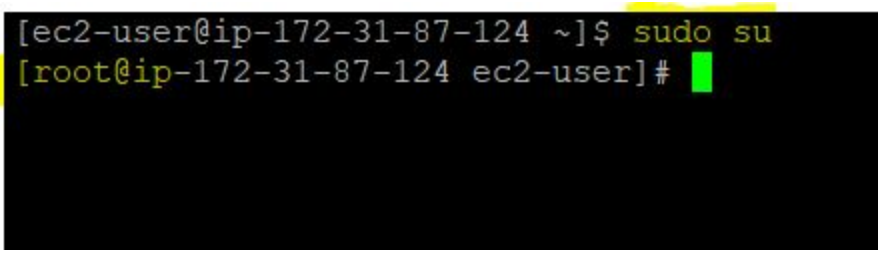
# Hosting a Web Server

**Prerequisite:**

- Login to your EC2 instance

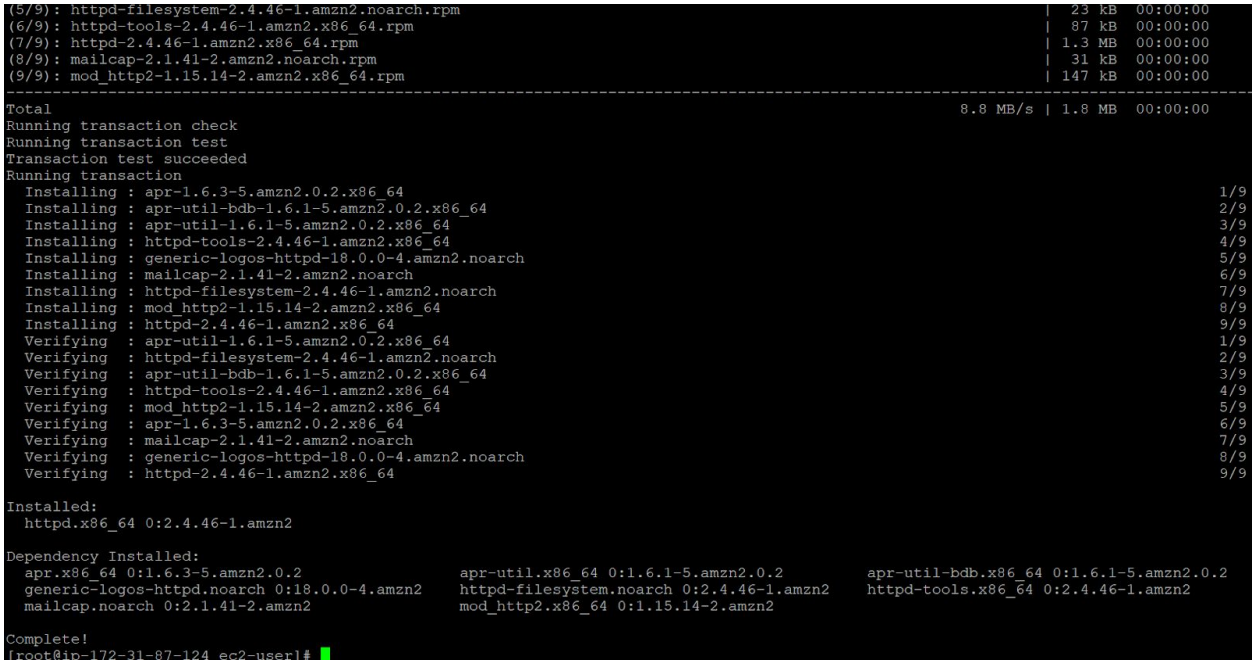
1. Once you have logged in to your EC2 instance, you need to install **Apache HTTP Server** on your EC2 instance. For this, you need to change the user. Enter the command **sudo su** to change the user to root user.




2. Once you have changed the user to root user, you need to run the following command to install the **Apache HTTP server**:

```
yum install httpd -y
```

Type in the above command and press **Enter**. This will install the **Apache HTTP Server**.




