ASSIGNMENT- III

Working and Implementation of Infrastructure as a service Create an EC2 Linux Instance, Install an Apache Web Server and run the Hello World page by typing commands on a virtual machine.

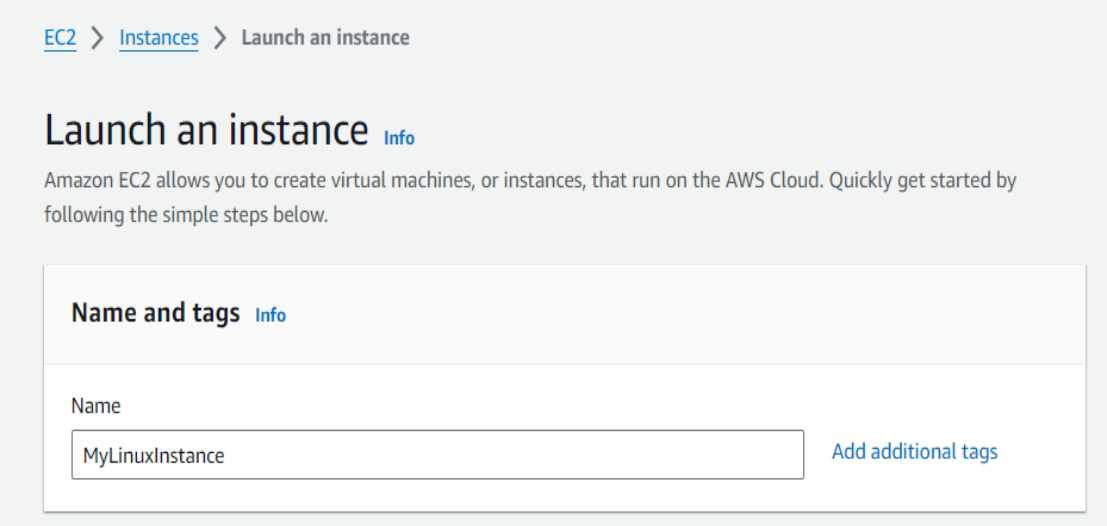
Step 1: Log in to AWS Management Console and Navigate to EC2 Dashboard

- In the search bar at the top, type "EC2" and select EC2 from the dropdown menu. This will take you to the EC2 Dashboard.

Step 2: Launch Instance

- On the EC2 Dashboard, click on the Launch instance button.

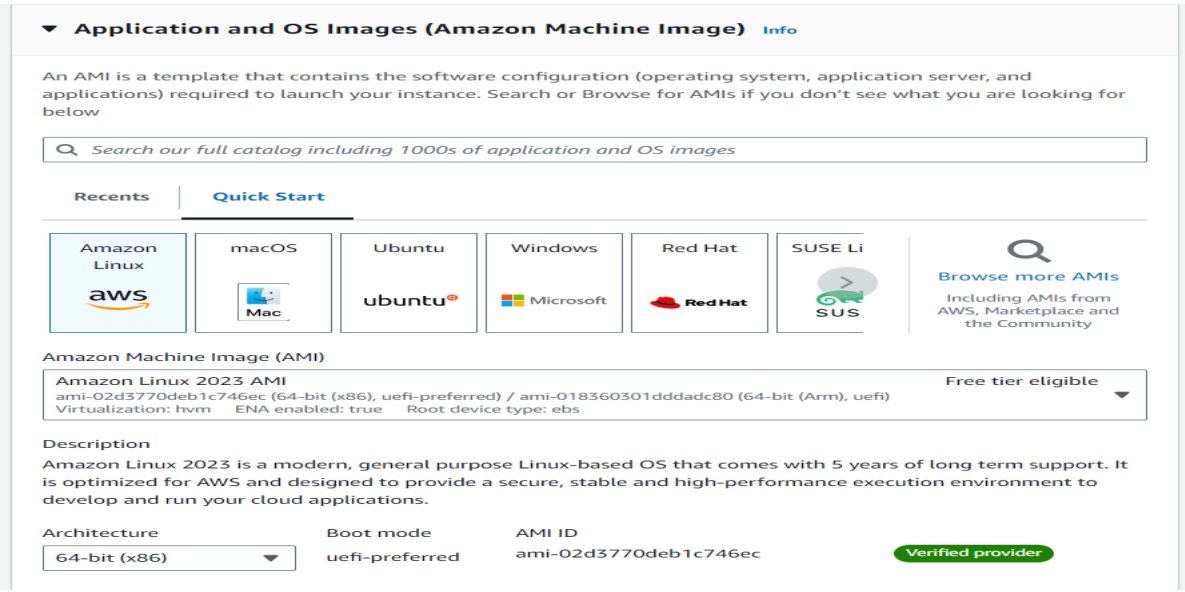
- Give your instance a name in the "Name and tags" section if desired.



