Practical 1: Infrastructure as a Service using AWS

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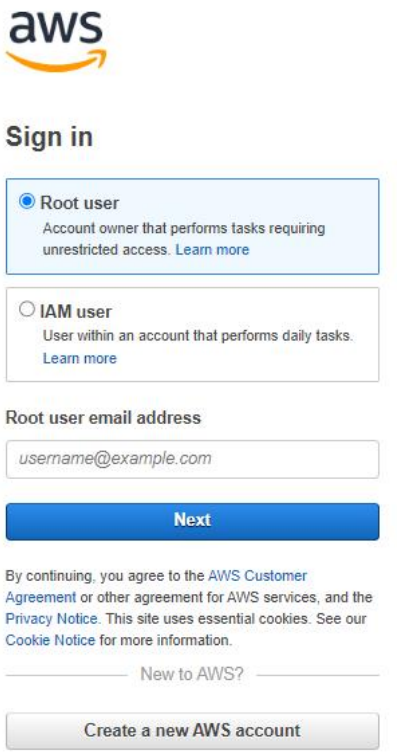
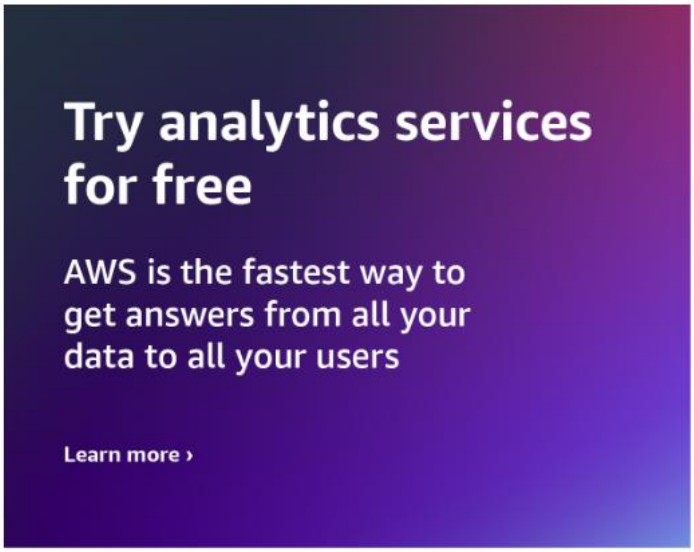
Roll No. A074

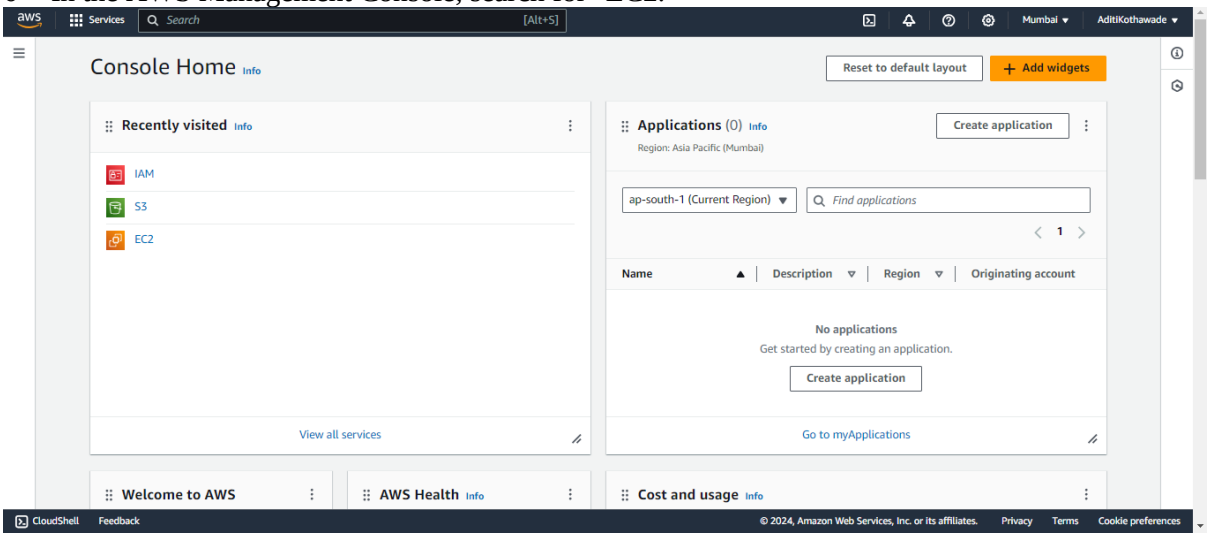
Steps for Ubuntu Instance

1. **Log in to AWS Management Console:**
   - Go to AWS Management Console.
   - Sign in with your credentials.

