

SOLUTIONS ARCHITECTING ON CLOUD

(20CS3235AA)

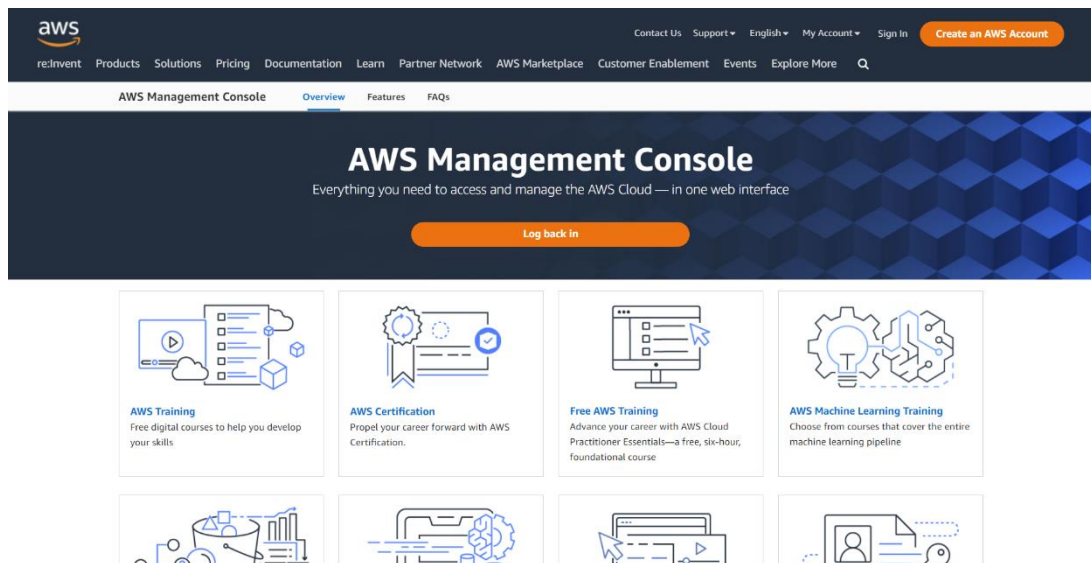
Labs-1

Name: K. VENKATA SREE SAI

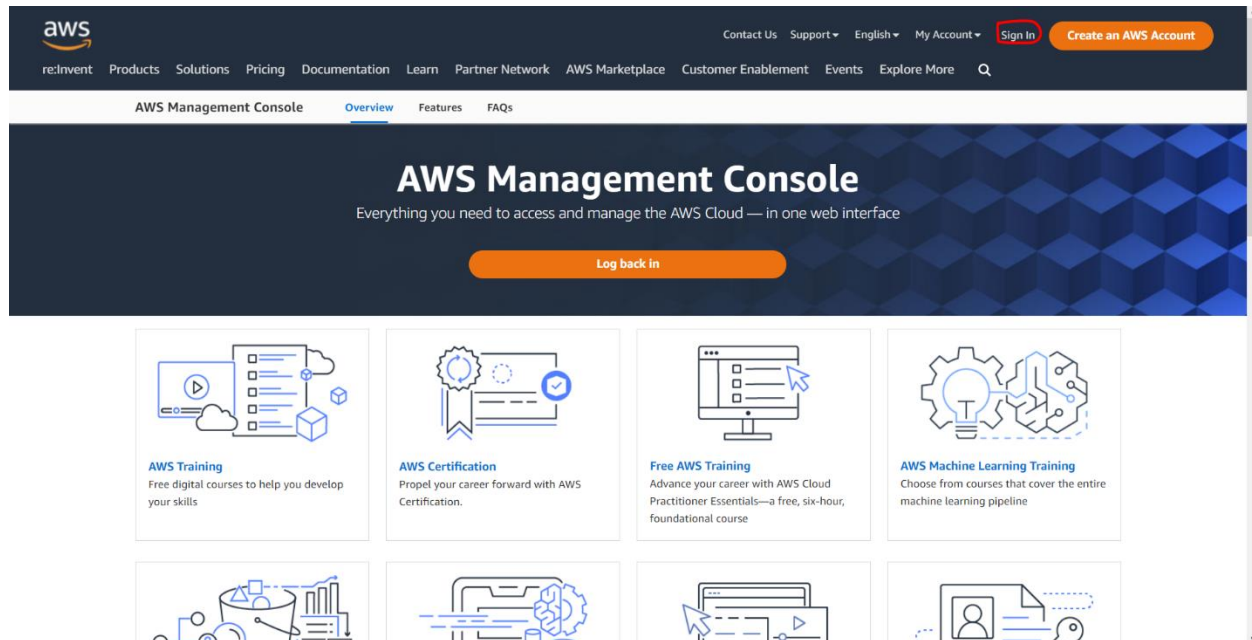
ID:2000030439

Launch Linux instances connect with ssh, use scp to copy files from local system to cloud vice versa.

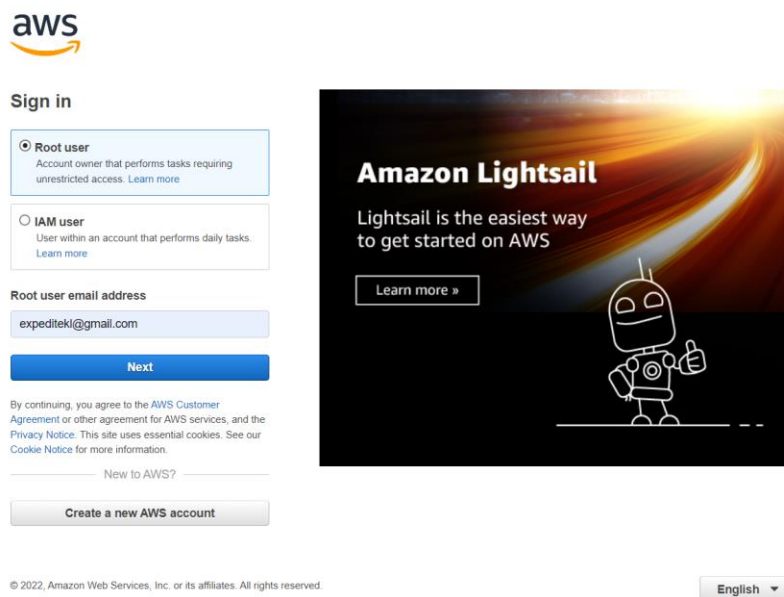
Step-1: Go to Google Browser and type [AWS \(Amazon Web Services\) Management Console](https://aws.amazon.com/console/).



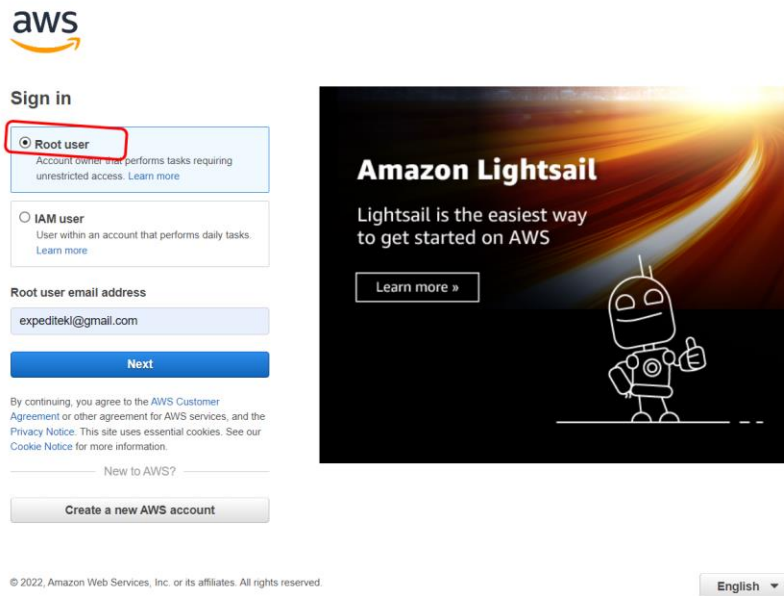
Step-2: After That If you having an account in [Aws management console](#) then click on [Sign-in](#) option.



Step-3: After it will redirect to [aws sign-in](#) portal.