Step 3: Choose an Amazon Machine Image (AMI)

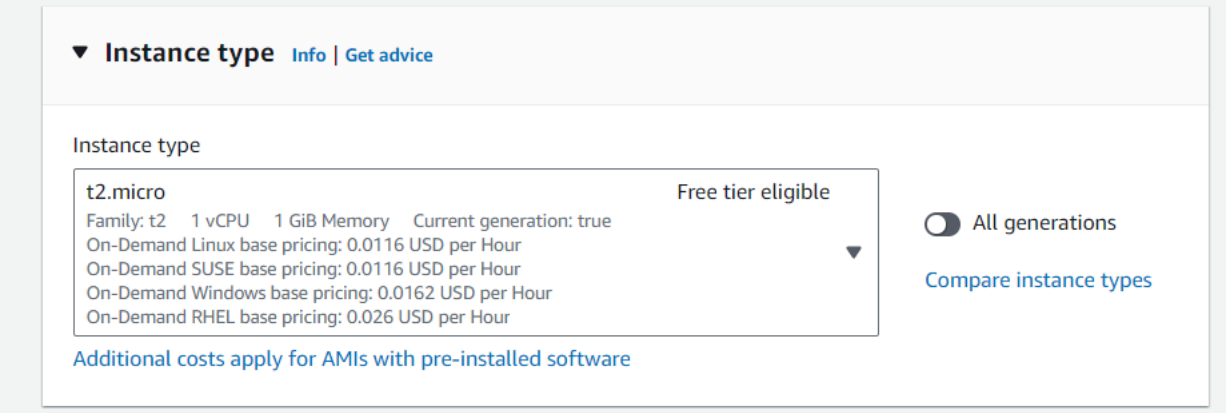
- Scroll down to the "Application and OS Images (Amazon Machine Image)" section.

- Select an AMI such as Amazon Linux AMI, SSD Volume Type.



Step 4: Choose an Instance Type

- Select an instance type that suits your needs, such as t2.micro(free tier eligible).



- Click on Next: Configure Instance Details.