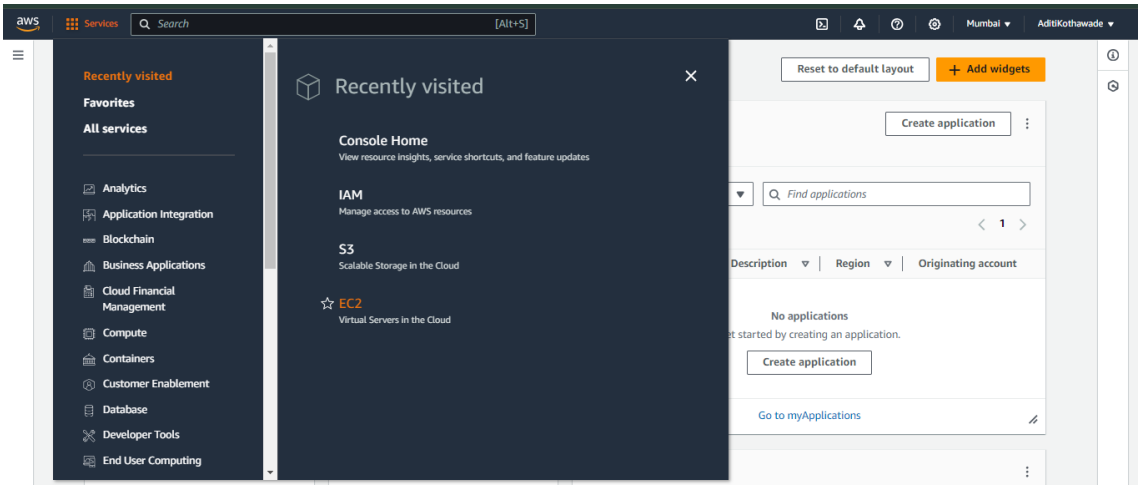




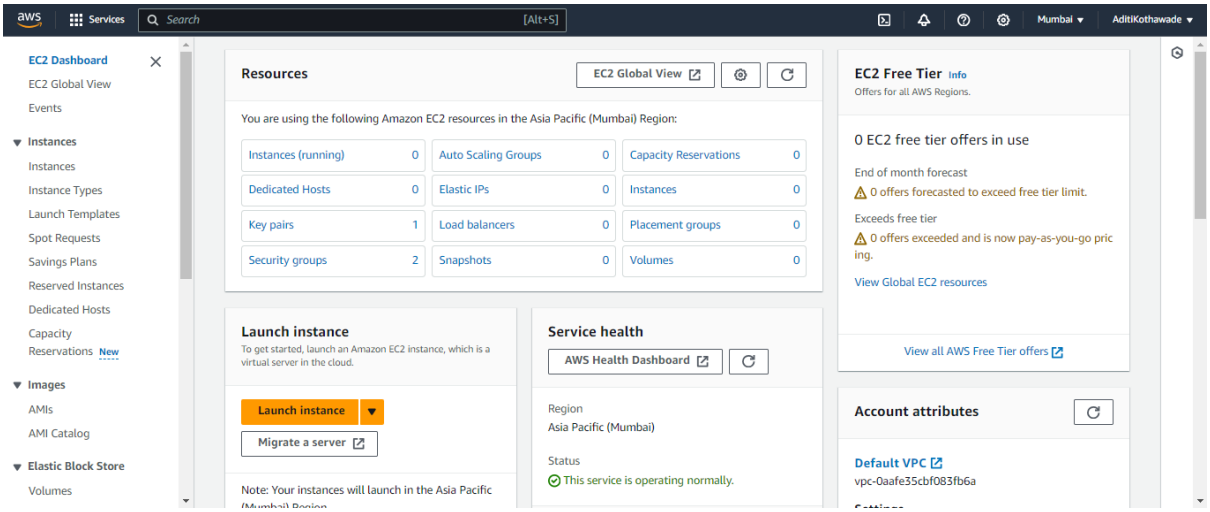
2. **Navigate to EC2 Dashboard:**
   - In the AWS Management Console, search for "EC2."



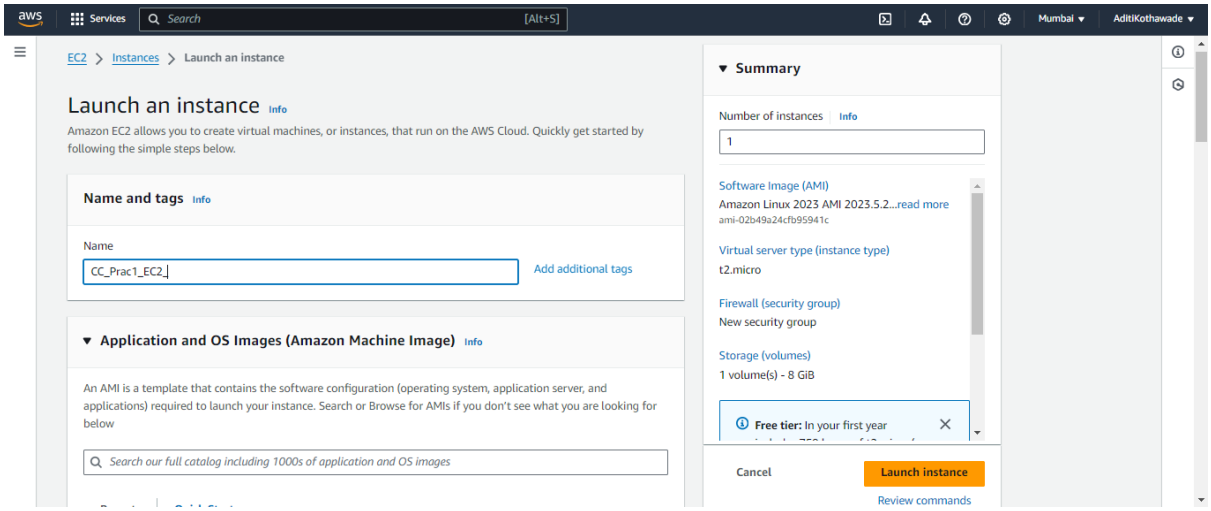
- Click on "EC2" to open the EC2 Dashboard.



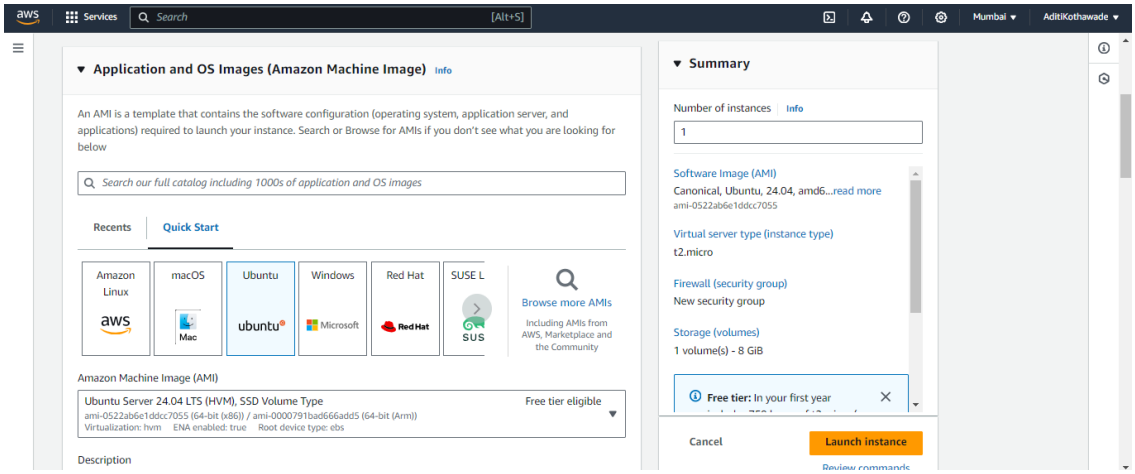
3. **Launch Instance:**
   - Click on “Launch Instance” from the EC2 Dashboard.



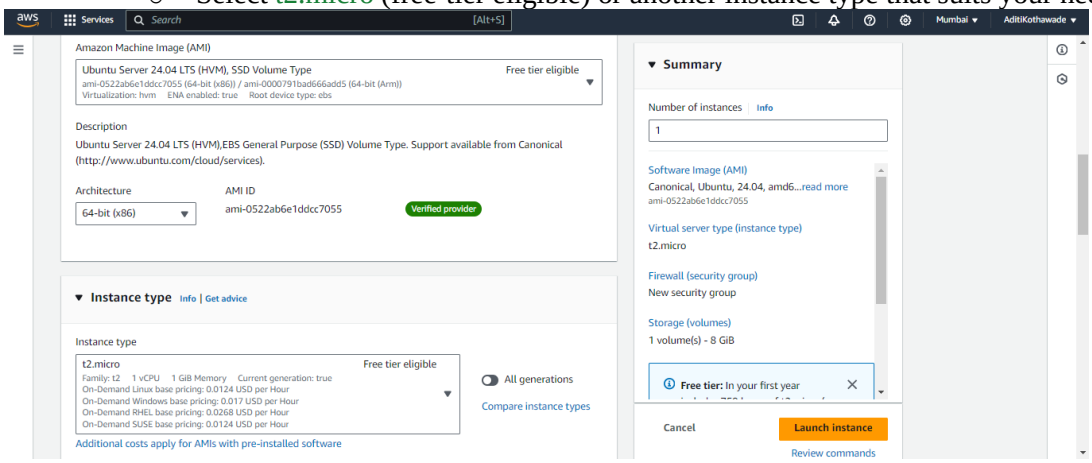
   - After clicking on “Launch Instance” this interface will appear.
   - Write the name of the Instance you want to create



