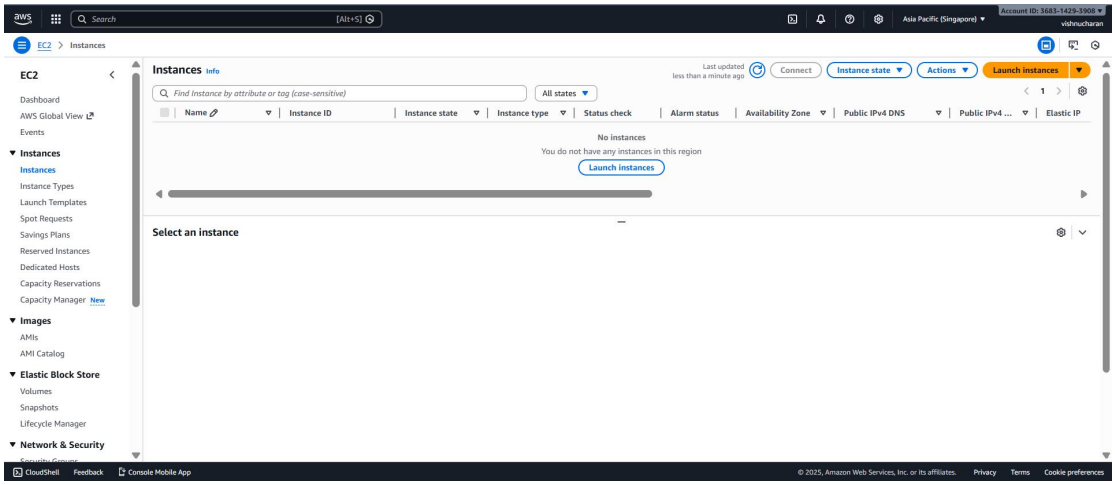
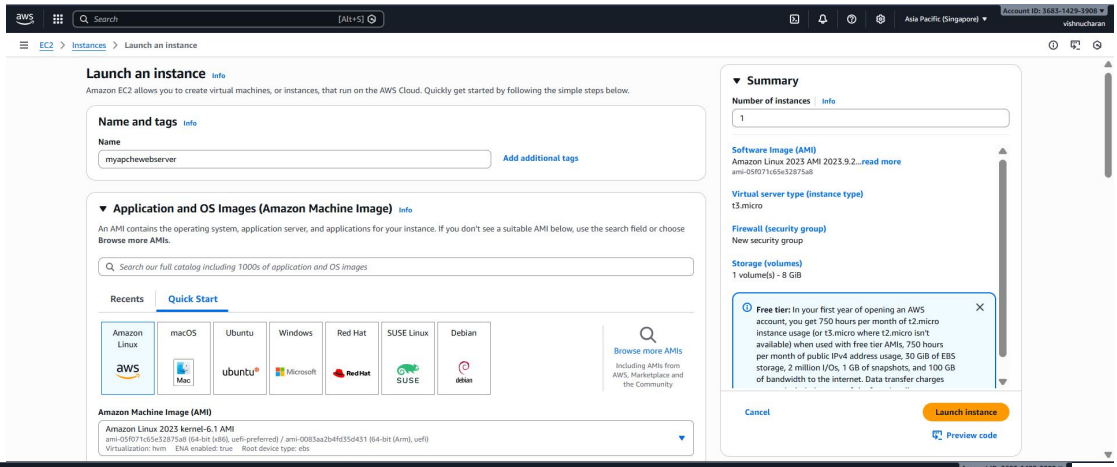
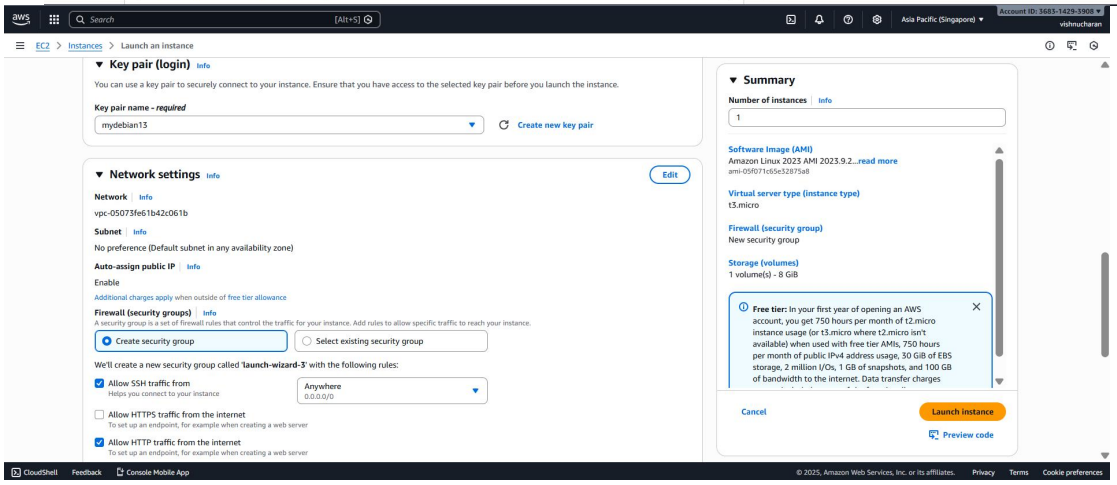
EC2-based Web Server – Configure Apache/Nginx on an EC2 instance