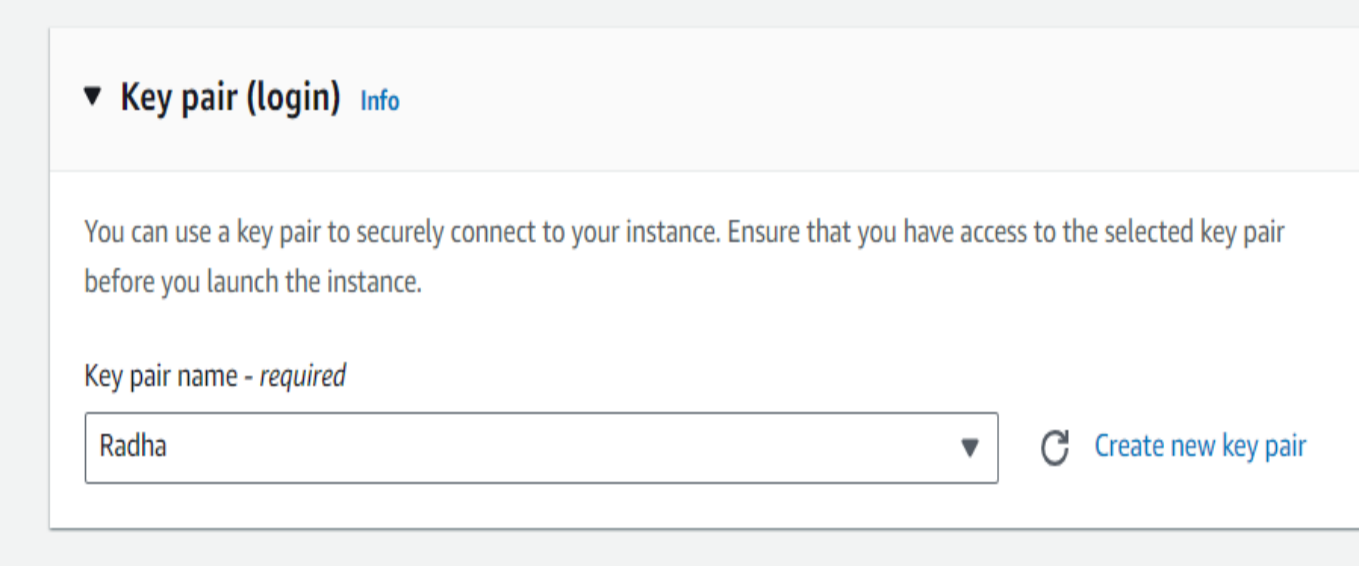
Step 5: Configure Instance Details

- You can leave the default settings or modify them according to your requirements.

- Click on Next: Add Storage.

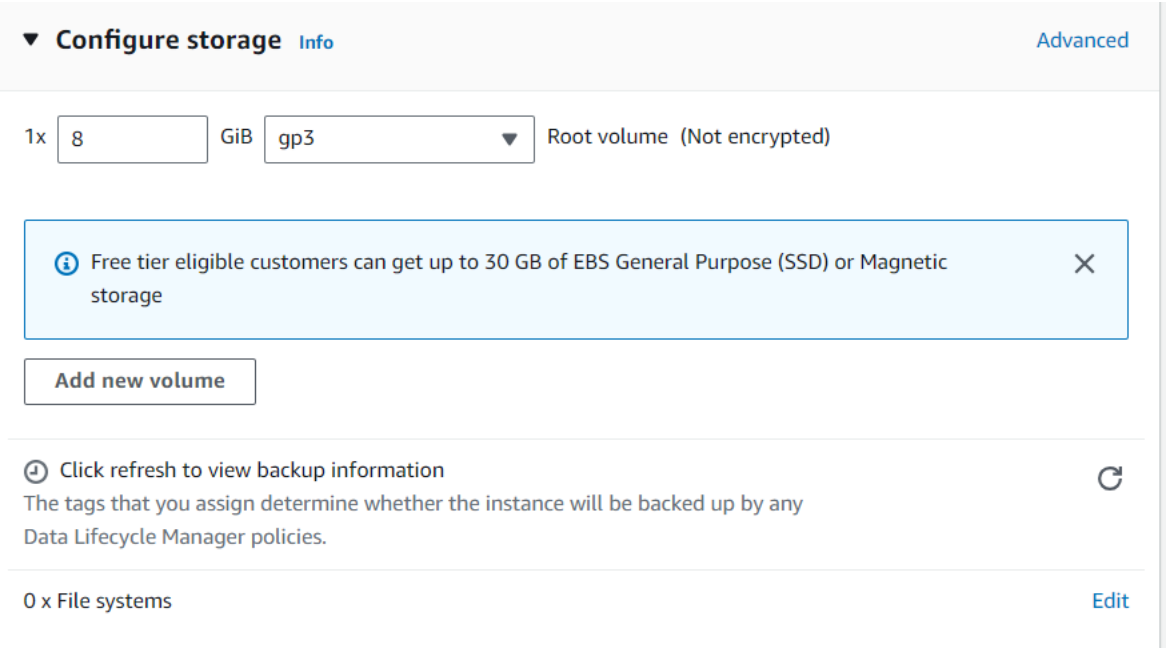
Step 6: Add Key Pair

- When prompted, create a new key pair named Radha or select an existing one.



Step 7: Add Storage

- The default storage configuration is usually sufficient. Modify the storage size if needed.



- Click on Next: Add Tags.

Step 8: Add Tags (Optional)