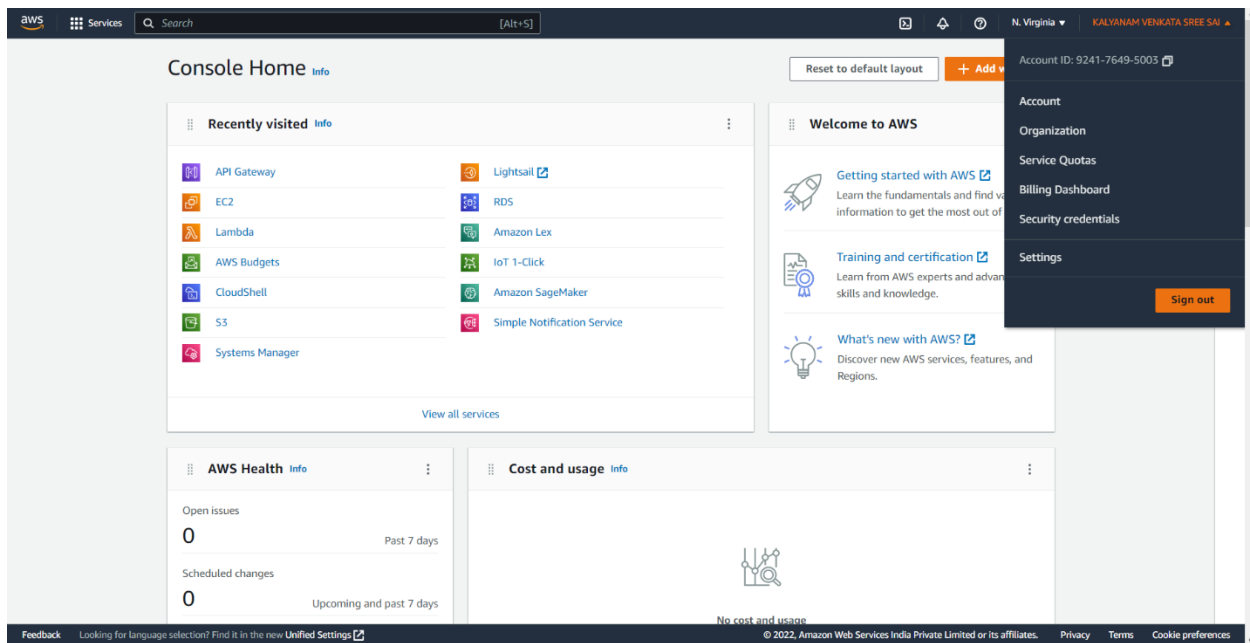


Step-4: Sign-in with your root account only

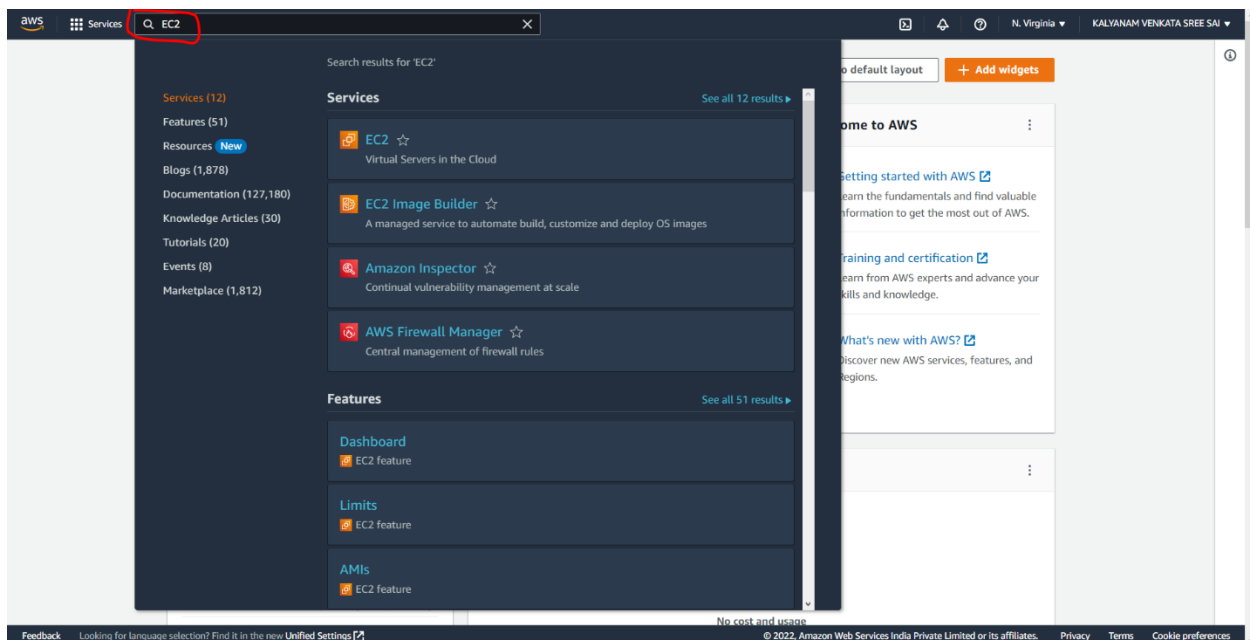


The screenshot shows the AWS sign-in interface. On the left, the 'aws' logo is at the top. Below it, the 'Sign in' section has two radio button options: 'Root user' (which is selected and highlighted with a red rectangle) and 'IAM user'. The 'Root user' option includes the text 'Account owner can perform tasks requiring unrestricted access. Learn more'. The 'IAM user' option includes 'User within an account that performs daily tasks. Learn more'. Below these is a text input field for 'Root user email address' containing 'expediteki@gmail.com'. A blue 'Next' button is below the email field. Underneath the button is a small disclaimer: 'By continuing, you agree to the AWS Customer Agreement or other agreement for AWS services, and the Privacy Notice. This site uses essential cookies. See our Cookie Notice for more information.' Below the disclaimer is a link 'New to AWS?' and a button 'Create a new AWS account'. On the right side of the page is a large promotional banner for 'Amazon Lightsail' with the text 'Lightsail is the easiest way to get started on AWS' and a 'Learn more »' button. The banner features a stylized robot character and a glowing light trail. At the bottom left, there is a copyright notice: '© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.' At the bottom right, there is a language selector dropdown menu set to 'English'.

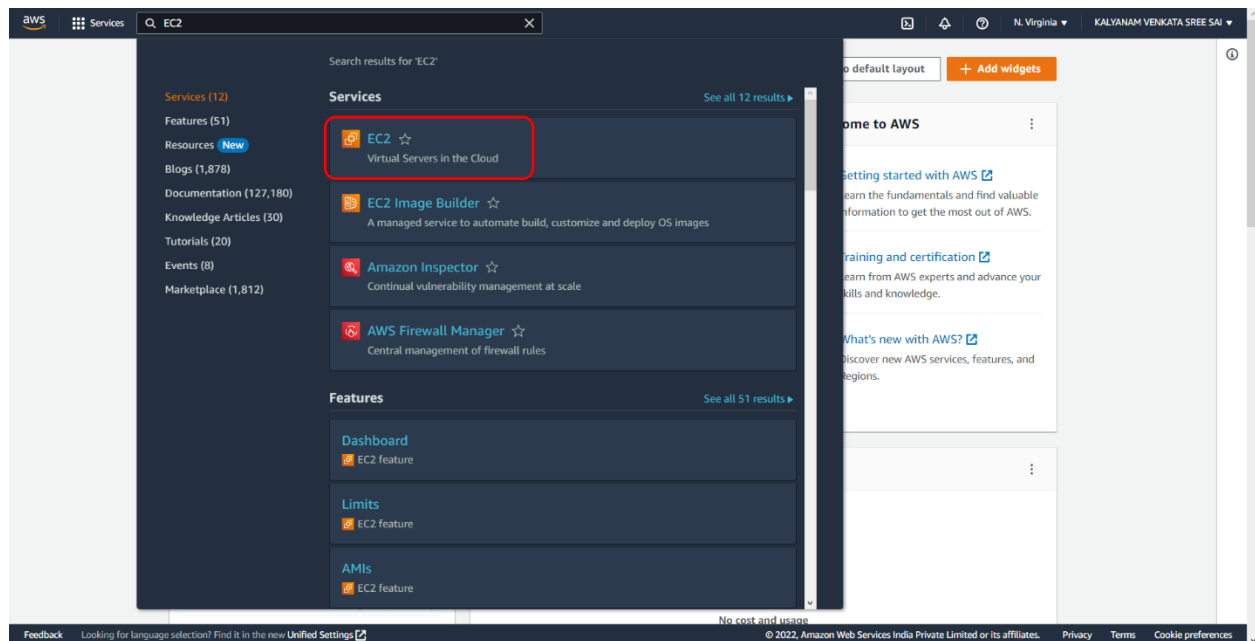
Step-5: After Sign-in the aws management console look like the below image.



