

# CI/CD in-sem Lab Exam

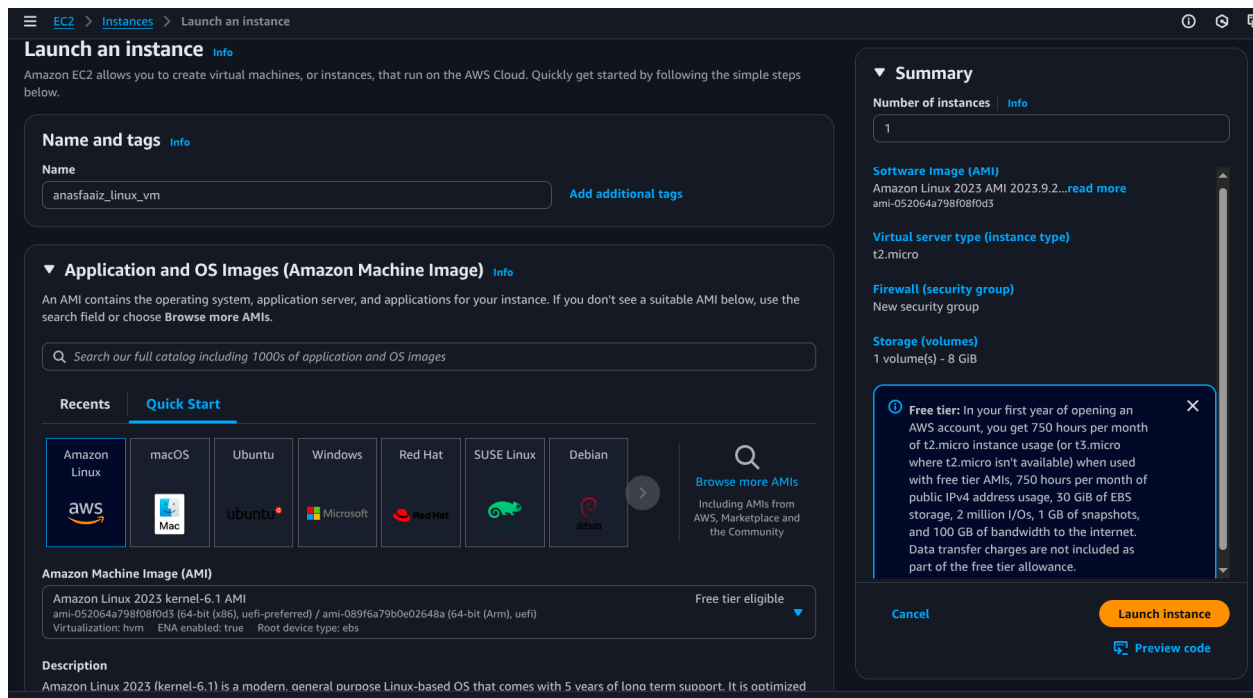
Syed Anas Faaiz

2310030087

Q) Launch a Linux virtual machine in AWS and access the same from a local machine which has linux OS