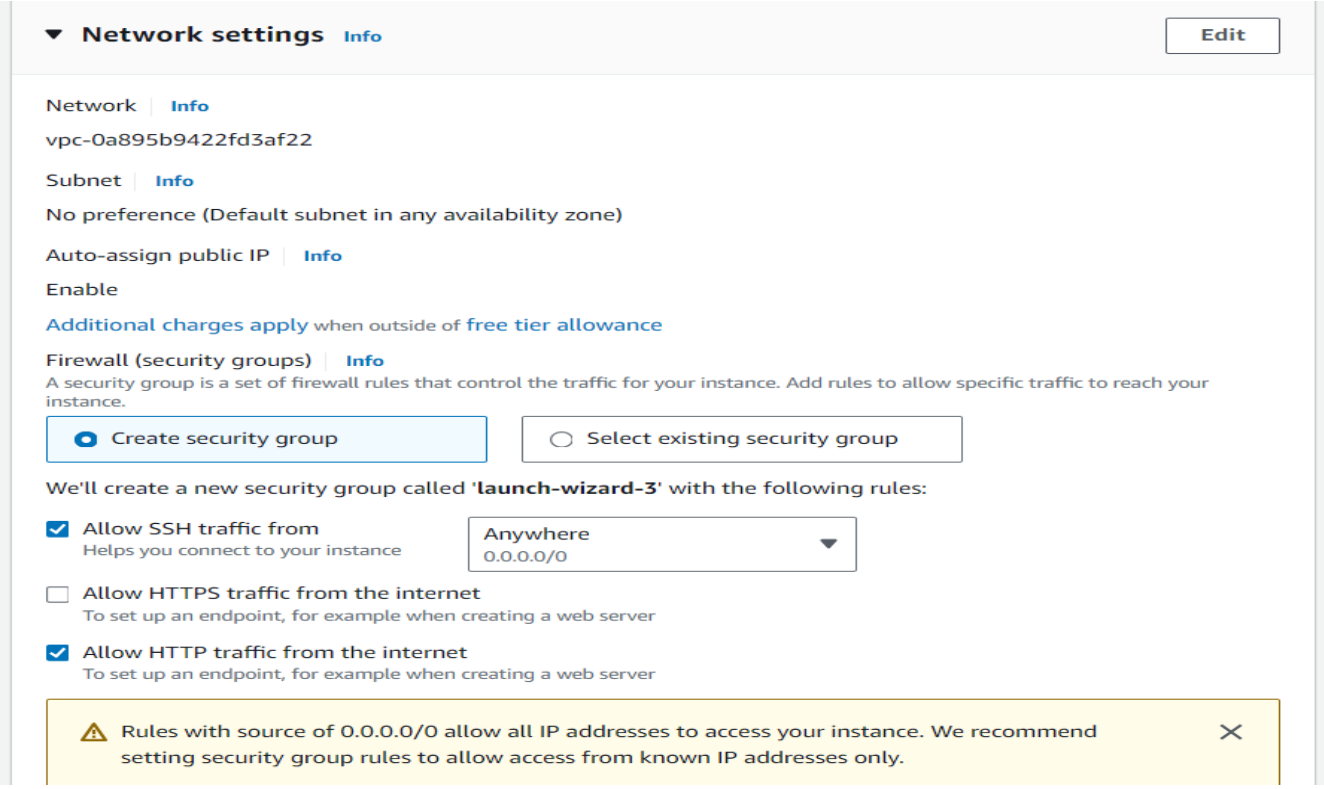
- Add tags to help identify your instance (e.g., key `Name` and value `MyLinuxInstance`).

- Click on Next: Configure Security Group.

Step 9: Configure Security Group

- Create a new security group or choose an existing one.