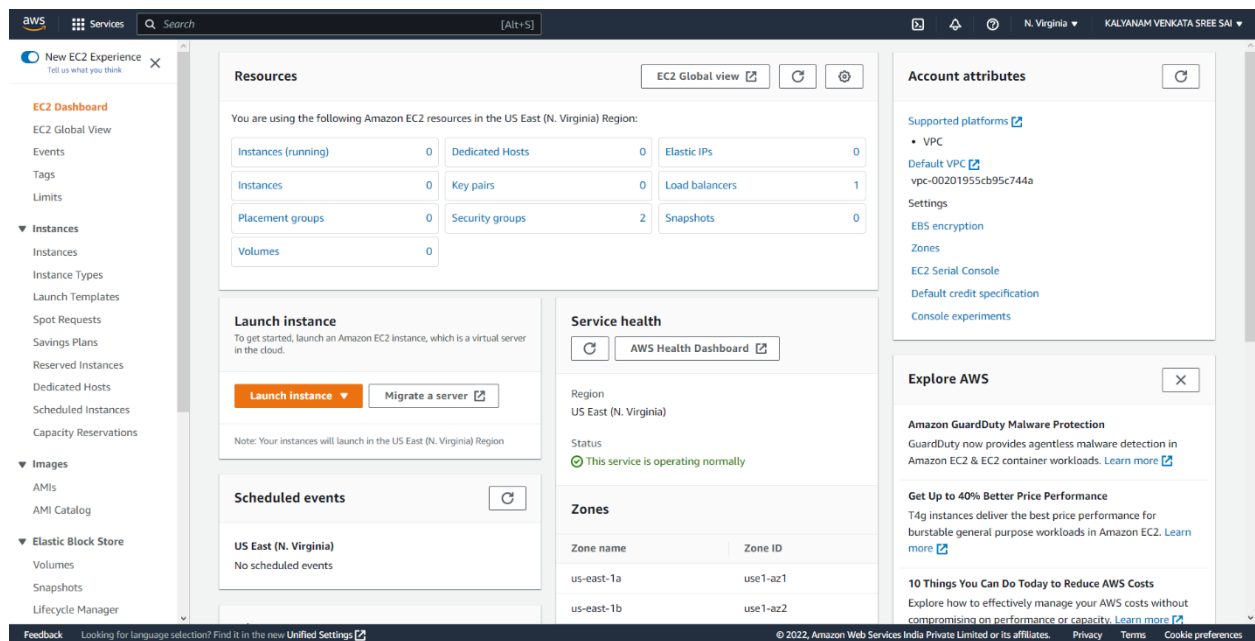
Step-6: Go through the search bar and type “EC2”.



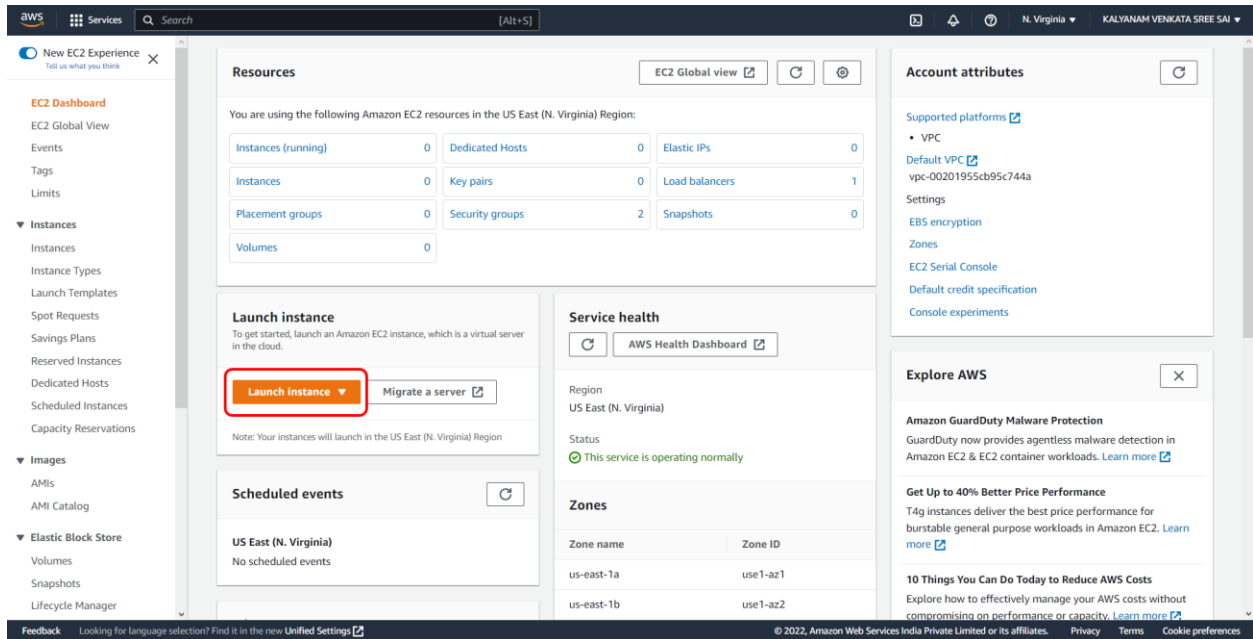
Step-7: Select the First service from the listed below.



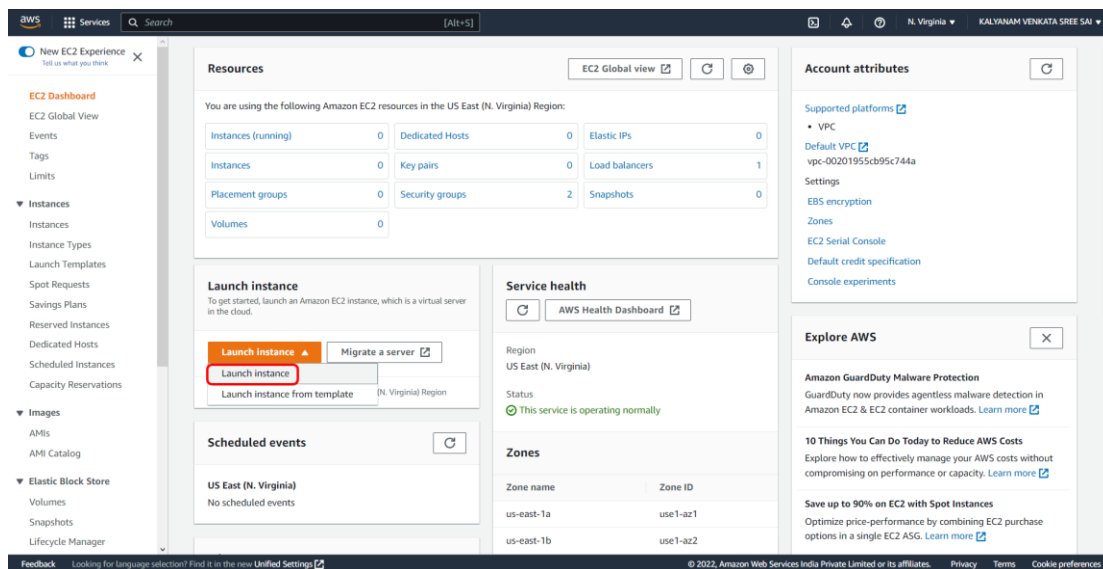
Step-8: After clicking the First Service The console will look like.