3. Next, you need to start this service. To do so you need to enter the following command:

```
service httpd start
```

To check whether the service has started or not, you can use the following command:

```
service httpd status
```

If you get the status as **active (running)** that means the service has successfully started.

```
[root@ip-172-31-87-124 ec2-user]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-87-124 ec2-user]# service httpd status
Redirecting to /bin/systemctl status httpd.service
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: active (running) since Thu 2021-01-14 14:21:49 UTC; 7s ago
     Docs: man:httpd.service(8)
 Main PID: 32558 (httpd)
   Status: "Processing requests..."
   CGroup: /system.slice/httpd.service
           ├─32558 /usr/sbin/httpd -DFOREGROUND
           ├─32559 /usr/sbin/httpd -DFOREGROUND
           ├─32560 /usr/sbin/httpd -DFOREGROUND
           ├─32561 /usr/sbin/httpd -DFOREGROUND
           ├─32562 /usr/sbin/httpd -DFOREGROUND
           └─32563 /usr/sbin/httpd -DFOREGROUND

Jan 14 14:21:49 ip-172-31-87-124.ec2.internal systemd[1]: Starting The Apache HTTP Server...
Jan 14 14:21:49 ip-172-31-87-124.ec2.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-172-31-87-124 ec2-user]#
```

4. Enter the following command to change the directory. You will be creating an **HTML** file in this directory.

```
cd /var/www/html
```

Type the above command and press **Enter**.

5. Now to create an HTML file, you would need to enter the following command:

```
vi index.html
```

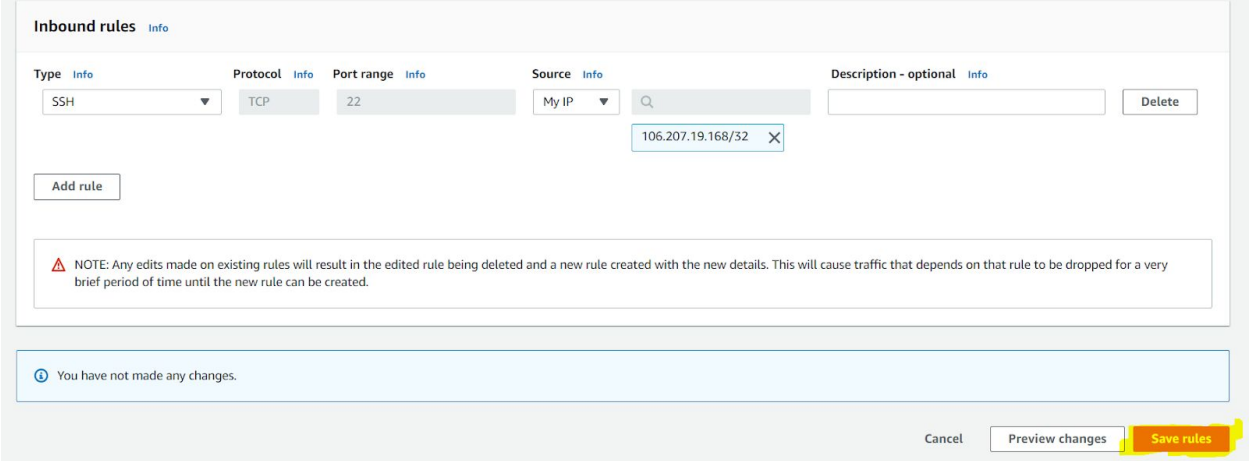
This will open **Vim**, a text editor.