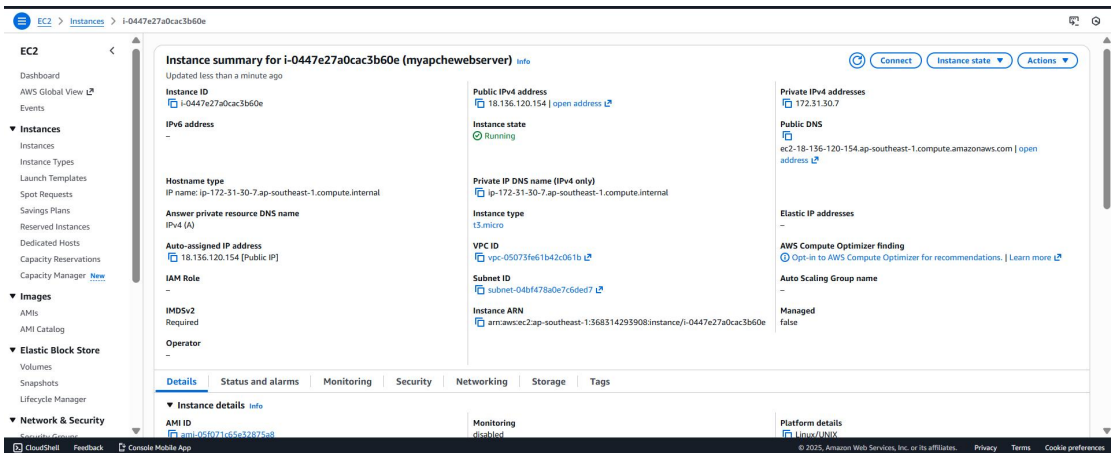
1. Login to AWS Console
2. Go to EC2 → Launch Instance



3. Name — Myapachewebserver
   AMI — Amazon Linux 2 (recommended)
   Instance Type — t2.micro (Free Tier)
   Key Pair — Create or select existing
   Security Group — Allow 22 (SSH) and 80 (HTTP)







