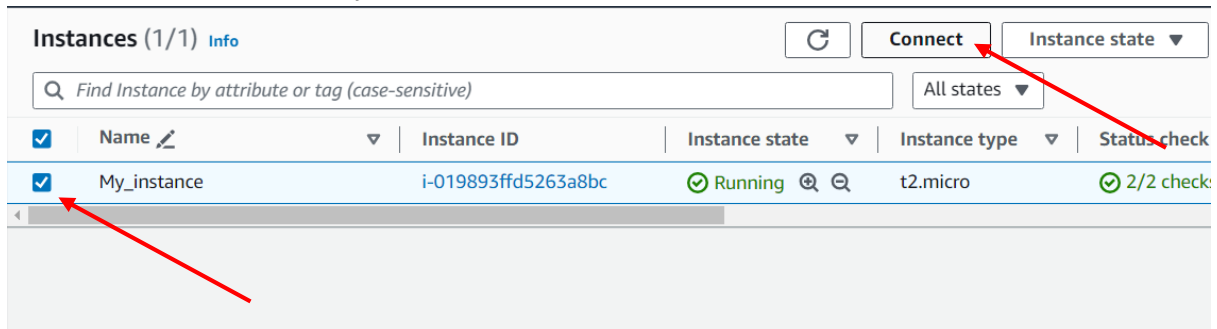


Various Methods to connect to an EC2 Instance are below:

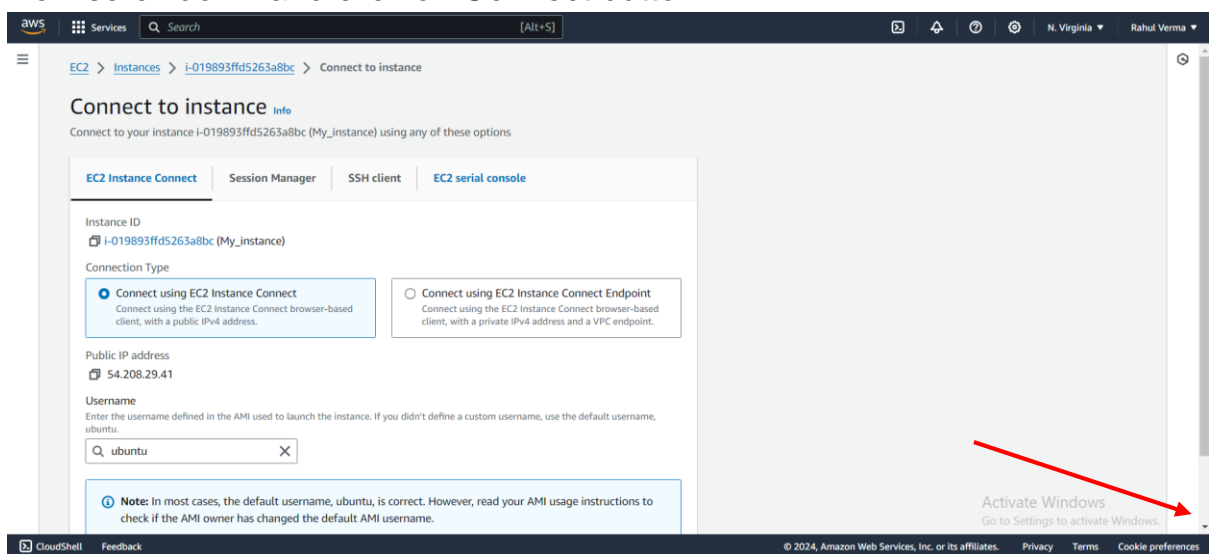
- 1. Using AWS Console**
- 2. Using CMD Prompt or windows powershell**
- 3. Using MobaXterm and putty software**