6. Press **i** to enter into insert mode in this editor. Copy and paste the following code in this editor.

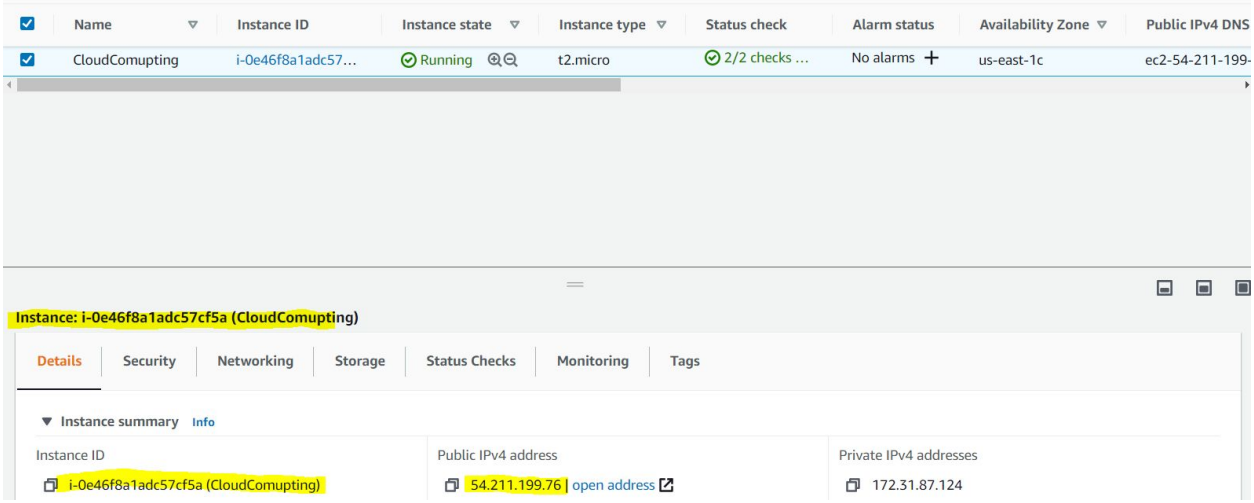
```
<html>
<body>
<h1>
Welcome to Upgrad!!
</h1>
</body>
</html>
```

Next, you need to press **esc** to come out of insert mode. Now to save the file, you need to type '**:wq**' and then press **Enter**.

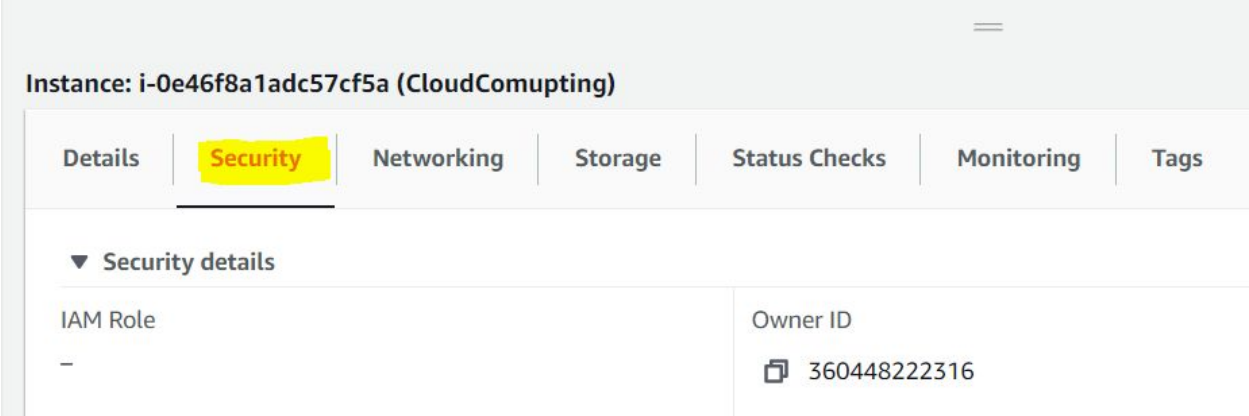
7. Now, you need to change the inbound rules and add a new rule for the **HTTP** server. Select the instance. Click on the checkbox next to the instance to select it.