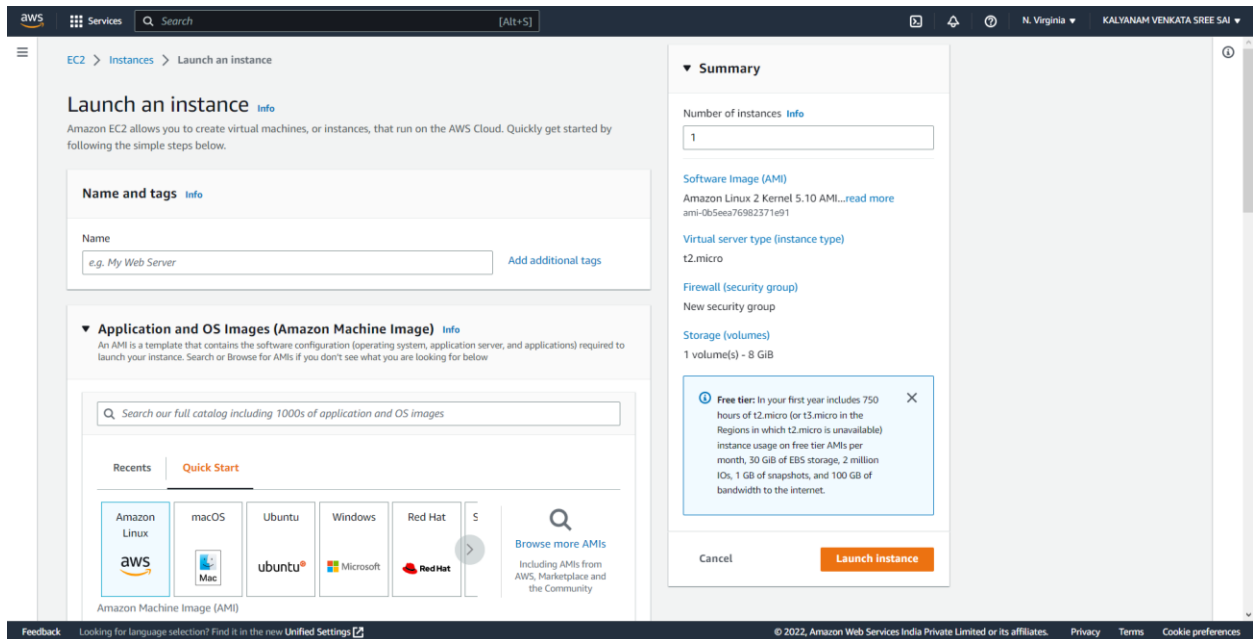
Step-9: Click on the “Launch Instance” in the EC2 console.



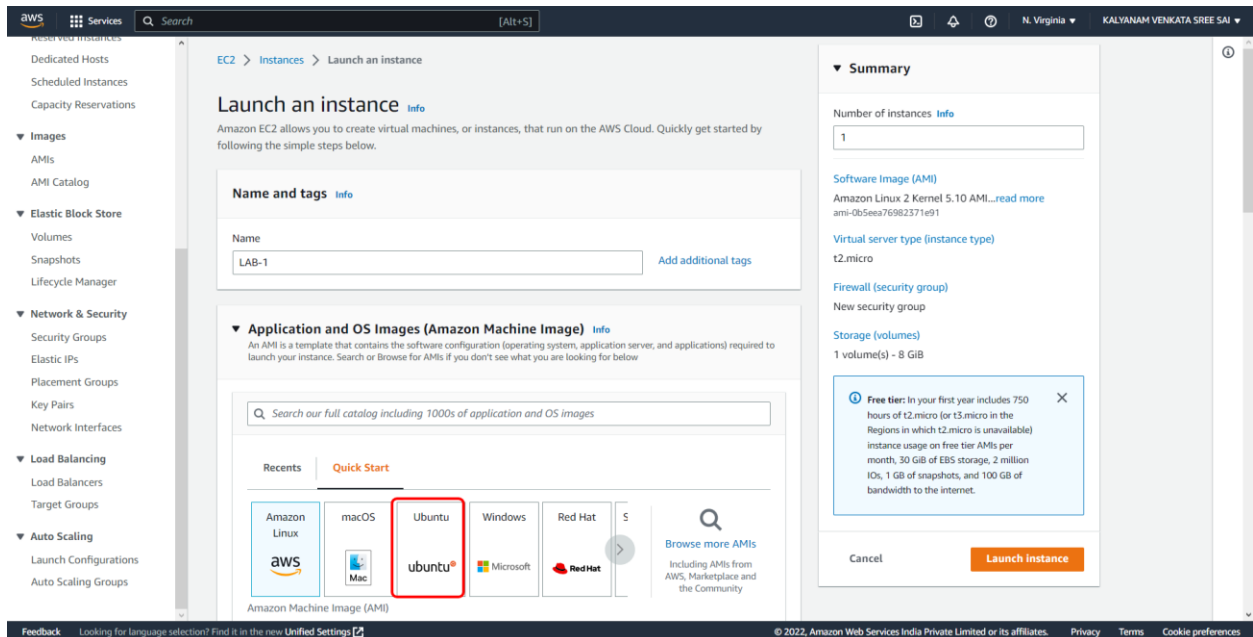
Step-10: Click on the “Launch Instance” from the drop-down menu.



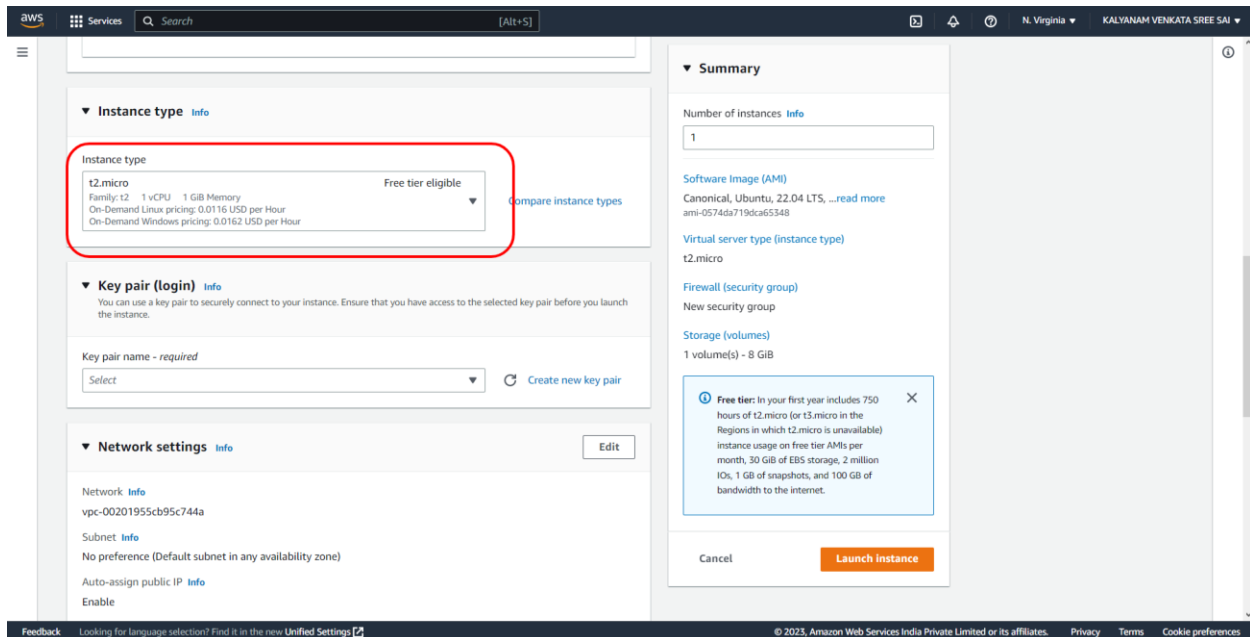
Step-11: After Clicking on the Launch Instance, it will look like.