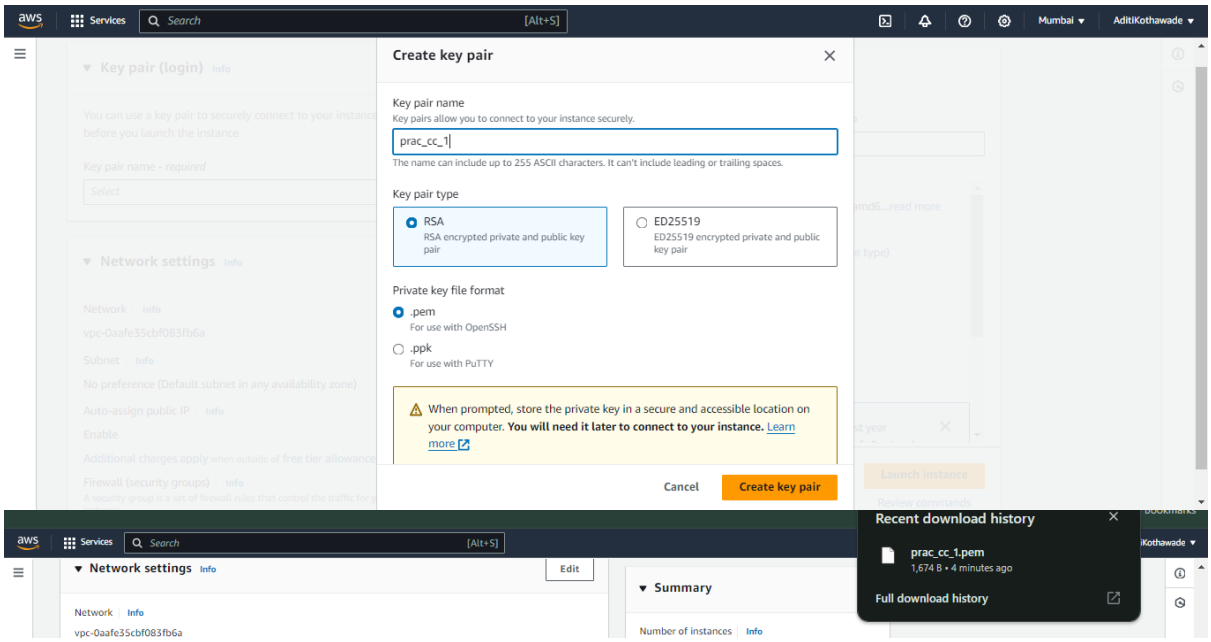
4. **Choose an Amazon Machine Image (AMI):**
   - Select an Ubuntu AMI, such as "Ubuntu Server 22.04 LTS."
   - Ubuntu is a popular choice for Linux-based operations.



5. **Choose an Instance Type:**
   - Select t2.micro (free-tier eligible) or another instance type that suits your needs.

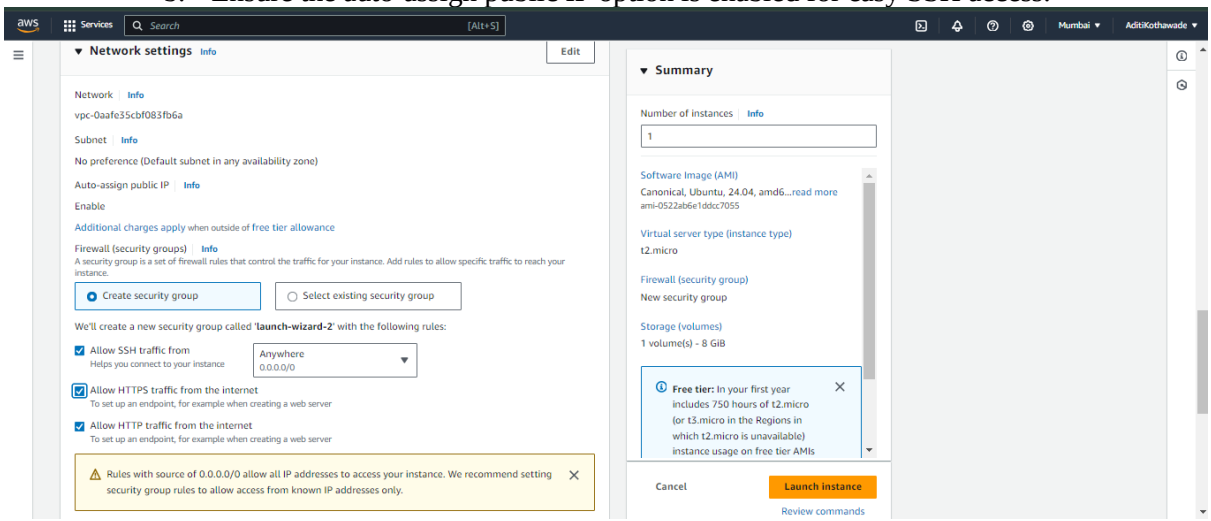


6. **Create a new key pair**
   - Click on create key pair button by selecting RSA, .pem
   - Create or select an existing key pair. Download the private key (.pem file).



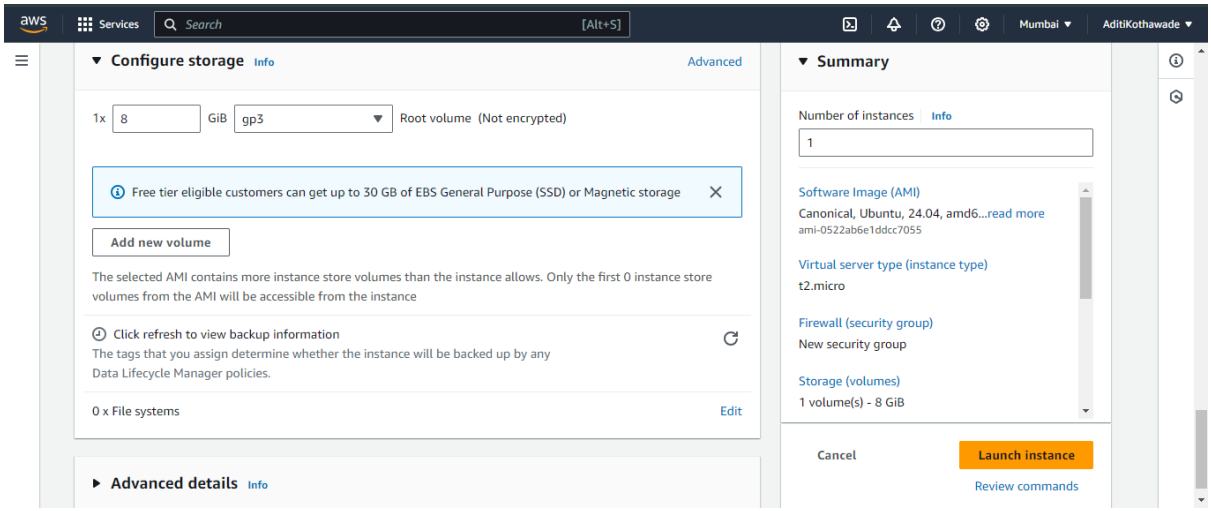
7. Configure Instance Details:

a. Keep most settings as default unless you need specific configurations.
b. Ensure the auto-assign public IP option is enabled for easy SSH access.



