finexo.zip                      100%[=============================================================>]   2.00M  2.15MB/s    in 0.9s

2024-06-07 07:04:45 (2.15 MB/s) - 'finexo.zip' saved [2094048/2094048]
```

g) check it is there or not

```
root@ip-172-31-39-158:~# ls
finexo.zip  snap
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
```

h) now we need to unzip the file

```
root@ip-172-31-39-158:~# unzip finexo.zip
Command 'unzip' not found, but can be installed with:
apt install unzip
root@ip-172-31-39-158:~# unzip finexo.zip
Command 'unzip' not found, but can be installed with:
apt install unzip
root@ip-172-31-39-158:~# apt install unzip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  zip
The following NEW packages will be installed:
  unzip
0 upgraded, 1 newly installed, 0 to remove and 49 not upgraded.
Need to get 175 kB of archives.
After this operation, 386 kB of additional disk space will be used.
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 unzip amd64 6.0-26ubuntu3.2 [175 kB]
Fetched 175 kB in 0s (9082 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 66052 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-26ubuntu3.2_amd64.deb ...
Unpacking unzip (6.0-26ubuntu3.2) ...
Setting up unzip (6.0-26ubuntu3.2) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
```

i) now again check

```
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~# ls
finexo-html  finexo.zip  snap
root@ip-172-31-39-158:~#
```

j) move file to /var/www/html

```
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~# cd finexo-html/
root@ip-172-31-39-158:~/finexo-html# ls
about.html  css  fonts  images  index.html  js  service.html  team.html  why.html
root@ip-172-31-39-158:~/finexo-html#
root@ip-172-31-39-158:~/finexo-html#
root@ip-172-31-39-158:~/finexo-html#
root@ip-172-31-39-158:~/finexo-html#
root@ip-172-31-39-158:~/finexo-html#
root@ip-172-31-39-158:~/finexo-html# mv * /var/www/html/
root@ip-172-31-39-158:~/finexo-html# cd
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~#
root@ip-172-31-39-158:~# cd /var/www/html/
root@ip-172-31-39-158:/var/www/html#
root@ip-172-31-39-158:/var/www/html#
root@ip-172-31-39-158:/var/www/html#
root@ip-172-31-39-158:/var/www/html#
root@ip-172-31-39-158:/var/www/html# ls
about.html  css  fonts  images  index.html  js  service.html  team.html  why.html
root@ip-172-31-39-158:/var/www/html#
```

k) Copy public IP and paste in Google Chrome
Now your website is live