Step 1: Navigate to the EC2 Dashboard

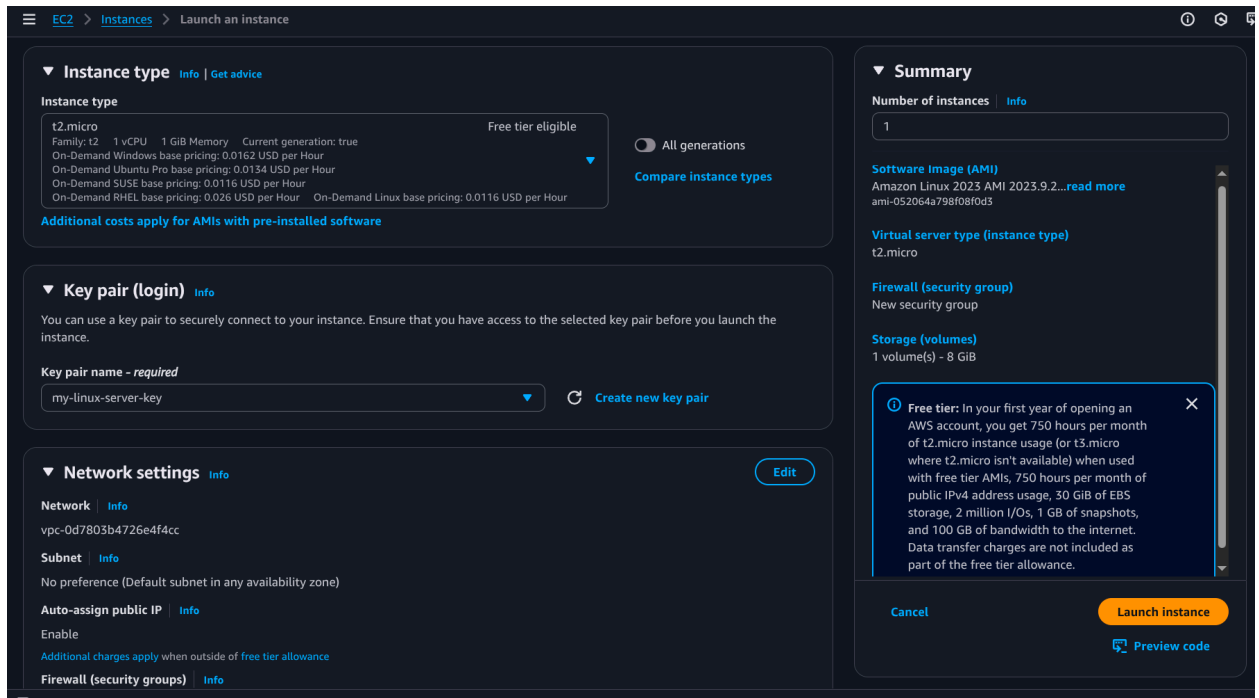
Step 2: Start the Instance Launch Process



Step 3: Name and Choose the Operating System (AMI)

- Name: Give your instance a name, for example, “**anasfaaiz\_linux\_vm**”.

- Application and OS Images (AMI): Select Amazon Linux. The “Amazon Linux 2023”



#### Step 4: Select the Instance Type

- Scroll down to the "Instance type" section.
- Choose **t2.micro**,

#### Step 5: Create a Secure Key Pair

- In the "Key pair (login)" section, click on Create new key pair.
- Click Create key pair. Your browser will immediately download the **.pem** file.

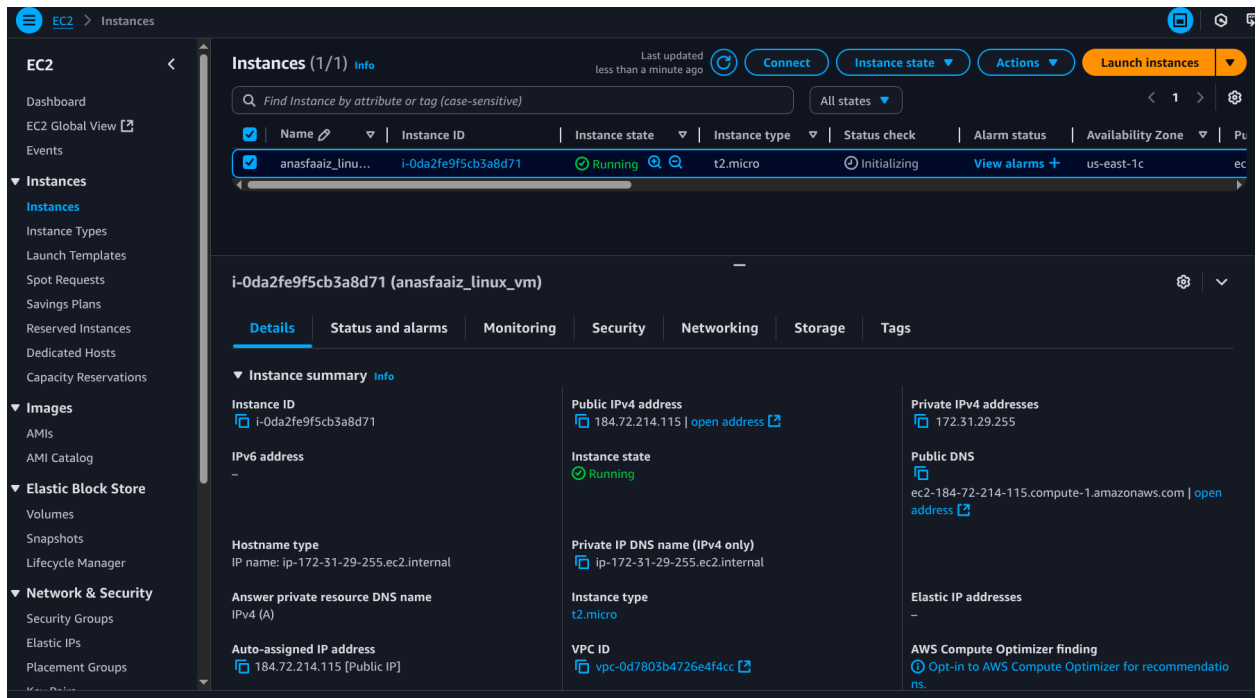
#### Step 6: Configure Network and Firewall (Security Group)