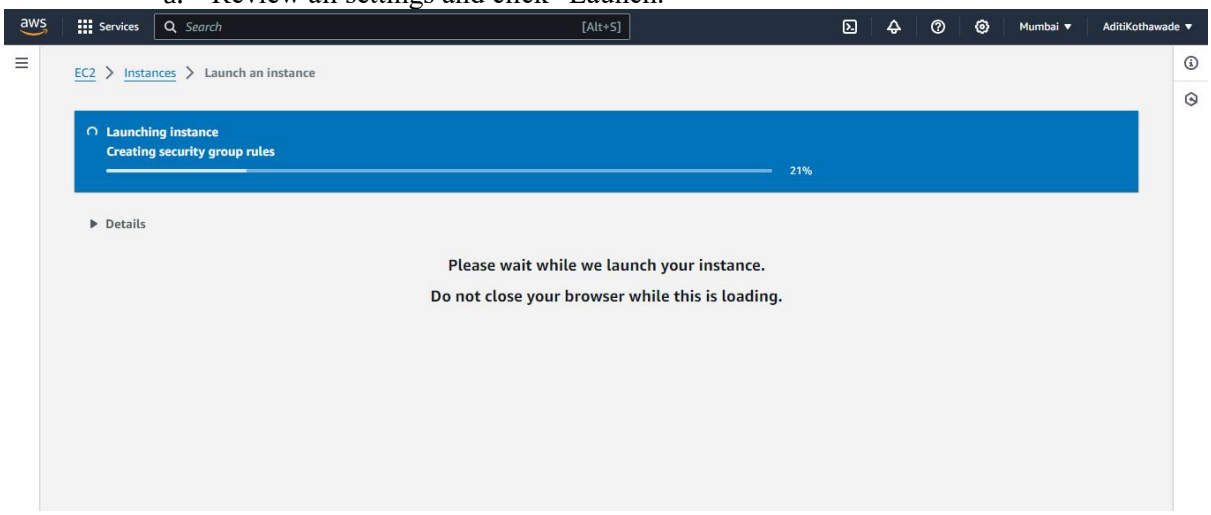
8. Configure Security Group:

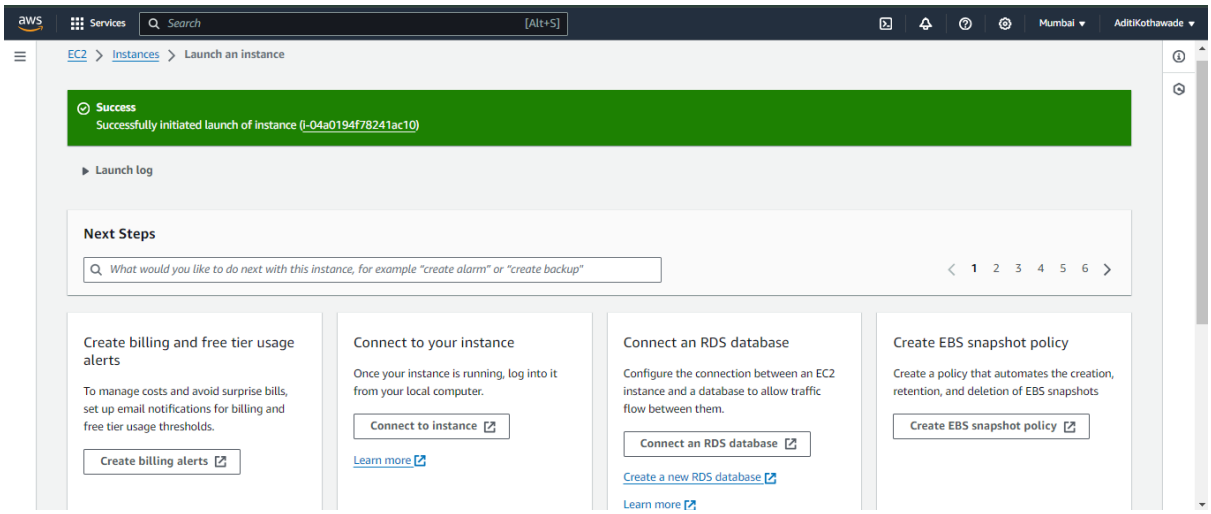
a. Create or select a security group.
b. Add an inbound rule to allow SSH traffic (port 22) from your IP address.
c. Allow HTTPS traffic from the internet



9. Review and Launch:

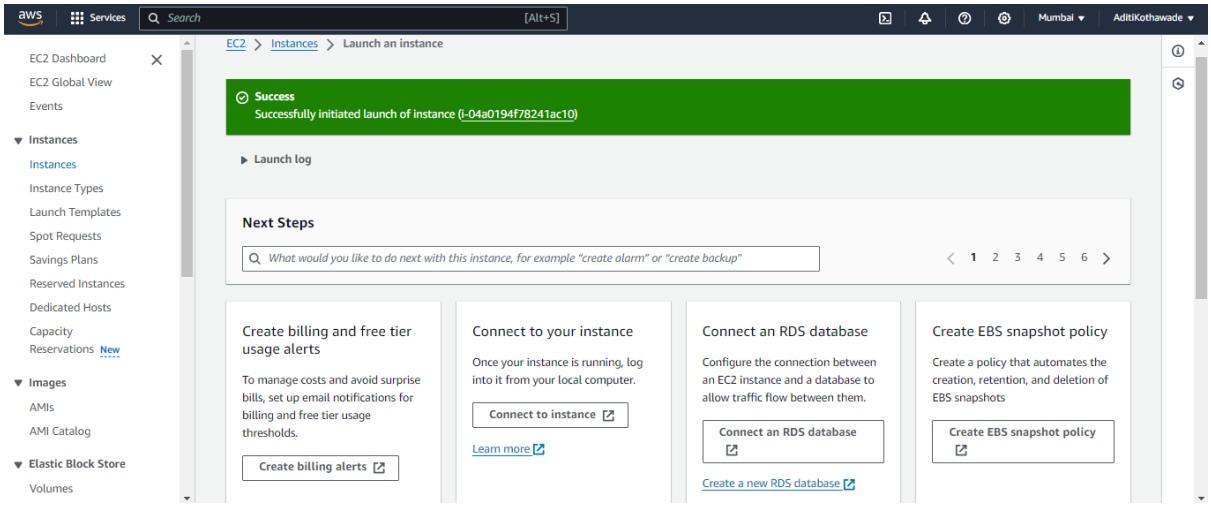
a. Review all settings and click “Launch.”