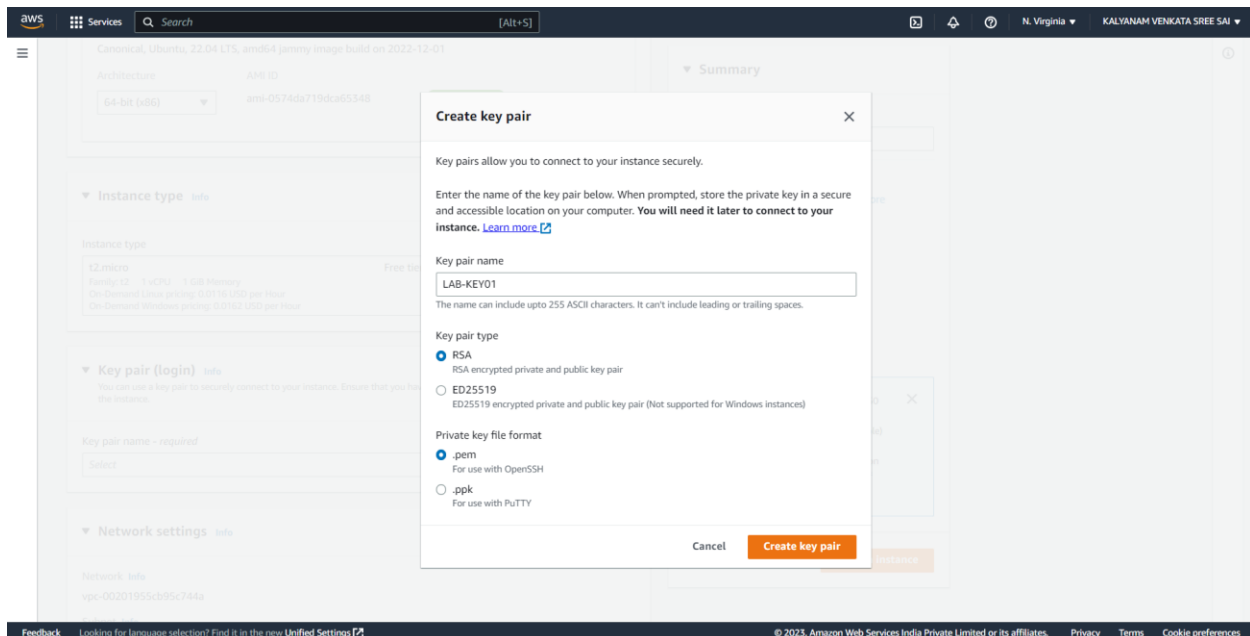
Step-12: In the AMI Section Select the “Ubuntu”.



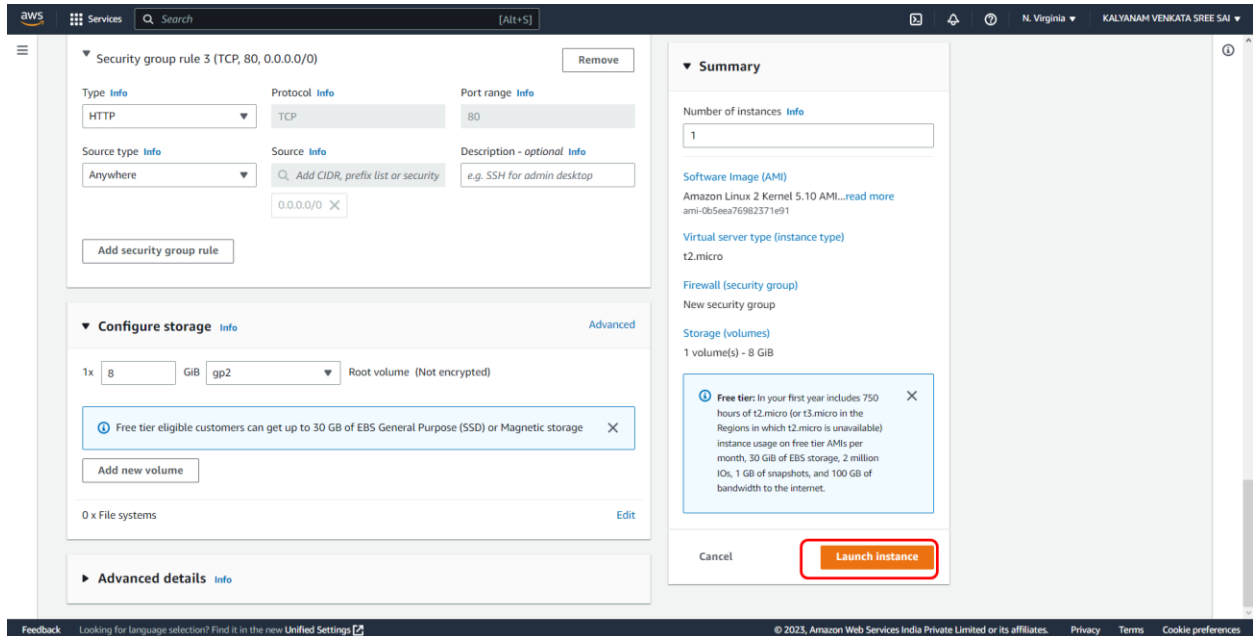
Step-13: After select, The Instance Type “t2. micro” which is under free tier eligible.



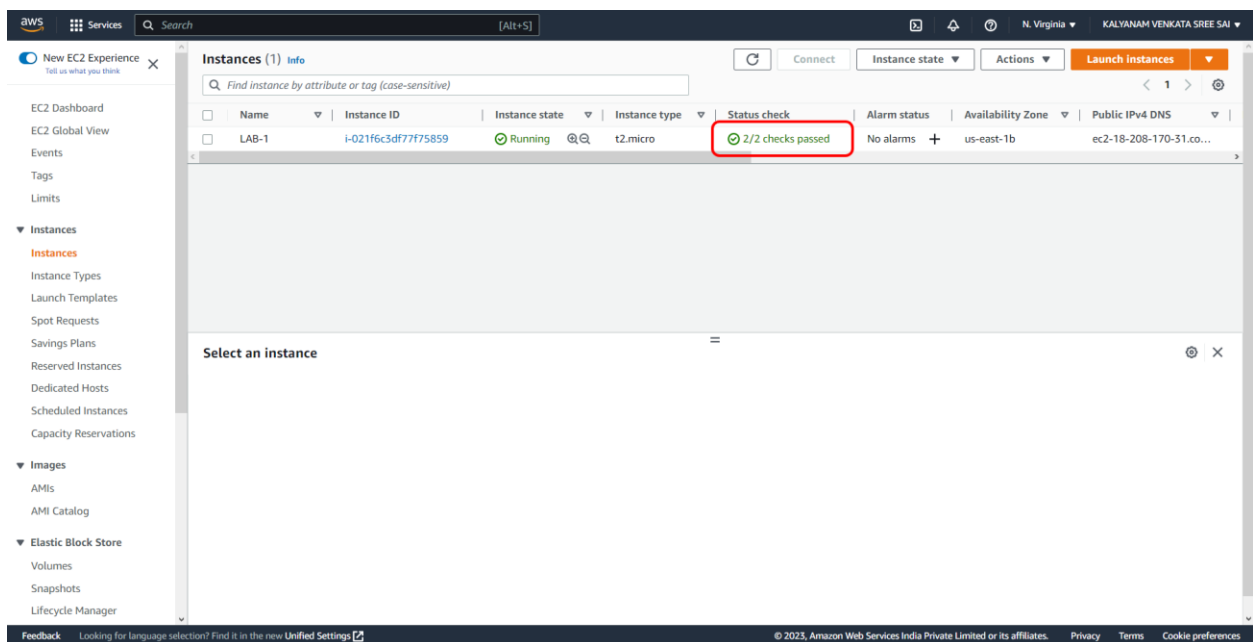
Step-14: Now “Create the new key pair” with extension .pem which will be useful for connecting The EC2 Instance through “SSH”.