4. SSH into the instance using the public IP.

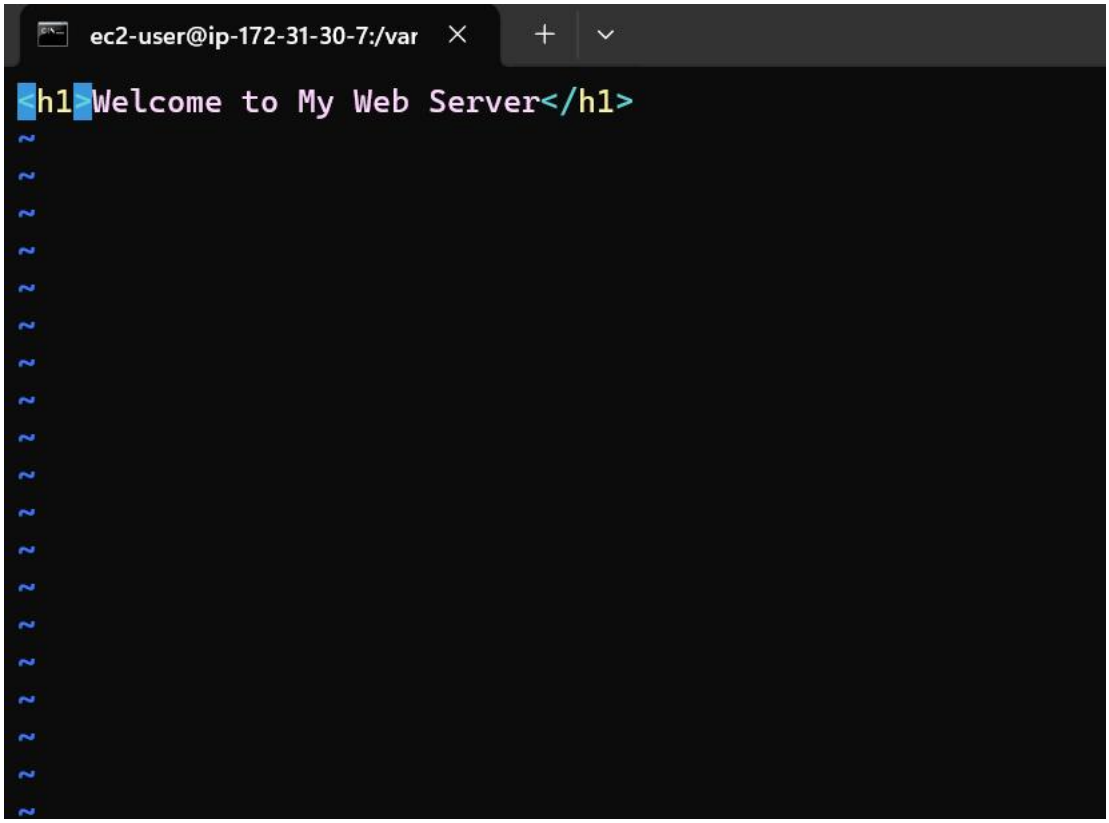
```
C:\Users\017933\Downloads>ssh -i mydebian13.pem ec2-user@18.136.120.154
       #_
    ~\_  ####_        Amazon Linux 2023
   ~~  \_#####\
   ~~     \###|
   ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
    ~~       V~' '->
     ~~~         /
       ~~._.   _/
          _/ _/
        _/m/'
[ec2-user@ip-172-31-30-7 ~]$
```

5. Installing Apache using the below commands

```
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
[ec2-user@ip-172-31-30-7 ~]$ sudo yum update -y
sudo yum install httpd -y
sudo systemctl start httpd
sudo systemctl enable httpd
sudo systemctl status httpd

Amazon Linux 2023 Kernel Livepatch repository                                    262 kB/s |  29 kB     00:00
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:00:01 ago on Mon Dec 22 08:43:26 2025.
Dependencies resolved.
================================================================================================================================
 Package                         Architecture          Version                          Repository                       Size
================================================================================================================================
Installing:
 httpd                           x86_64                2.4.65-1.amzn2023.0.2            amazonlinux                      47 k
Installing dependencies:
 apr                             x86_64                1.7.5-1.amzn2023.0.4             amazonlinux                     129 k
 apr-util                        x86_64                1.6.3-1.amzn2023.0.2             amazonlinux                      97 k
 apr-util-lmdb                   x86_64                1.6.3-1.amzn2023.0.2             amazonlinux                      13 k
 generic-logos-httpd             noarch                18.0.0-12.amzn2023.0.3           amazonlinux                      19 k
 httpd-core                      x86_64                2.4.65-1.amzn2023.0.2            amazonlinux                     1.4 M
 httpd-filesystem                noarch                2.4.65-1.amzn2023.0.2            amazonlinux                      13 k
 httpd-tools                     x86_64                2.4.65-1.amzn2023.0.2            amazonlinux                      81 k
 libbrotli                       x86_64                1.0.9-4.amzn2023.0.2             amazonlinux                     315 k
 mailcap                         noarch                2.1.49-3.amzn2023.0.3            amazonlinux                      33 k
Installing weak dependencies:
```