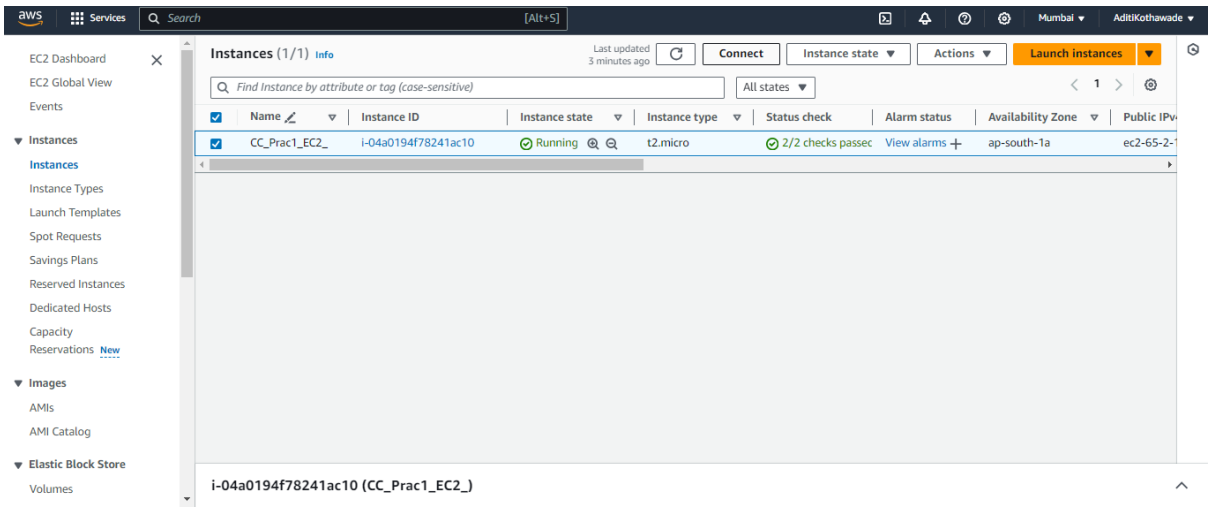




10. Connect to Your Ubuntu Instance:

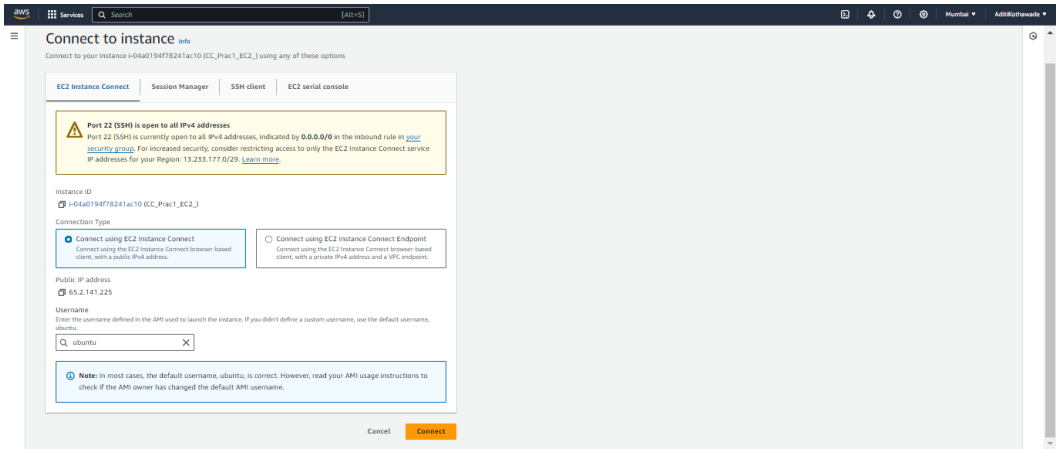
a. Once the instance is running, click “Connect.”





11. Once you click on connect this interface will appear.

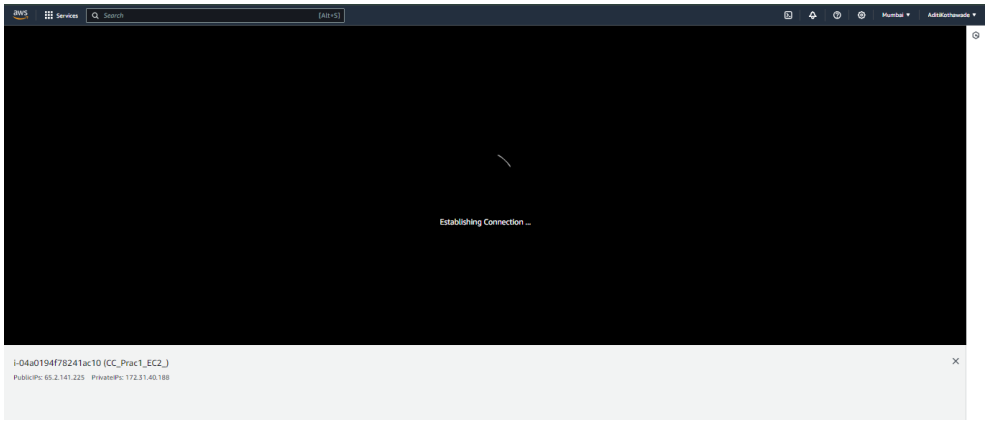
a. Click on "connect using EC2 instance connect"

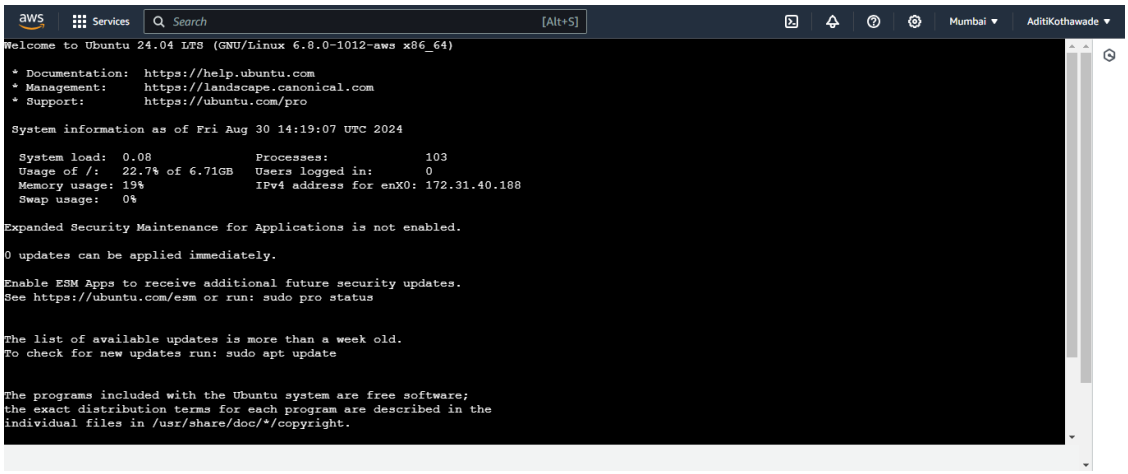


12. Ubuntu interface will appear

a. Now you are ready to code on ubuntu.