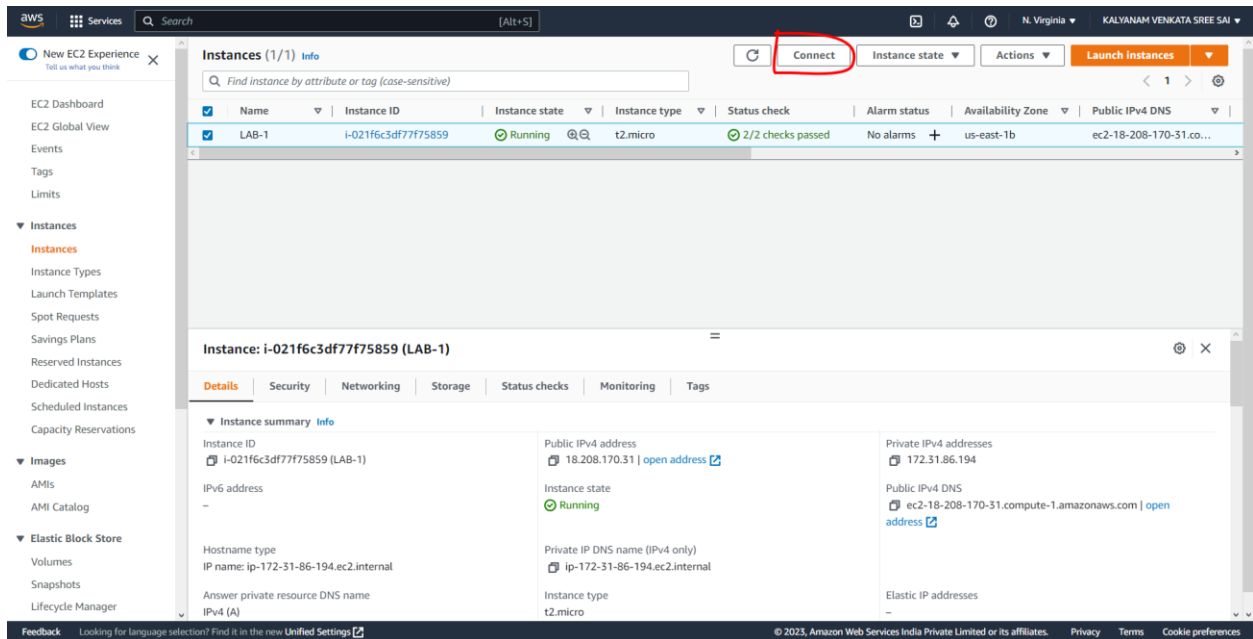
Step-15: After Create the key pair Launch Then launch the instance.



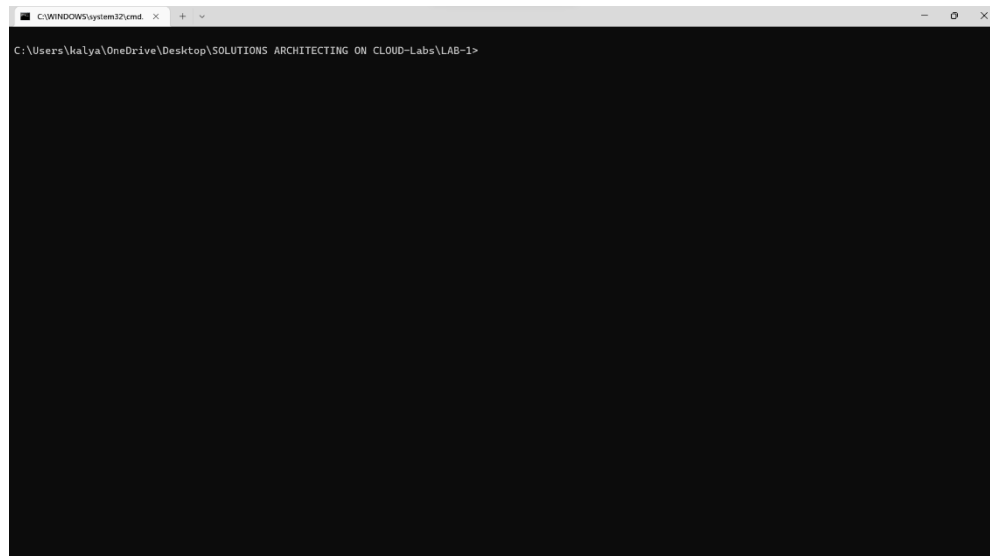
Step-16: Before Launch, the “SSH” Check the Instance Status IS “2/2 Passed”.



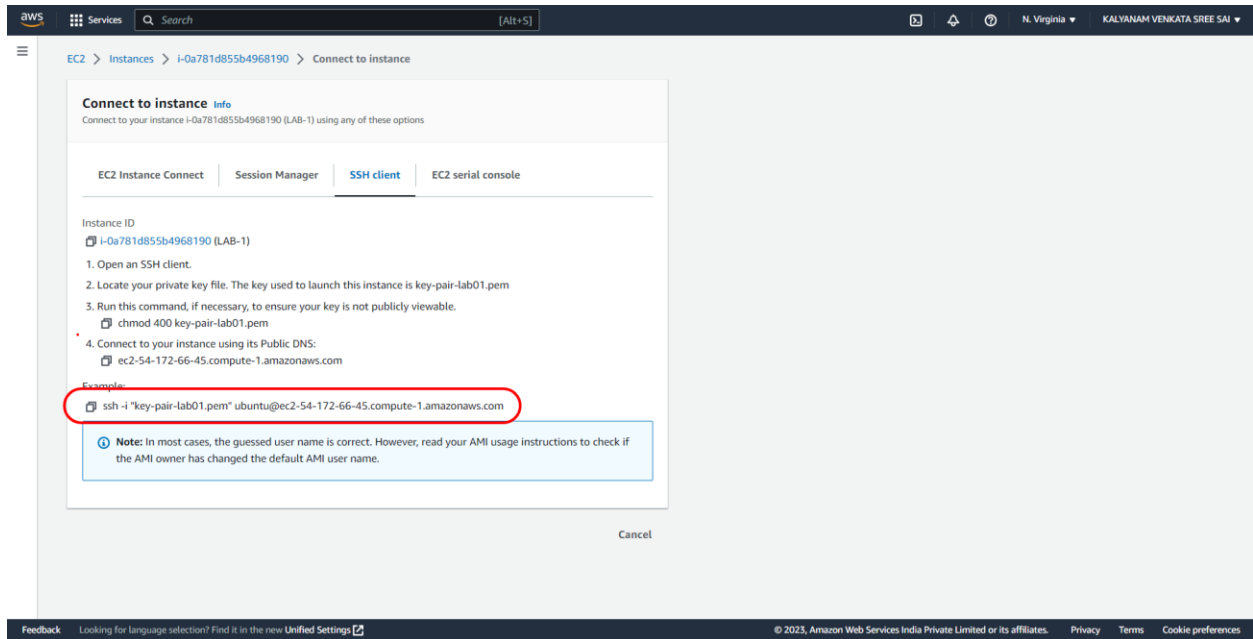
Step-17: After That Connect the Instance



Step-18: Before You Connect the instance and open the terminal



Step-19: Go back to Step-17 and copy the highlighted one.



Step-20: Go the directory where the key-file is located and check with the command “DIR” in windows and “ls” in ubuntu.