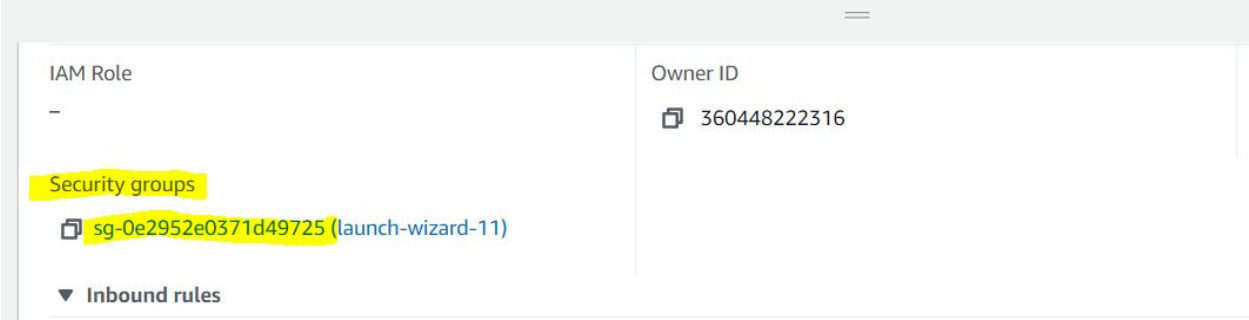



8. Once you have selected it, you will see the details of your instance below.

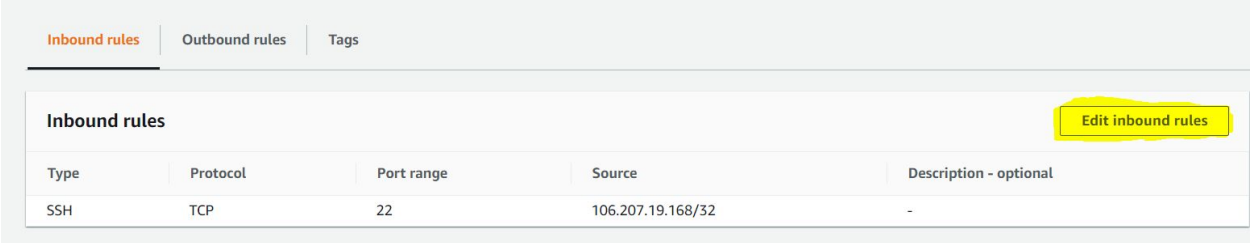



9. Click on the **Security** tab and scroll down until you see **Security groups** section. Click on the **name of the security group** as highlighted in the image below.

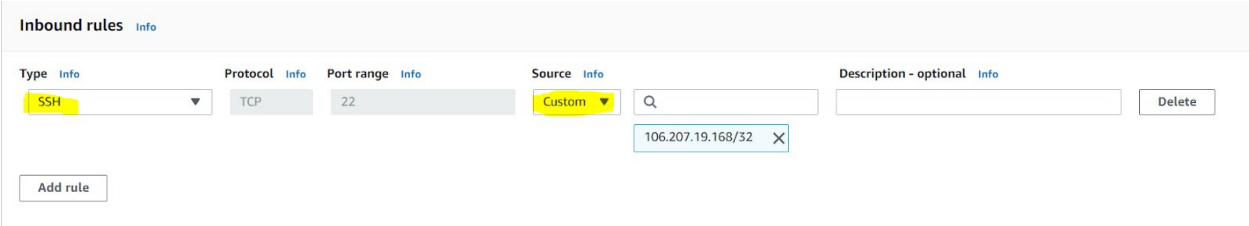


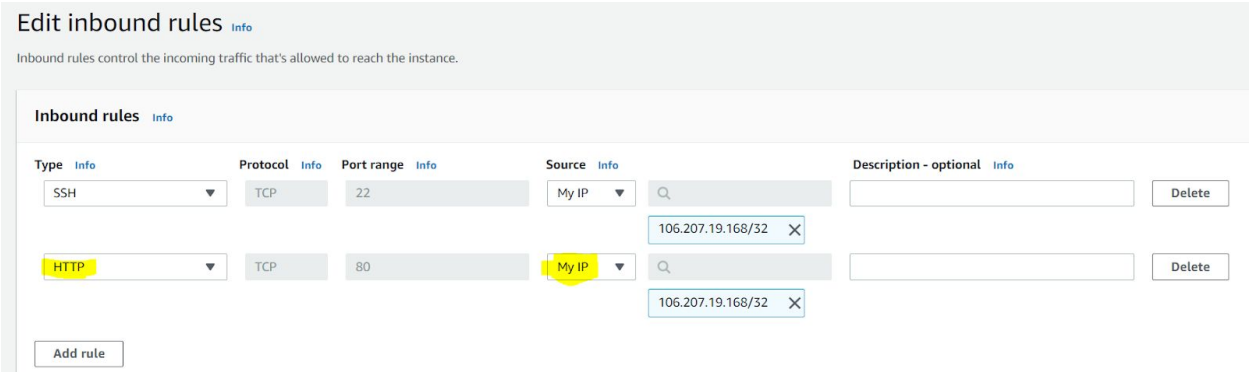

10. A new page will appear. On this page, you need to edit the inbound rules. Click on the **Edit inbound rules** button.