- In the "Network settings" section, click Edit.
- Under "Firewall (security groups)", ensure Create security group is selected.

#### Step 7: Launch the Instance

- Review the details in the "Summary" panel on the right.

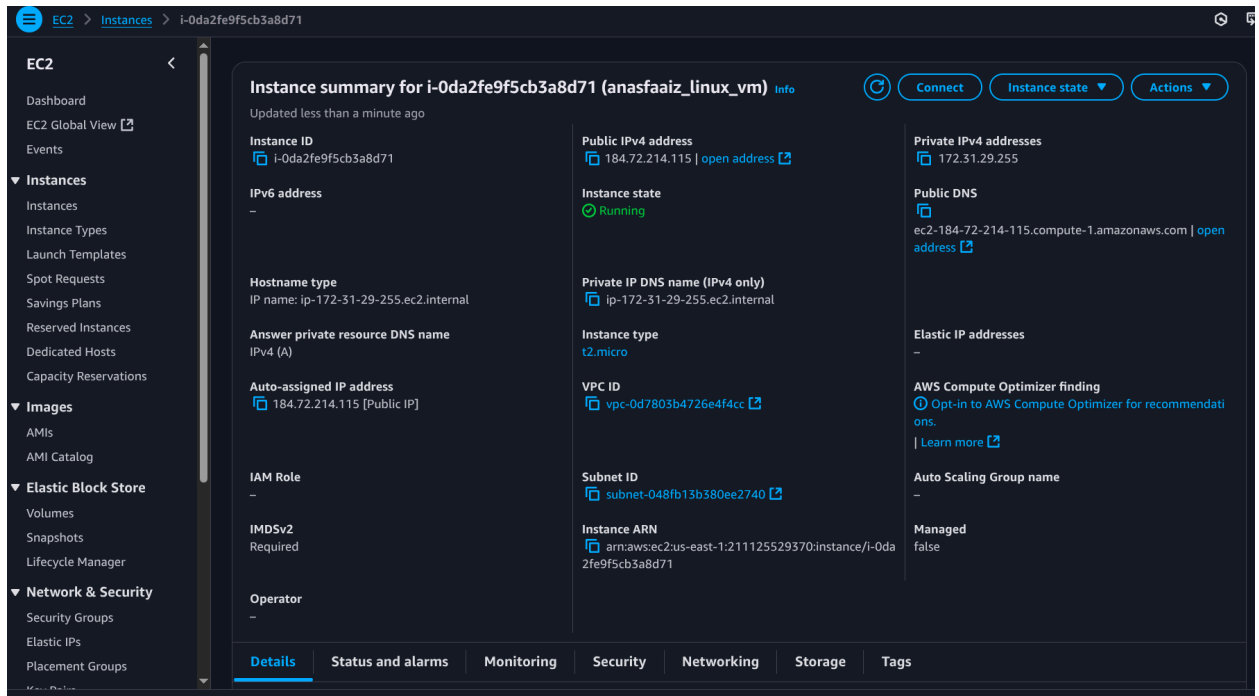
- Click the orange Launch instance button.