Now let's connect to our EC2 Instance

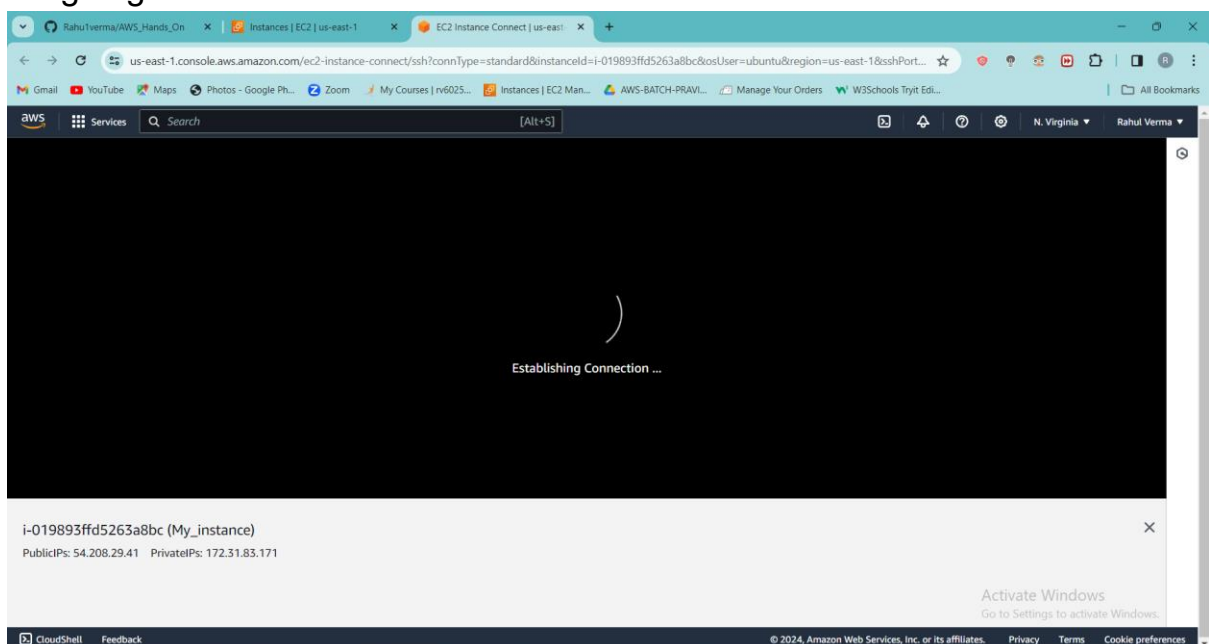
Method 1- Just select your instance and click on Connect button



Now scroll down and click on Connect button



It's going to take few seconds



The screenshot shows a CloudShell terminal window with the following content:

```

Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-83-171:~$
  
```

Below the terminal output, the instance details are displayed:

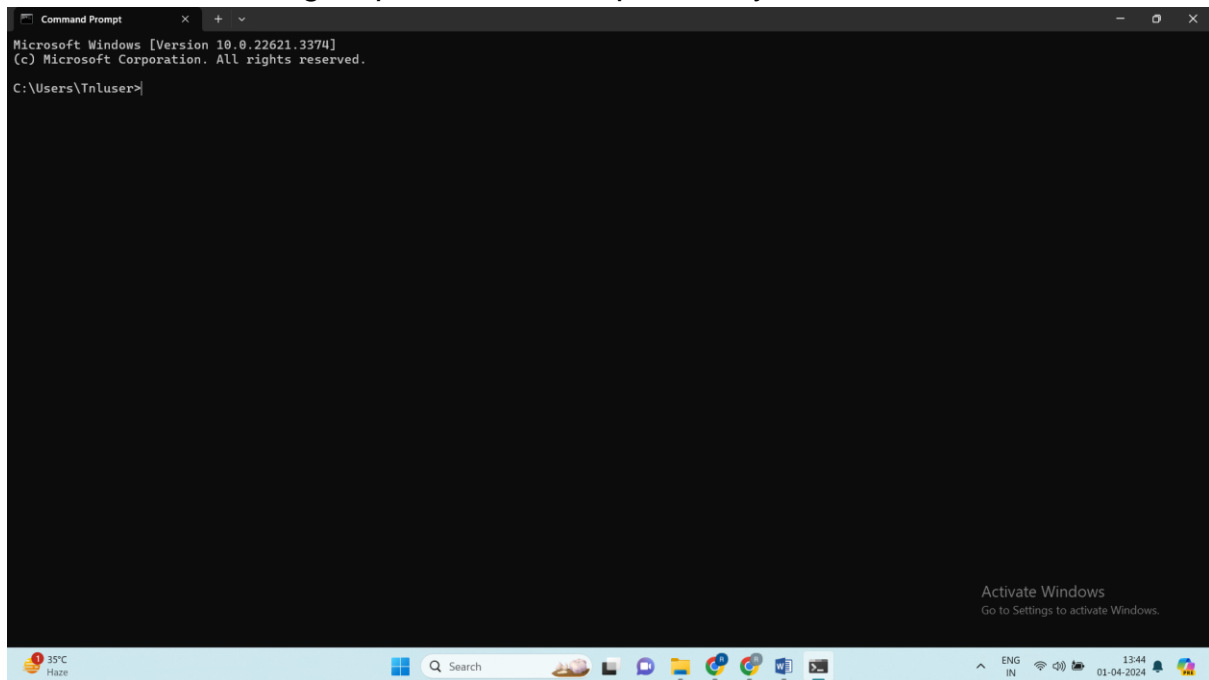
```

i-019893ffd5263a8bc (My_instance)
PublicIps: 54.208.29.41  PrivateIps: 172.31.83.171
  