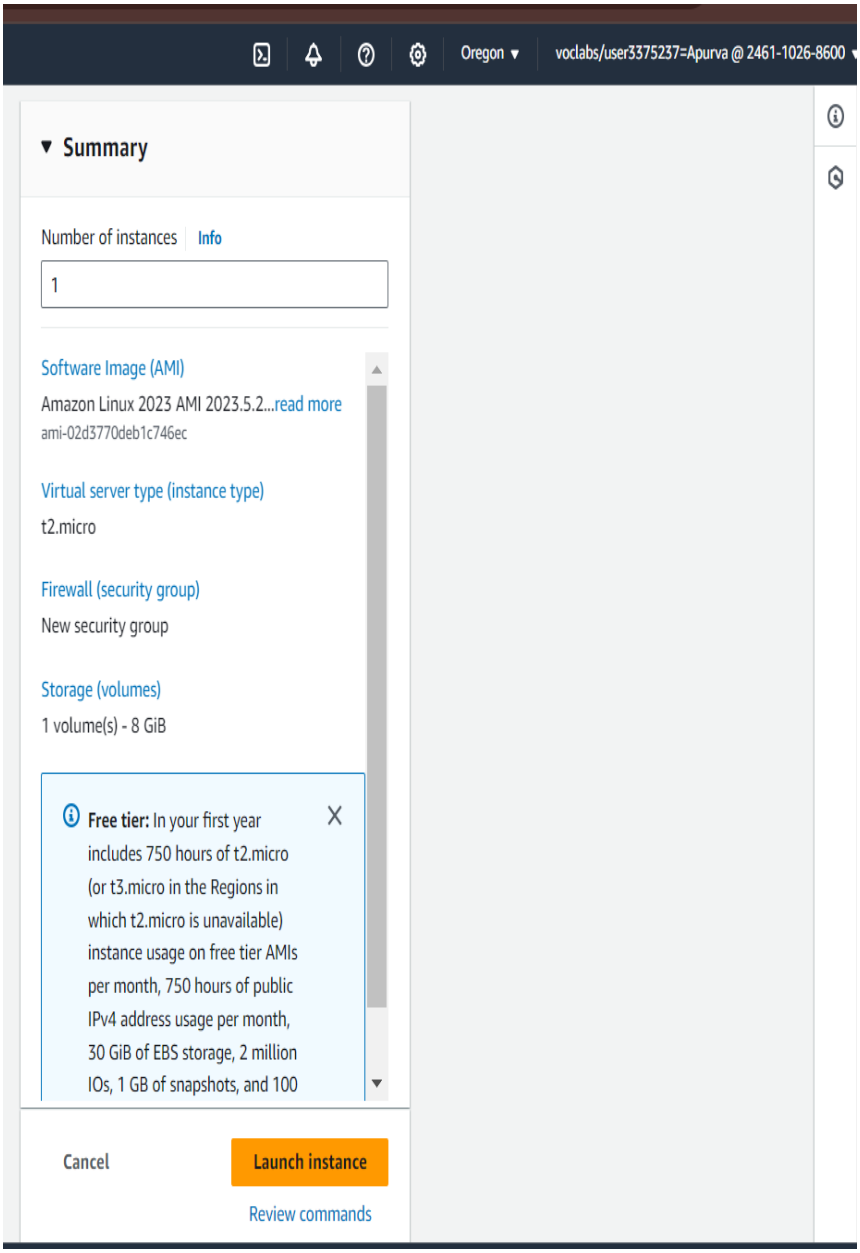
- Ensure SSH access is enabled by allowing traffic on port 22 and http



- Click on Review and Launch.

Step 10: Review and Launch

- Review your instance details.
- Click Launch.

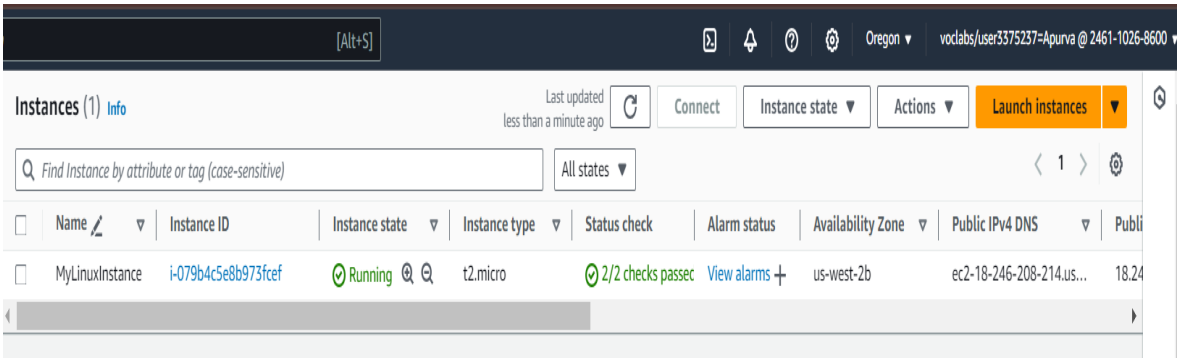


- Confirm by clicking Launch Instances.

Step 11: View Instance

- Click on the View Instances button to see your instance's status.