#### Step 8: Wait for the Instance and Get the Public IP Address

- After launching, click the View all instances button.
- Find your new instance in the list. Wait for a few minutes until:
  - The Instance state changes from Pending to Running.
  - The Status check changes from Initializing to 2/2 checks passed.
- Once it's ready, select your instance by clicking the checkbox next to its name.

- In the "Details" tab below, find and copy the Public IPv4 address. It will be a series of numbers, like **184.72.214.115**



## Step 9: Open Your Local Terminal

- On your own Linux computer, open the terminal application.

## Step 10: Navigate to Your Key File's Location

Use the **cd** command to move into the directory where you saved your **.pem** key file. This is typically the **Downloads** folder.

### Bash

```
cd ~/Downloads
```

## Step 11: Secure Your Private Key File

Change the permissions on your key file so that only you can read it.

### Bash

```
chmod 400 my-aws-key.pem
```

## Step 12: Connect Using the SSH Command

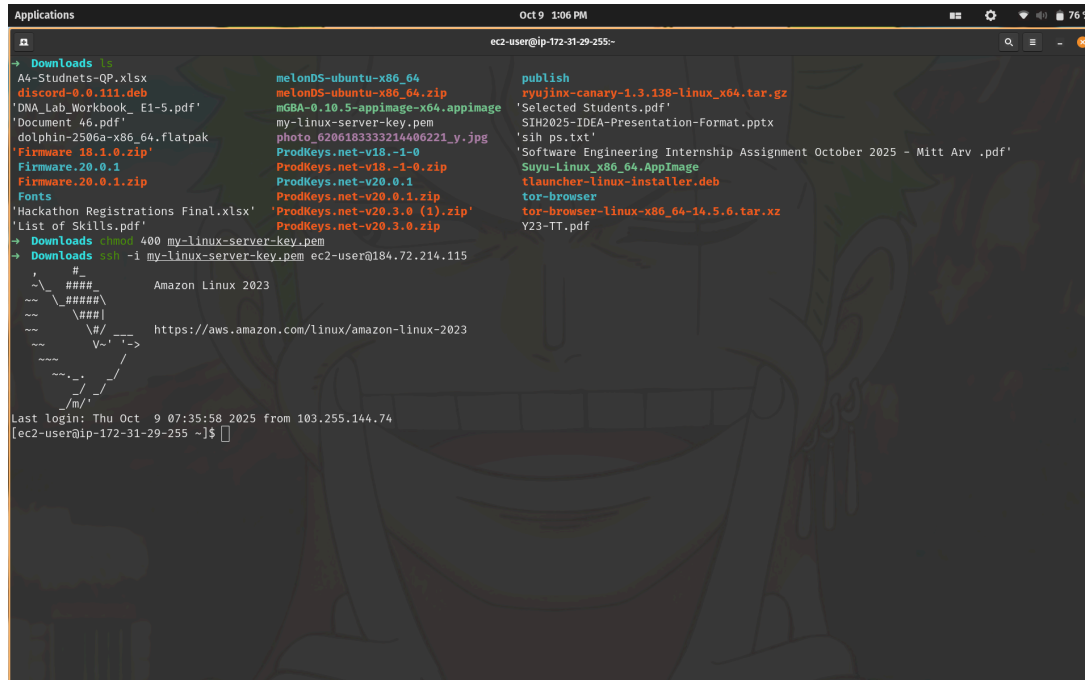
- Use the **ssh** command with your key file, the default username (ec2-user),