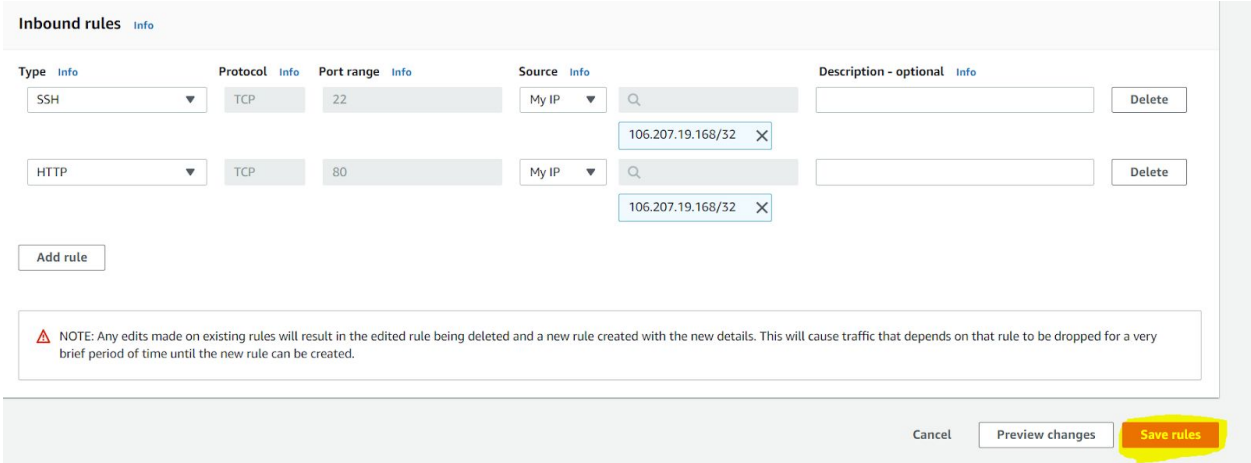

11. A new page will appear. On this page, you will see there is one rule for **SSH**.



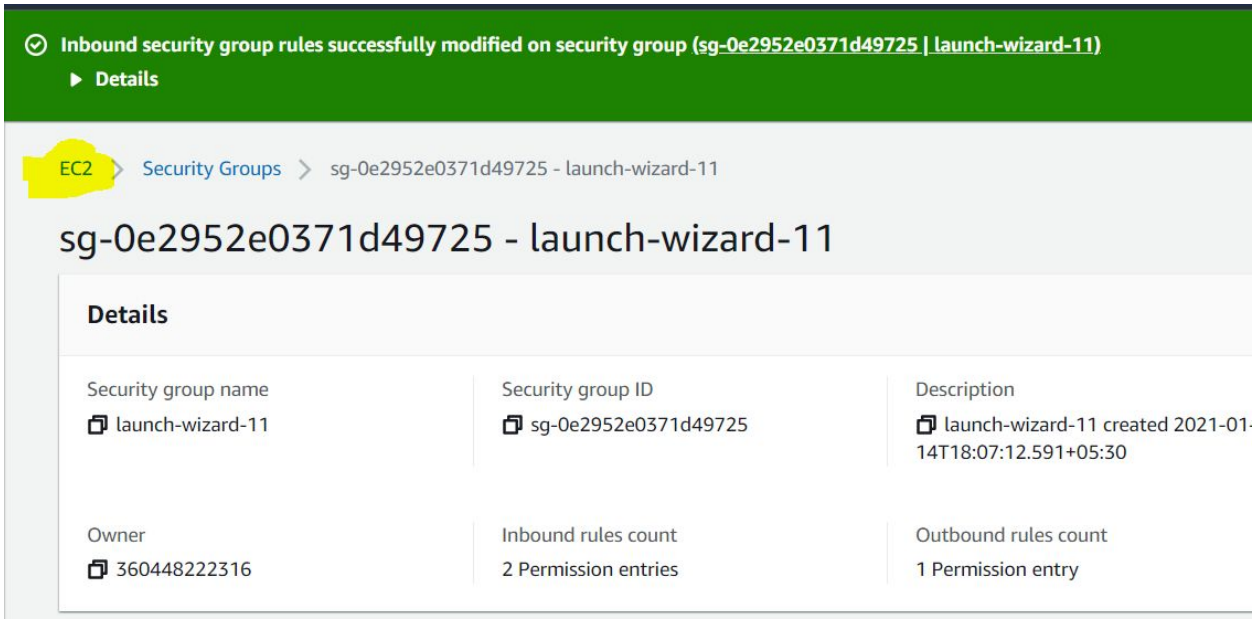
12. Click on **Add rule** and from the dropdown under **Type** section select **HTTP** and make sure that under the **Source** section the value selected is **My IP** as shown below.