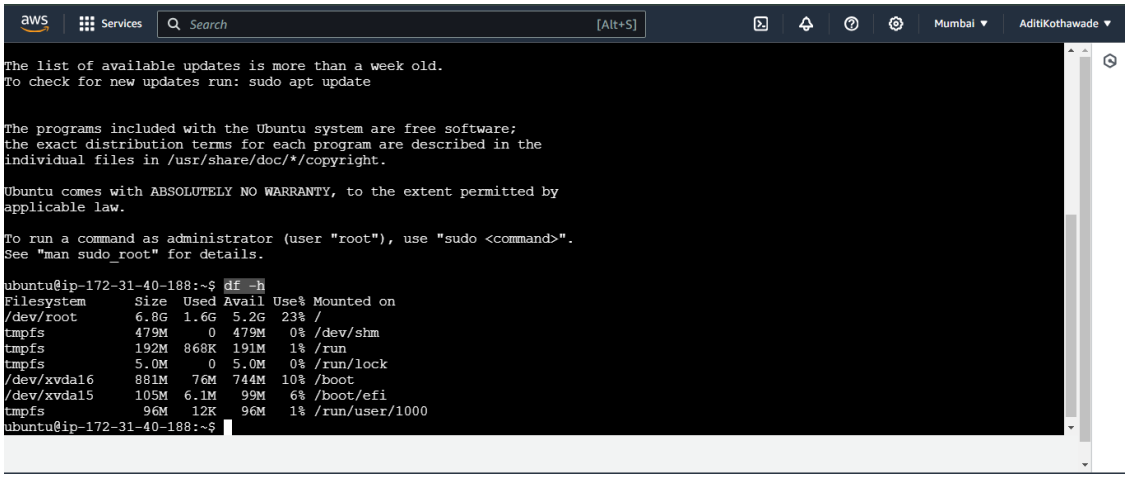
b. We will write 5 code on ubuntu





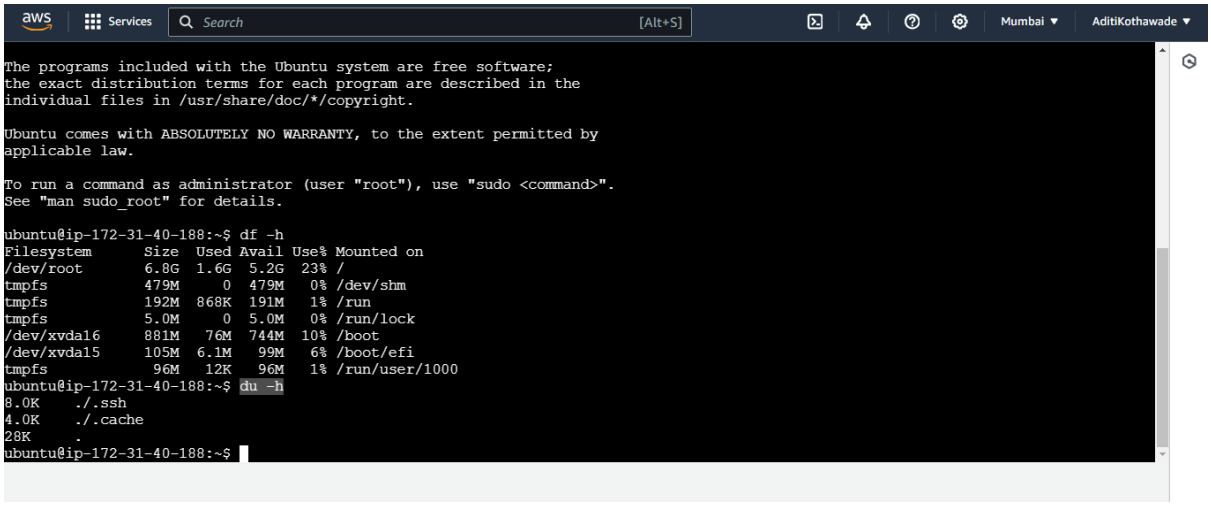
13. df -h

The **`df -h`** command in Linux is used to display information about disk space usage in a human-readable format.



14. du -h

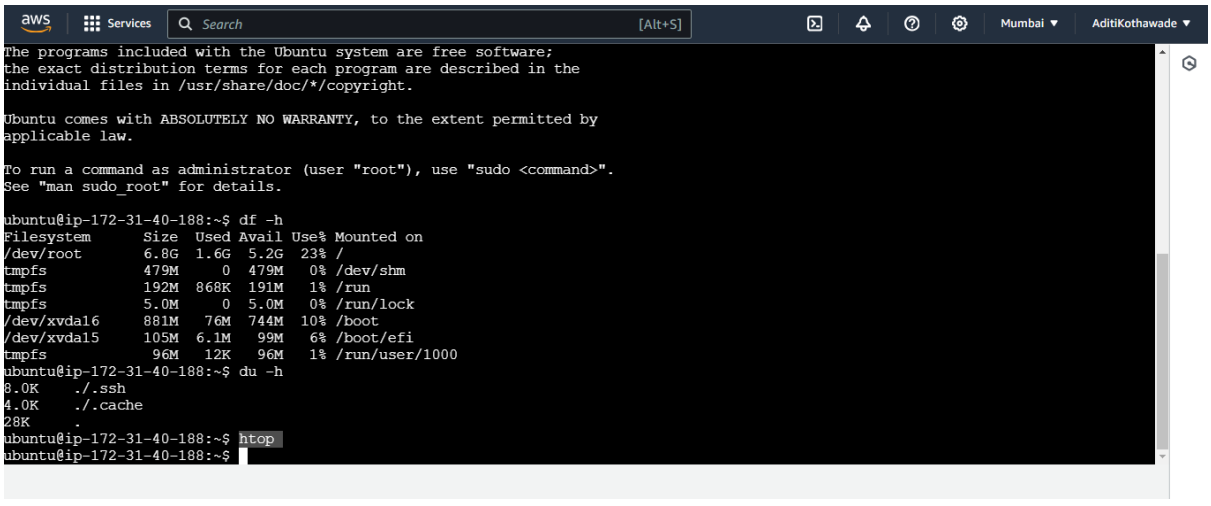
The **du -h** command in Linux is used to display the disk usage of files and directories in a human-readable format.



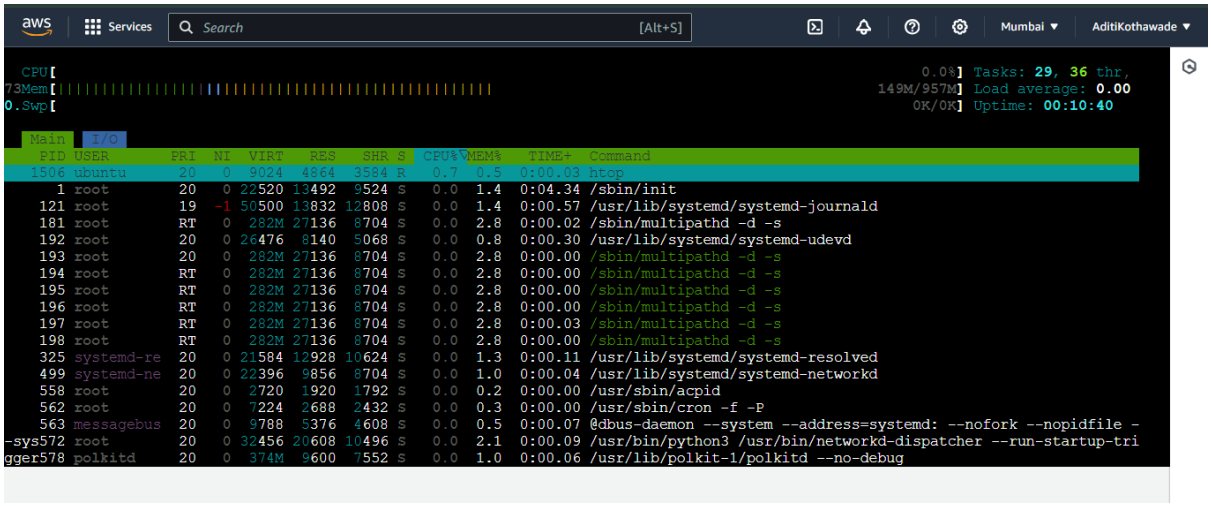
15. htop

1. **htop** is an interactive process viewer for Unix systems (like Linux). It provides a dynamic, real-time view of the running processes on your system, similar to what `top` does but with a more user-friendly and visually appealing interface.

2. **htop** is a powerful and convenient tool for monitoring system performance and managing processes on Unix-like operating systems.