## Bash

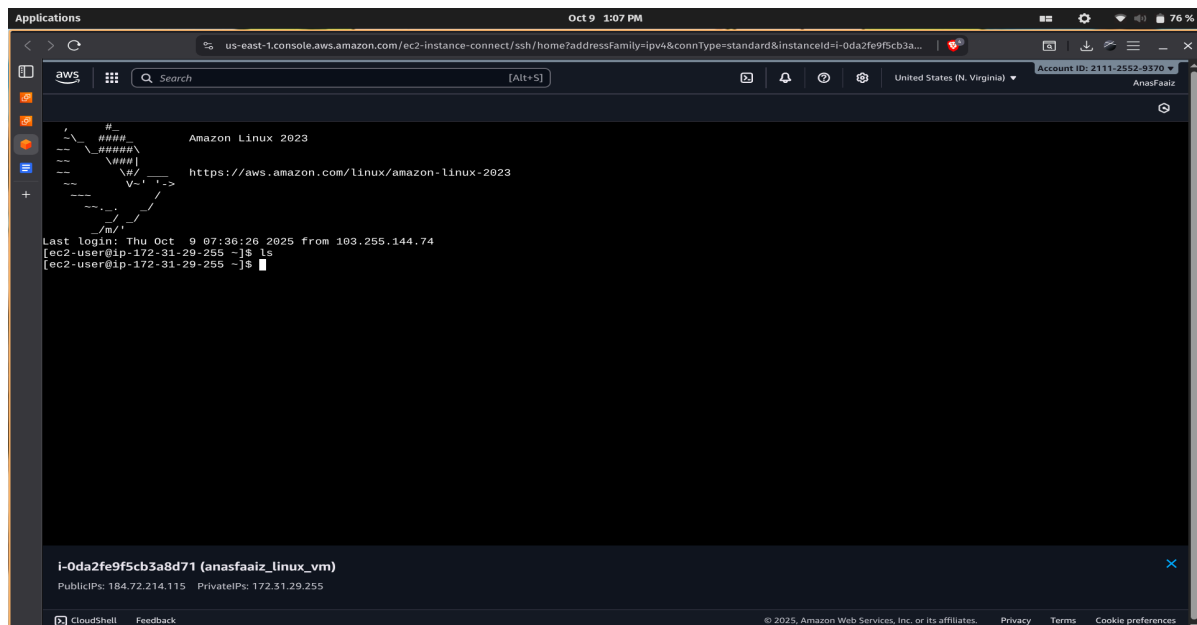
**ssh -i my-aws-key.pem ec2-user@184.72.214.115**

### Step 13: Accept the Host Authenticity

- The first time you connect, your terminal will show a message and ask, "Are you sure you want to continue connecting (yes/no/[fingerprint])?".
- Type yes and press Enter.



A terminal window titled "Applications" with a timestamp of "Oct 9 1:06 PM". The terminal shows the command `ssh -i my-linux-server-key.pem ec2-user@184.72.214.115` being executed. The output displays the Amazon Linux 2023 logo, the URL `https://aws.amazon.com/linux/amazon-linux-2023`, and the last login information: "Last login: Thu Oct 9 07:35:58 2025 from 103.255.144.74". The prompt is `[ec2-user@ip-172-31-29-255 ~]$`. The terminal background features a faint, stylized illustration of a person's face.



An AWS CloudShell terminal window titled "Applications" with a timestamp of "Oct 9 1:07 PM". The terminal shows the same SSH command as the previous window. The output is identical, showing the Amazon Linux 2023 logo, the URL `https://aws.amazon.com/linux/amazon-linux-2023`, and the last login information: "Last login: Thu Oct 9 07:36:26 2025 from 103.255.144.74". The prompt is `[ec2-user@ip-172-31-29-255 ~]$`. The terminal background features a faint, stylized illustration of a person's face. At the bottom of the window, a notification bar displays the instance ID `i-Oda2fe9f5cb3a8d71 (anasfaalix_linux_vm)` and its public and private IP addresses: `PublicIPs: 184.72.214.115 PrivateIPs: 172.31.29.255`. The footer includes the text "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".