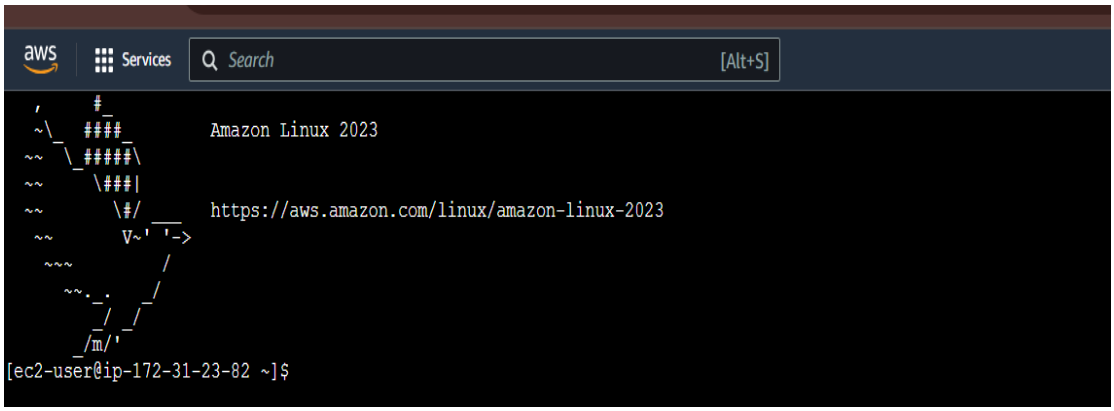
- Wait for the instance status to show as "running".



2. Install Apache Web Server and Run the Hello World Page

Step 1: Connect to Your EC2 Instance

- In the EC2 Dashboard, select your instance and click on **Connect**.



Step 2: Update Package Information

- Once connected, update the package information by running the following command:

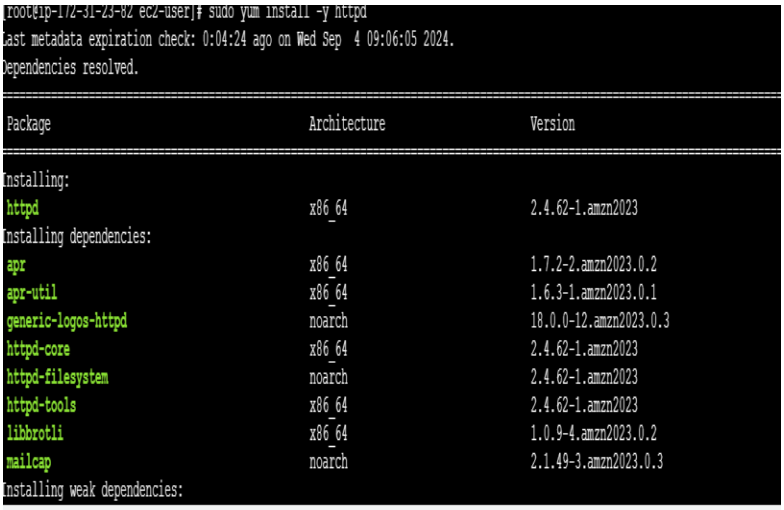
sudo yum update -y

```
[ec2-user@ip-172-31-23-82 ~]$ sudo su
[root@ip-172-31-23-82 ec2-user]# sudo yum update -y
Last metadata expiration check: 0:03:23 ago on Wed Sep  4 09:06:05 2024.
Dependencies resolved.
Nothing to do.
Complete!
```

Step 3: Install Apache Web Server

- Install the Apache web server (httpd) using the following command:

sudo yum install -y httpd



Step 4: Start the Apache Web Server

- Start the Apache service and enable it to start on boot:

bash

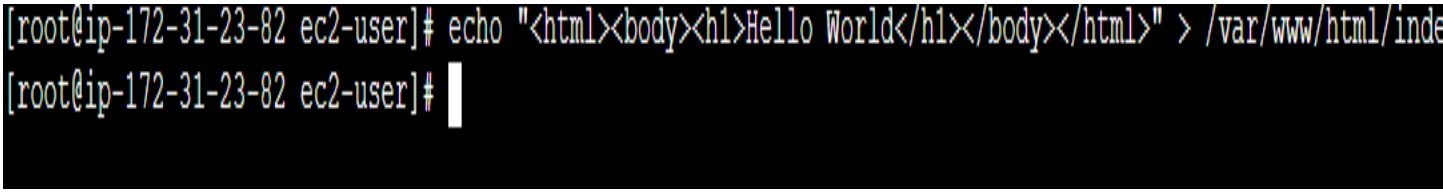
sudo systemctl start httpd

sudo systemctl enable httpd

Step 5: Create a Hello World Page

- Create a simple HTML file to serve as your "Hello World" page

```
echo "<html><body><h1>Hello World</h1></body></html>" /var/www/html/index.html
```



Step 6: Verify the Web Server

- Open a web browser and enter the public IP address of your EC2 instance.
- You should see the "Hello World" page displayed.