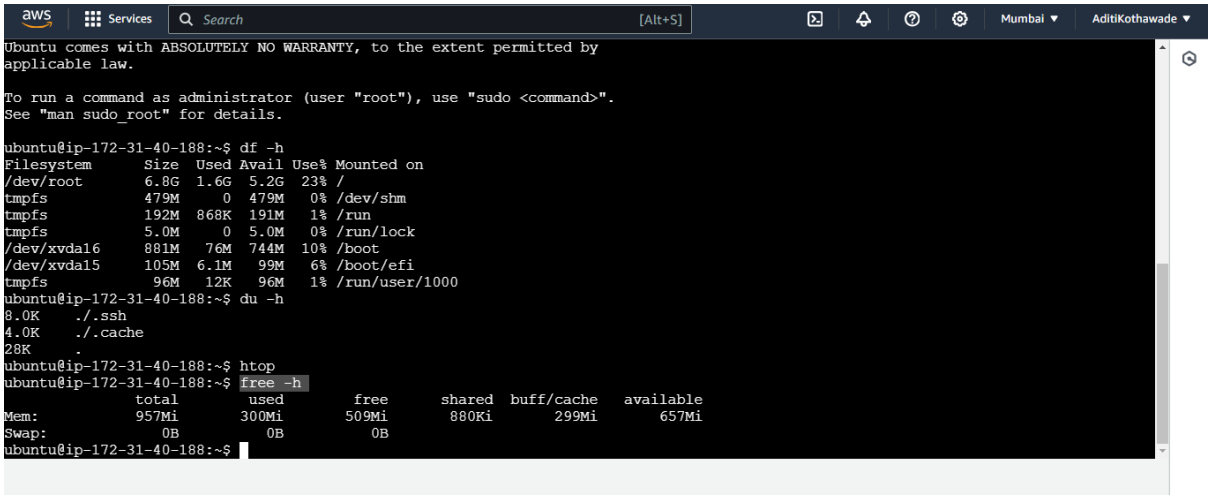


After running the code htop you will see this interface.



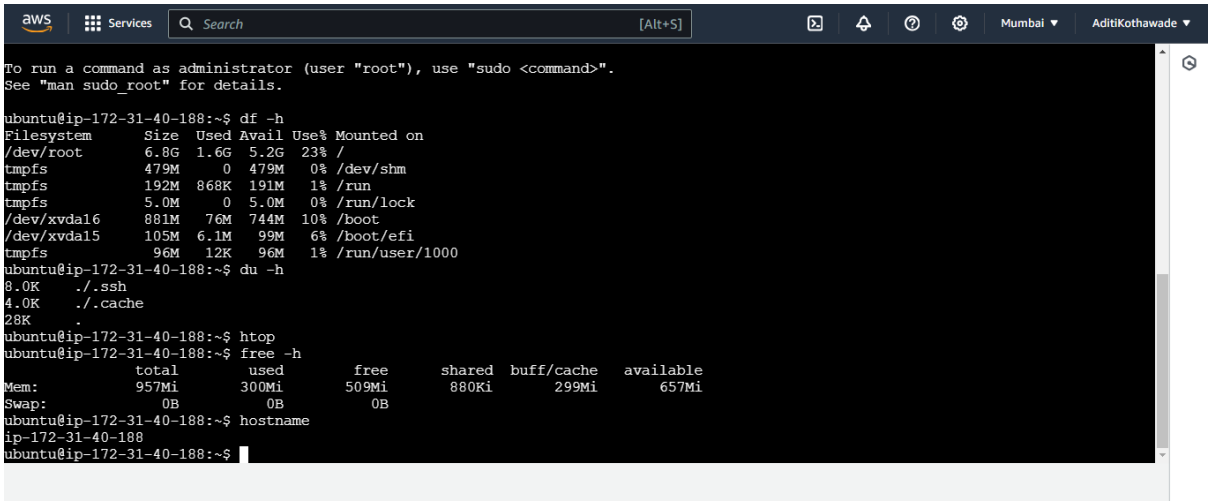
16. free -h

The `free -h` command in Linux is used to display the system's memory usage, including RAM and swap space, in a human-readable format.

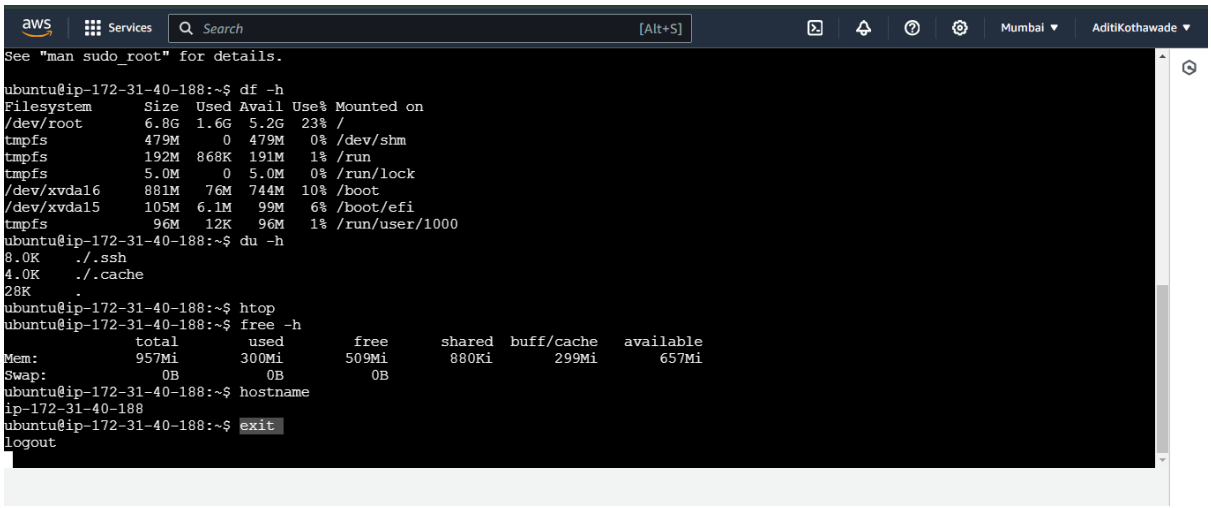


17. hostname

The **`hostname`** command in Linux is used to display or set the system's hostname, which is the name assigned to the machine on a network.