```

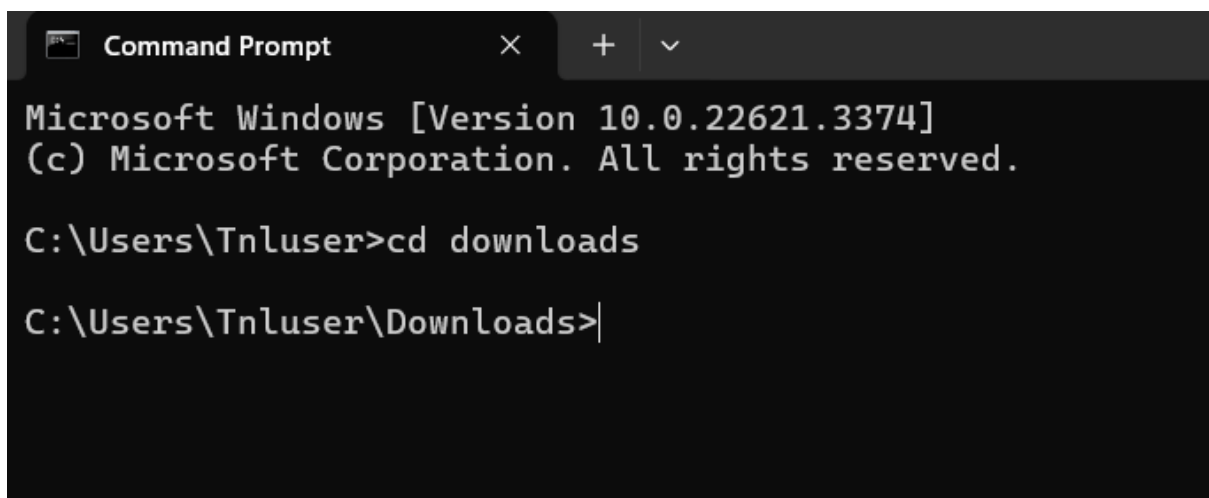
The bottom of the image shows the Windows taskbar with the date and time as 01-04-2024, 12:56.

A screenshot of the Windows Search interface. The top navigation bar includes tabs for 'All', 'Apps', 'Documents', 'Web', 'Settings', 'Folders', and 'Phone'. The 'All' tab is selected. Below the navigation bar, the search results are categorized into 'Best match' and 'Search the web'. Under 'Best match', the 'Command Prompt' app is listed with its icon and the label 'App'. Under 'Search the web', a result for 'cmd' is shown with the text 'See more search results'. To the right, a detailed view of the 'Command Prompt' app is displayed, showing its icon, name, and a list of actions: 'Open', 'Run as administrator', 'Open file location', 'Pin to Start', and 'Pin to taskbar'. The background of the search results area is a light blue gradient.