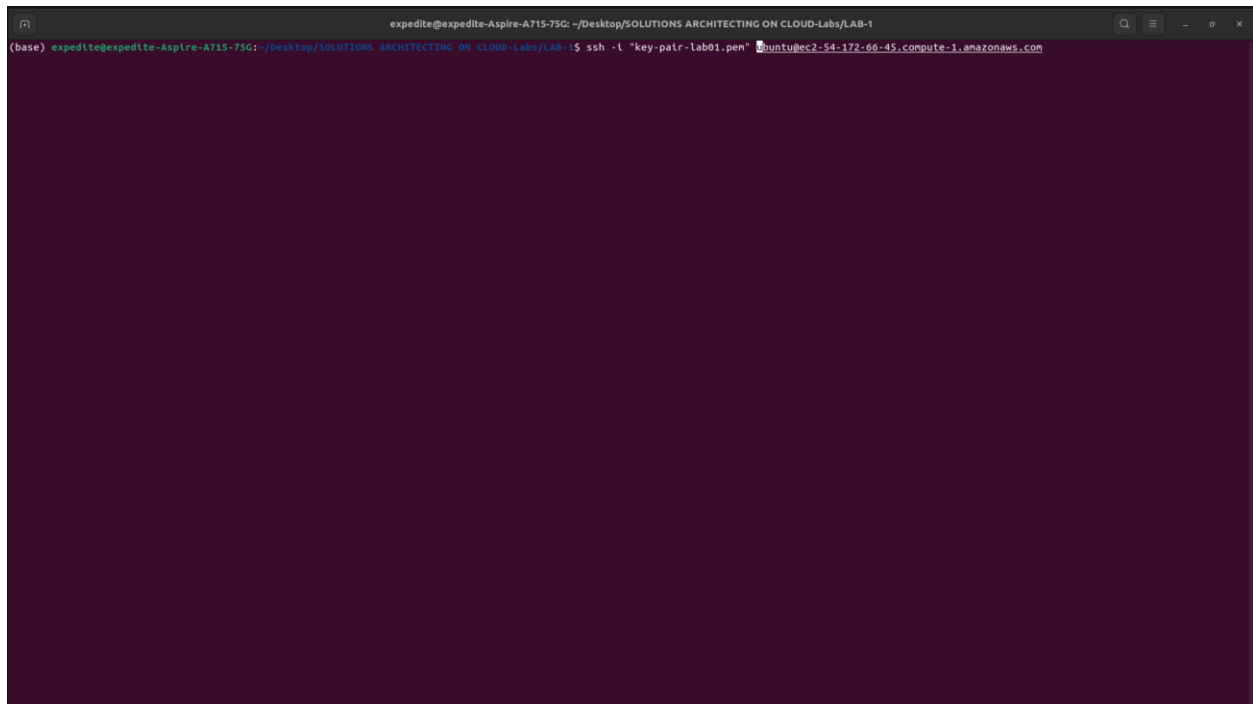
```
C:\WINDOWS\system32\cmd. x Settings x + v
C:\Users\kalya\OneDrive\Desktop\SOLUTIONS ARCHITECTING ON CLOUD-Labs\LAB-1>DIR
Volume in drive C has no label.
Volume Serial Number is 0C84-3439

Directory of C:\Users\kalya\OneDrive\Desktop\SOLUTIONS ARCHITECTING ON CLOUD-Labs\LAB-1

01/07/2023  01:29 PM  <DIR>          .
12/31/2022  12:46 AM  <DIR>          ..
01/07/2023  12:52 AM             3,803,682 2000030439_SOLUTIONS ARCHITECTING ON CLOUD_Lab-1.docx
01/02/2023  08:33 AM             1,674 key-pair-lab01.pem
                2 File(s)          3,805,276 bytes
                2 Dir(s)    213,407,002,624 bytes free

C:\Users\kalya\OneDrive\Desktop\SOLUTIONS ARCHITECTING ON CLOUD-Labs\LAB-1>
```

Step-21: Paste it in that directory “[ssh -i "key-pair-lab01.pem" ubuntu @ ec2-54-172-66-45.compute-1.amazonaws.com.](#)”

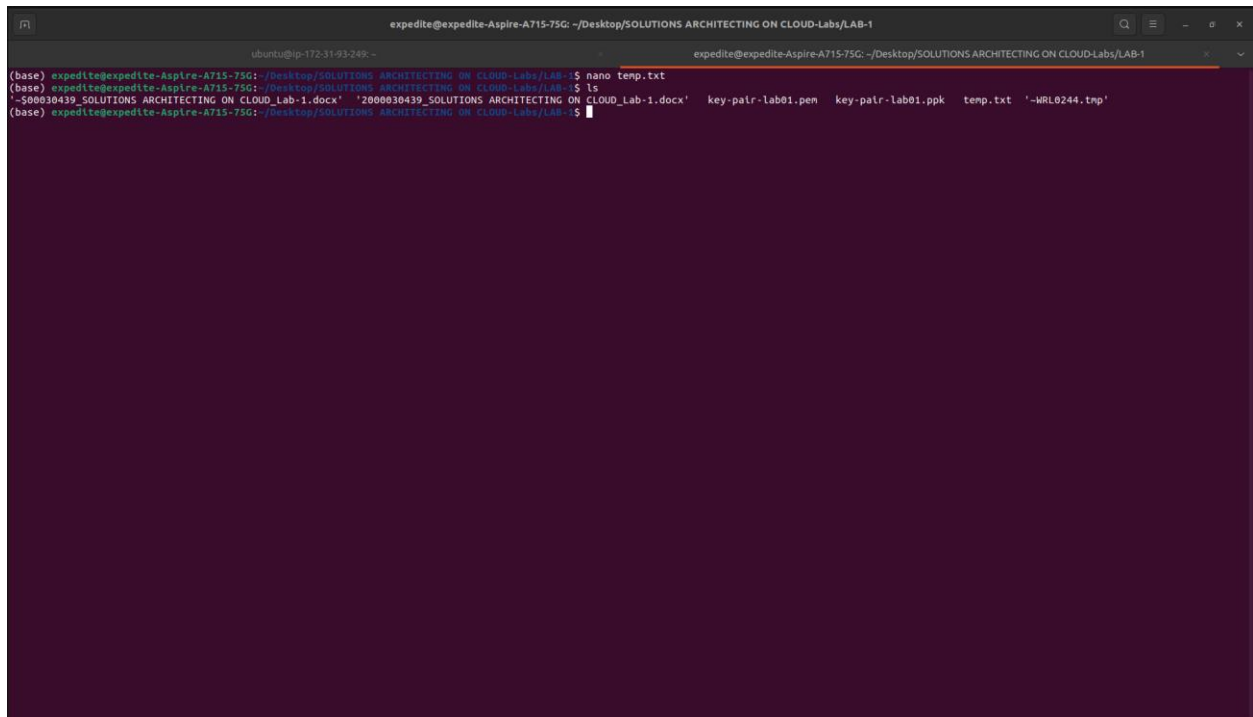


A terminal window with a dark background and light-colored text. The window title bar shows the user 'expedite' on a machine named 'expedite-Aspire-A715-75G' at the directory '~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1'. The terminal content shows the command 'ssh -i "key-pair-lab01.pem" ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com' being entered at the prompt. The prompt is '(base) expedite@expedite-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1: \$'. The command is partially executed, with 'ssh -i "key-pair-lab01.pem"' on the first line and 'ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com' on the second line. The terminal is otherwise empty.

Step-22: After that type “yes” then press “Enter” Then we connected the “EC2” Instance Successfully.