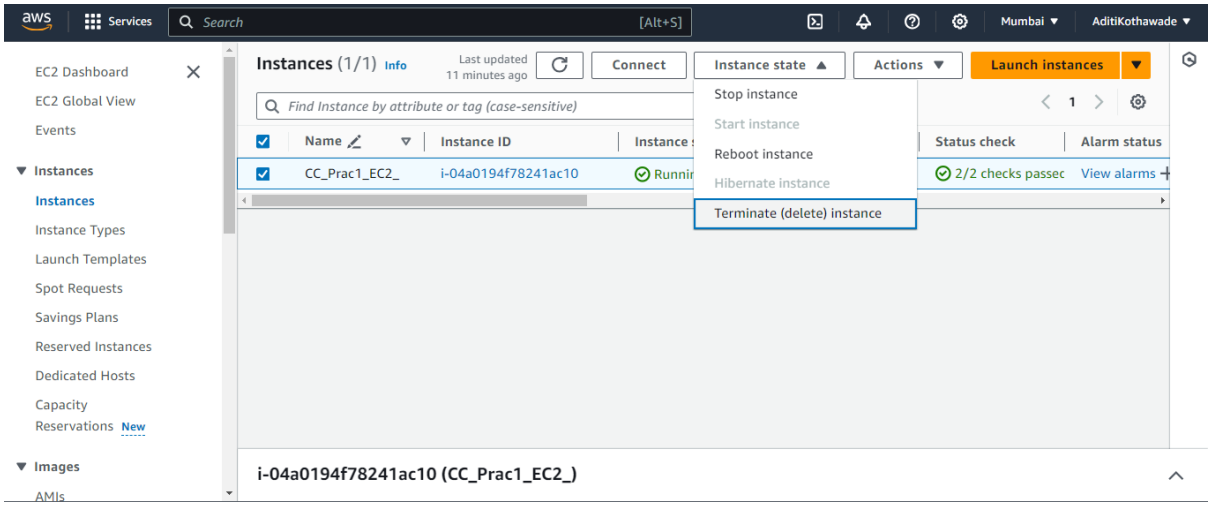


Exit

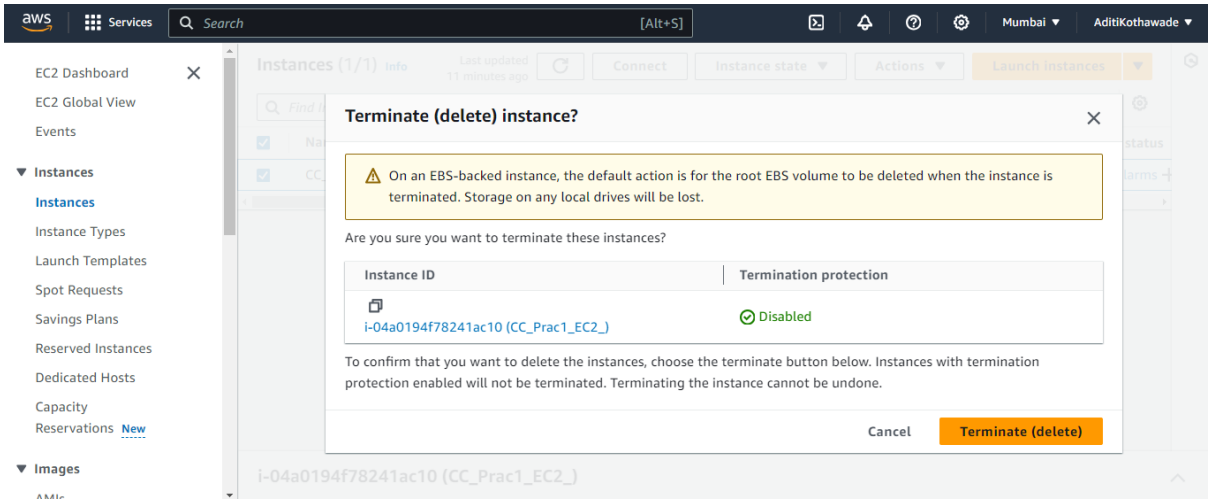


18. View Running Instances:

- In the EC2 Dashboard, click on "Instances" in the left-hand menu under the "Instances" section.
- Select the instance you want to terminate& Click the checkbox next to the instance to select it.
- With the instance selected, click the "Instance state" dropdown button at the top.
- Choose "Terminate instance" from the dropdown menu.

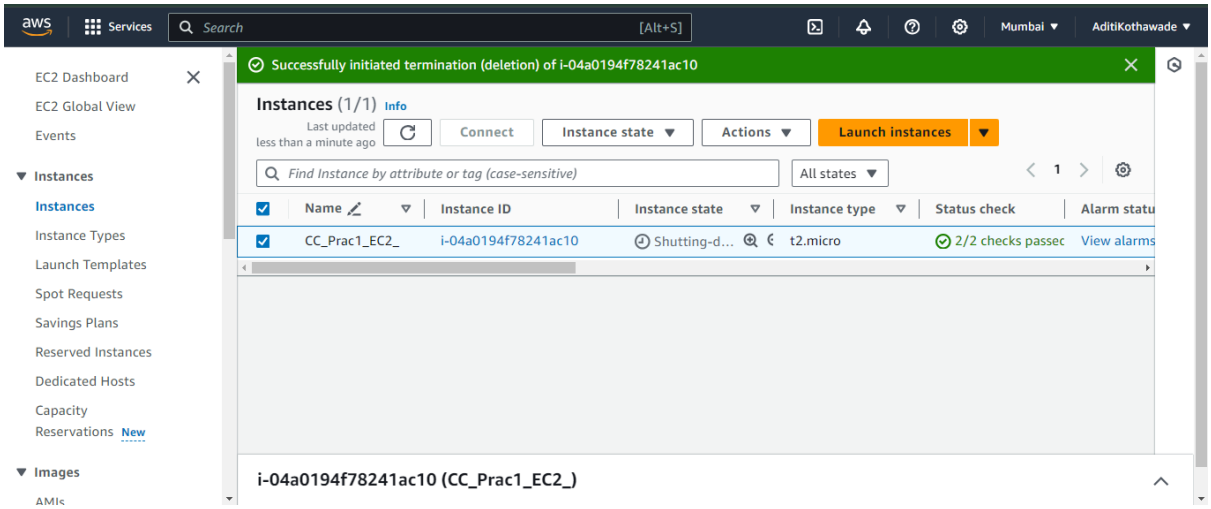


- **Confirm Termination**



19. Wait for Termination:

- The instance state will change to "shutting-down" and then to "terminated."
- Once terminated, the instance will no longer incur charges, and it will be removed from the list of running instances.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Dedicated Hosts
Capacity Reservations New
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Successfully initiated termination (deletion) of i-04a0194f78241ac10
Instances (1/1) Info
Last updated less than a minute ago
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Find Instance by attribute or tag (case-sensitive)
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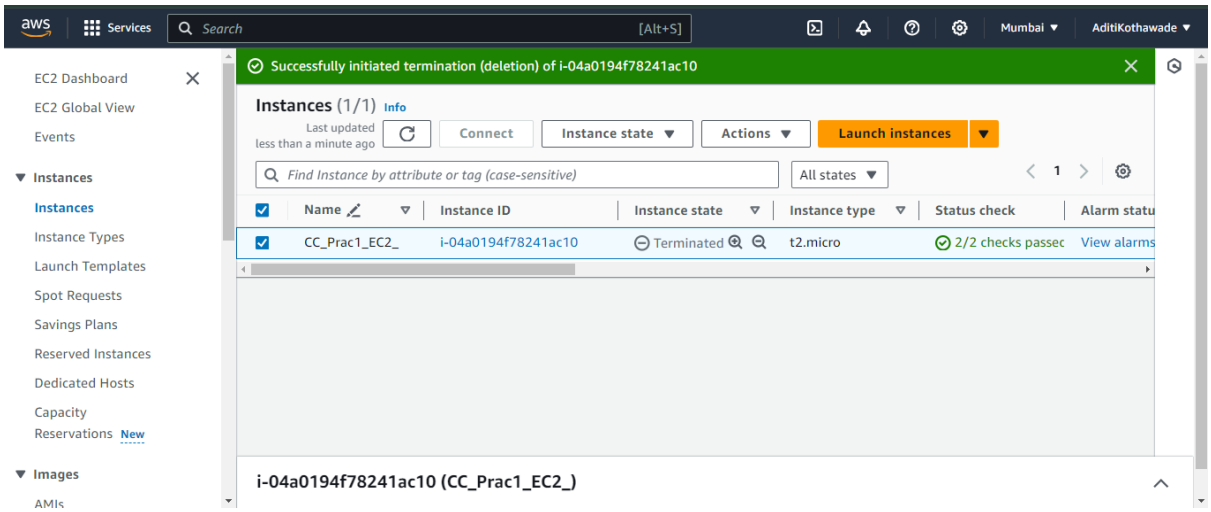
View alarms
i-04a0194f78241ac10 (CC_Prac1_EC2_)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All states
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Name
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