So first we have to give path where our public key is downloaded



Just write- **cd downloads**



Now just type- **dir** (it will show you all the items in your downloads)

And you can see our file is also there name as **RahulKP.pem**

```
30-01-2024 12:34 31,764 payslip_tax_12_2023 (2).pdf
30-01-2024 12:23 31,762 payslip_tax_12_2023.pdf
11-02-2024 21:03 31,756 payslip_tax_1_2024.pdf
27-03-2024 18:22 <DIR> Portfolio
27-03-2024 18:19 <DIR> Portfolio-Website-Template-main
27-03-2024 18:06 8,196,612 Portfolio-Website-Template-main.zip
16-02-2024 12:05 157,282 Project-1---Deploying-A-Multi-Tier-Website
01-04-2024 12:58 <DIR> Projects
28-03-2024 18:02 1,674 RahulKP.pem
28-02-2024 12:19 2,757 SNS-Payload-Based-Filtering-SAM.template
28-02-2024 12:19 2,245 SNS-Subscription-Attributes-Tutorial-CloudFormation.template
28-02-2024 12:19 6,806 SNS-VPCE-Tutorial-CloudFormation.template
21-03-2024 13:25 1,042,444 ticketIXITRS288694297146556.pdf
21-03-2024 13:22 1,042,412 ticketIXITRS288757078521943.pdf
21-03-2024 13:10 260,660 ticket_217064115060.pdf
```