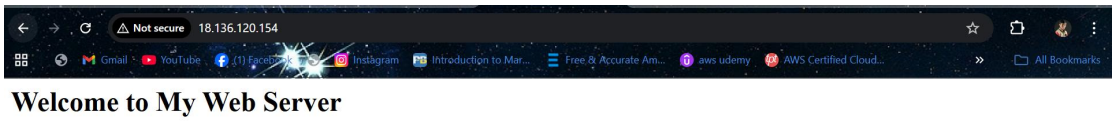
```
  Verifying        : mod_lua-2.4.65-1.amzn2023.0.2.x86_64                                                        13/13

Installed:
  apr-1.7.5-1.amzn2023.0.4.x86_64                          apr-util-1.6.3-1.amzn2023.0.2.x86_64
  apr-util-lmdb-1.6.3-1.amzn2023.0.2.x86_64                apr-util-openssl-1.6.3-1.amzn2023.0.2.x86_64
  generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch        httpd-2.4.65-1.amzn2023.0.2.x86_64
  httpd-core-2.4.65-1.amzn2023.0.2.x86_64                  httpd-filesystem-2.4.65-1.amzn2023.0.2.noarch
  httpd-tools-2.4.65-1.amzn2023.0.2.x86_64                 libbrotli-1.0.9-4.amzn2023.0.2.x86_64
  mailcap-2.1.49-3.amzn2023.0.3.noarch                     mod_http2-2.0.27-1.amzn2023.0.3.x86_64
  mod_lua-2.4.65-1.amzn2023.0.2.x86_64

Complete!
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
● httpd.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Mon 2025-12-22 08:43:31 UTC; 494ms ago
       Docs: man:httpd.service(8)
   Main PID: 3260 (httpd)
     Status: "Started, listening on: port 80"
      Tasks: 177 (limit: 1067)
     Memory: 13.4M
        CPU: 57ms
     CGroup: /system.slice/httpd.service
             ├─3260 /usr/sbin/httpd -DFOREGROUND
             ├─3379 /usr/sbin/httpd -DFOREGROUND
             ├─3383 /usr/sbin/httpd -DFOREGROUND
             ├─3384 /usr/sbin/httpd -DFOREGROUND
             └─3439 /usr/sbin/httpd -DFOREGROUND

Dec 22 08:43:30 ip-172-31-30-7.ap-southeast-1.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 22 08:43:31 ip-172-31-30-7.ap-southeast-1.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 22 08:43:31 ip-172-31-30-7.ap-southeast-1.compute.internal httpd[3260]: Server configured, listening on: port 80
[ec2-user@ip-172-31-30-7 ~]$
```

6. Create a basic html file and save/move it to /var/www/html/ path.




```
Dec 22 08:43:30 ip-172-31-30-7.ap-southeast-1.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Dec 22 08:43:31 ip-172-31-30-7.ap-southeast-1.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Dec 22 08:43:31 ip-172-31-30-7.ap-southeast-1.compute.internal httpd[3260]: Server configured, listening on: port 80
[ec2-user@ip-172-31-30-7 ~]$ sudo echo "<h1>Welcome to My Apache Web Server</h1>" > /var/www/html/index.html
-bash: /var/www/html/index.html: Permission denied
[ec2-user@ip-172-31-30-7 ~]$ vi index.html
[ec2-user@ip-172-31-30-7 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-30-7 html]$ ls -al
total 0
drwxr-xr-x. 2 root root  6 Oct 14 20:54 .
drwxr-xr-x. 4 root root 33 Dec 22 08:43 ..
[ec2-user@ip-172-31-30-7 html]$ cd
[ec2-user@ip-172-31-30-7 ~]$ sudo mv index.html /var/www/html/
[ec2-user@ip-172-31-30-7 ~]$ ls -al
total 16
drwx------. 3 ec2-user ec2-user  90 Dec 22 08:47 .
drwxr-xr-x. 3 root     root      22 Dec 22 08:37 ..
-rw-r--r--. 1 ec2-user ec2-user  18 Jan 28  2023 .bash_logout
-rw-r--r--. 1 ec2-user ec2-user 141 Jan 28  2023 .bash_profile
-rw-r--r--. 1 ec2-user ec2-user 492 Jan 28  2023 .bashrc
drwx------. 2 ec2-user ec2-user  29 Dec 22 08:37 .ssh
-rw-------. 1 ec2-user ec2-user 746 Dec 22 08:46 .viminfo
[ec2-user@ip-172-31-30-7 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-30-7 html]$ ls -al
total 4
drwxr-xr-x. 2 root     root     24 Dec 22 08:47 .
drwxr-xr-x. 4 root     root     33 Dec 22 08:43 ..
-rw-r--r--. 1 ec2-user ec2-user 34 Dec 22 08:46 index.html
[ec2-user@ip-172-31-30-7 html]$
```

7. Browse using our public IP in our browser [http://18.136.120.154/.](http://18.136.120.154/)



8. Enabling my httpd (apache services) so that my web server will start automatically after reboot.

```
[ec2-user@ip-172-31-30-7 html]$ sudo systemctl enable httpd
[ec2-user@ip-172-31-30-7 html]$
```