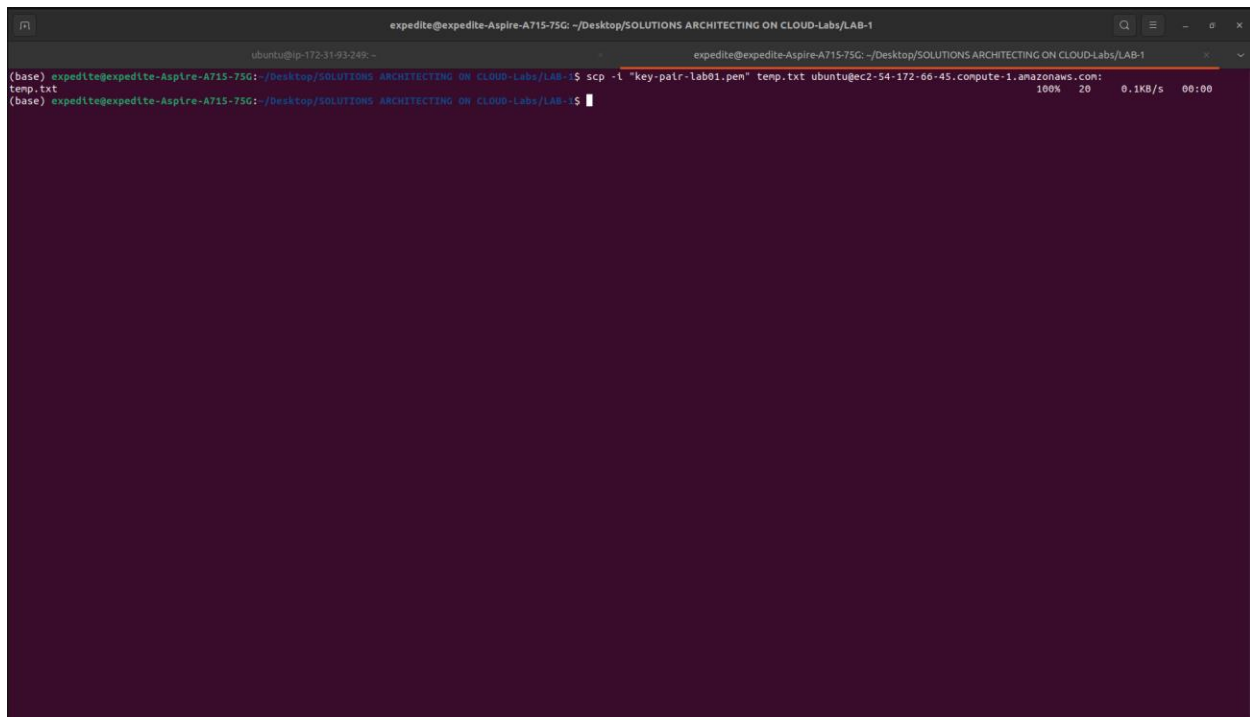
```
ubuntu@ip-172-31-93-249:~$  
(base) expedite@expedite-Aspire-A715-T5G: /desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-$ ssh -l "key-pair-lab01.pem" ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com  
The authenticity of host 'ec2-54-172-66-45.compute-1.amazonaws.com (54.172.66.45)' can't be established.  
ED25519 fingerprint is SHA256:c1qldBqk8NslG4qKC/gxKHISlyoiHqvPMH1/dntNg.  
This key is not known by any other names  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added 'ec2-54-172-66-45.compute-1.amazonaws.com' (ED25519) to the list of known hosts.  
#####  
0 WARNING: UNPROTECTED PRIVATE KEY FILE!  
#####  
0  
Permissions 0604 for 'key-pair-lab01.pem' are too open.  
It is required that your private key files are NOT accessible by others.  
This private key will be ignored.  
Load key 'key-pair-lab01.pem': bad permissions  
ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com: Permission denied (publickey).  
(base) expedite@expedite-Aspire-A715-T5G: /desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-$ ls  
-rw-r--r-- SOLUTIONS_ARCHITECTING_ON_CLOUD_Lab-1.docx  280003049 SOLUTIONS_ARCHITECTING_ON_CLOUD_Lab-1.docx  key-pair-lab01.pem  key-pair-lab01.ppk  ~MLR0244.tnp  
(base) expedite@expedite-Aspire-A715-T5G: /desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-$ ssh -l "key-pair-lab01.pem" ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com  
#####  
0 WARNING: UNPROTECTED PRIVATE KEY FILE!  
#####  
0  
Permissions 0604 for 'key-pair-lab01.pem' are too open.  
It is required that your private key files are NOT accessible by others.  
This private key will be ignored.  
Load key 'key-pair-lab01.pem': bad permissions  
ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com: Permission denied (publickey).  
(base) expedite@expedite-Aspire-A715-T5G: /desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-$ chmod 0600 key-pair-lab01.pem  
(base) expedite@expedite-Aspire-A715-T5G: /desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-$ ssh -l "key-pair-lab01.pem" ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com  
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1026-aws x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:       https://ubuntu.com/advantage  
  
System Information as of Sat Jan 7 18:58:19 UTC 2023  
  
System load: 0.0      Processes:           98  
Usage of /:   23.9% of 7.57GB     Users logged in:    0  
Memory usage: 23%      IPv4 address for eth0: 172.31.93.249  
Swap usage:   0%  
  
 * Ubuntu Pro delivers the most comprehensive open source security and compliance features.  
  
https://ubuntu.com/aws/pro  
  
22 updates can be applied immediately.  
10 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Last login: Sat Jan 7 12:27:12 2023 from 49.37.158.131  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.
```

Step-23: After That Create a file in the other terminal.



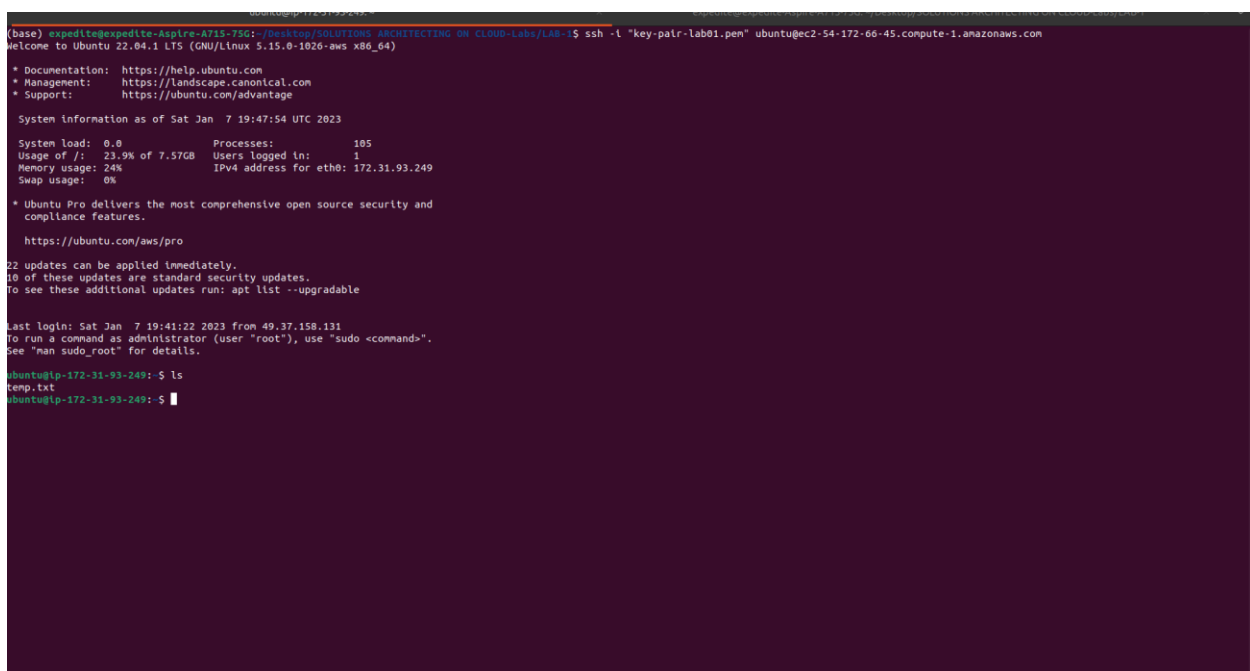
```
expedite@expedite-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1
ubuntu@ip-172-31-93-249: ~
(base) expedite@expedite-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$ nano temp.txt
(base) expedite@expedite-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$ ls
'-500030439_SOLUTIONS ARCHITECTING ON CLOUD_Lab-1.docx'  '2000030439_SOLUTIONS ARCHITECTING ON CLOUD_Lab-1.docx'  key-pair-lab01.pem  key-pair-lab01.ppk  temp.txt  '-HRL0244.tnp'
(base) expedite@expedite-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$
```

Step-24: Now By using “scp” which stands for **secure copy** protocol we can transfer file to ec2 instance.



```
expedit@expedit-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1
ubuntu@ip-172-31-93-249: ~
expedit@expedit-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1
(base) expedit@expedit-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$ scp -l "key-pair-Lab01.pem" temp.txt ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com:
temp.txt
(base) expedit@expedit-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$
```

Step-25: Finally, we successfully copied the file from linux system through **ec2** linux system.



```
expedit@expedit-Aspire-A715-75G: ~
(base) expedit@expedit-Aspire-A715-75G: ~/Desktop/SOLUTIONS ARCHITECTING ON CLOUD-Labs/LAB-1$ ssh -l "key-pair-Lab01.pem" ubuntu@ec2-54-172-66-45.compute-1.amazonaws.com
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1026-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Sat Jan  7 19:47:54 UTC 2023

System load:  0.0          Processes:    105
Usage of /:   23.9% of 7.57GB   Users logged in:  1
Memory usage: 24%            IPv4 address for eth0: 172.31.93.249
Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

https://ubuntu.com/aws/pro

22 updates can be applied immediately.
10 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Jan  7 19:41:22 2023 from 49.37.158.131
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-93-249:~$ ls
temp.txt
ubuntu@ip-172-31-93-249:~$
```