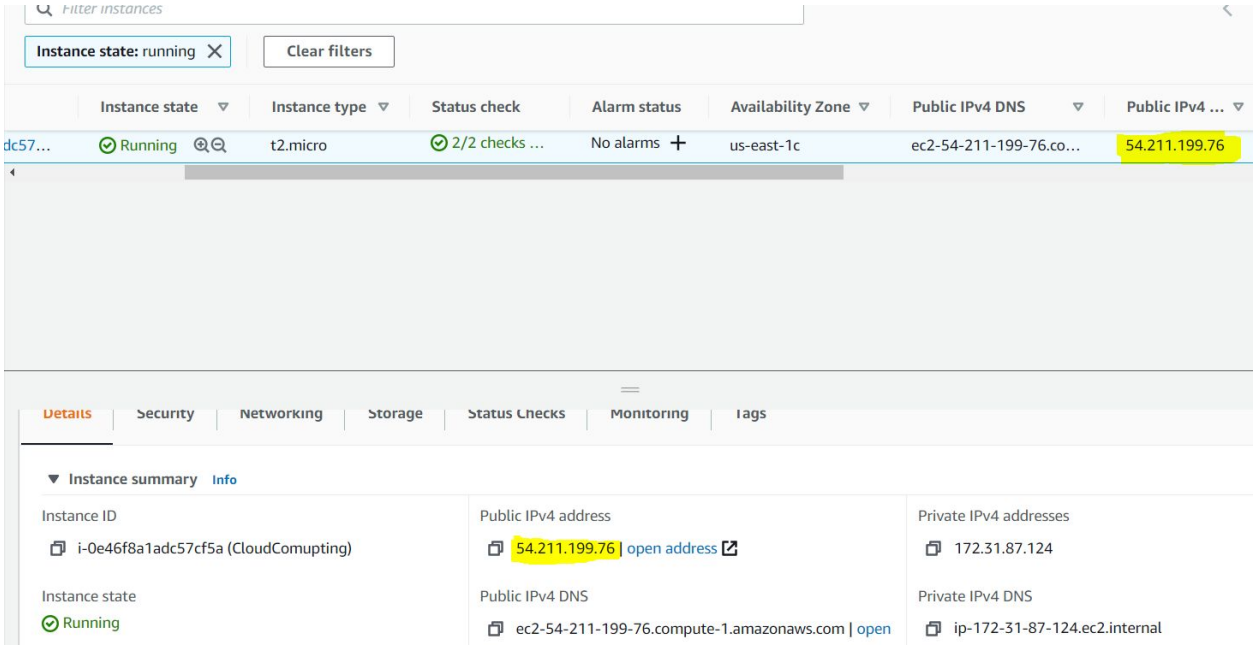

13. Once done click on **Save rules** button in the bottom right corner as shown below.




14. Now, open your EC2 dashboard. To open your EC2 dashboard click on EC2 as shown below.




15. Now select your EC2 instance and then copy the **'Public IPv4 address'** information as shown in the screenshot.




16. Open a new tab in your browser and paste this address. You will get a page as shown below.


With this, you have successfully hosted a simple web server on your EC2 instance.