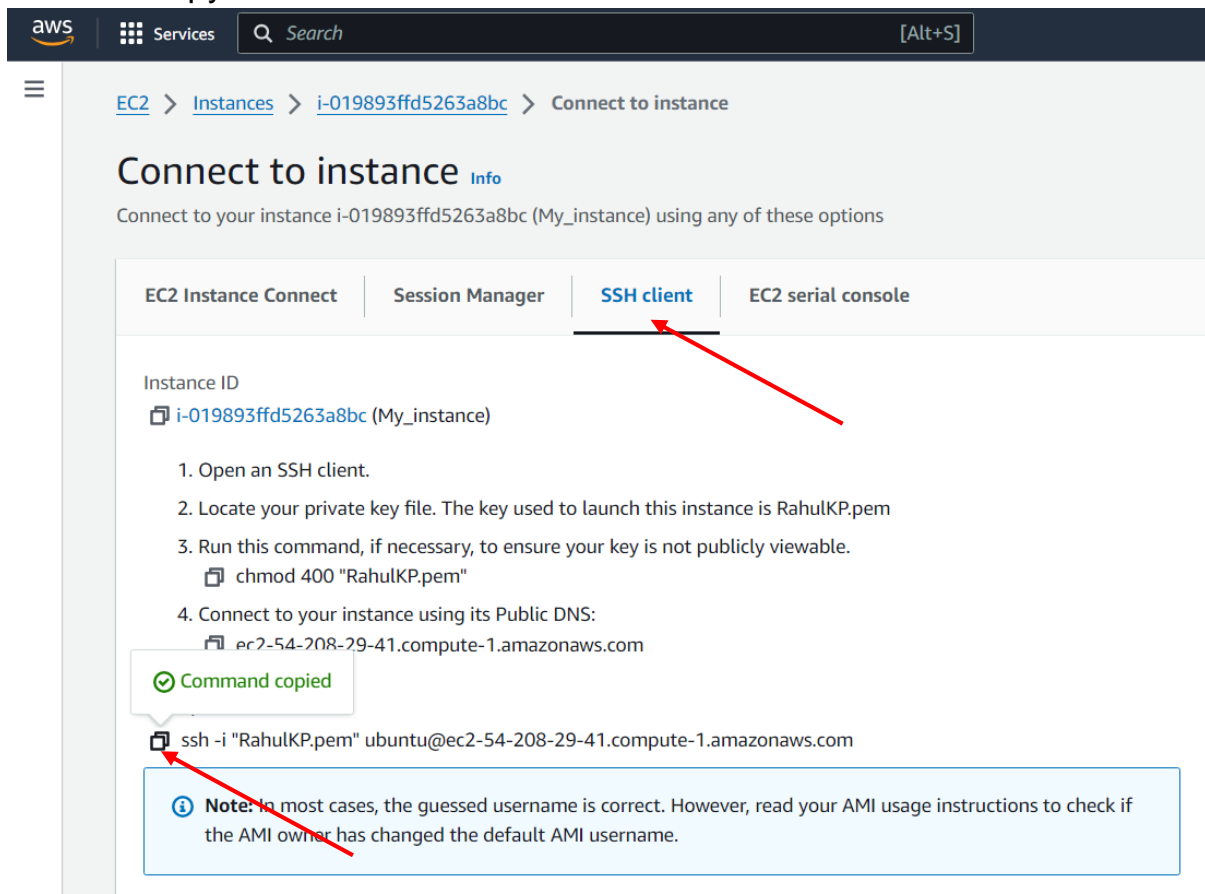
And now go to your AWS console

Select your instance

Click on connect

Click on SSH client

And now copy the command



The screenshot shows the AWS Management Console interface for connecting to an EC2 instance. The breadcrumb navigation shows 'EC2 > Instances > i-019893ffd5263a8bc > Connect to instance'. The main heading is 'Connect to instance' with an 'Info' link. Below this, it says 'Connect to your instance i-019893ffd5263a8bc (My_instance) using any of these options'. There are four tabs: 'EC2 Instance Connect', 'Session Manager', 'SSH client' (which is selected and highlighted with a red arrow), and 'EC2 serial console'. Under the 'SSH client' tab, the 'Instance ID' is 'i-019893ffd5263a8bc (My_instance)'. A list of steps is provided: 1. Open an SSH client. 2. Locate your private key file. The key used to launch this instance is RahulKP.pem. 3. Run this command, if necessary, to ensure your key is not publicly viewable. The command 'chmod 400 "RahulKP.pem"' is shown. 4. Connect to your instance using its Public DNS: 'ec2-54-208-29-41.compute-1.amazonaws.com'. Below the steps, a green checkmark icon and the text 'Command copied' are visible. The command 'ssh -i "RahulKP.pem" ubuntu@ec2-54-208-29-41.compute-1.amazonaws.com' is displayed, with a red arrow pointing to it. A blue box with a note icon contains the text: 'Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.'

Paste that command in your cmd prompt or power shell whichever you are using and press enter button

```
21-03-2024 12:27 145,485 WhatsApp Image 2024-03-21 at 12.23.48 PM.jpeg
21-03-2024 12:27 142,982 WhatsApp Image 2024-03-21 at 12.23.49 PM (1).jpeg
21-03-2024 12:27 208,031 WhatsApp Image 2024-03-21 at 12.23.49 PM.jpeg
21-03-2024 12:32 173,882 WhatsApp Image 2024-03-21 at 12.32.47 PM.jpeg
21-03-2024 12:44 70,033 WhatsApp Image 2024-03-21 at 12.44.01 PM.jpeg
21-03-2024 11:49 153,870 Your IndiGo Itinerary - BU2DMG.eml
101 File(s) 795,611,844 bytes
5 Dir(s) 120,417,619,968 bytes free

C:\Users\Tnluser\Downloads>ssh -i "RahulKP.pem" ubuntu@ec2-54-208-29-41.compute-1.amazonaws.com|
```

Write- **yes**

```
C:\Users\Tnluser\Downloads>ssh -i "RahulKP.pem" ubuntu@ec2-54-208-29-41.compute-1.amazonaws.com
The authenticity of host 'ec2-54-208-29-41.compute-1.amazonaws.com (54.208.29.41)' can't be established.
ED25519 key fingerprint is SHA256:Ai6PEsbltITGAnBrYYlVwK1TTUmzQBJza5PgScL4hhM.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes|
```

And you are connected to your instance now

```
ubuntu@ip-172-31-83-171: ~$
21-03-2024 12:44 70,033 WhatsApp Image 2024-03-21 at 12.44.01 PM.jpeg
21-03-2024 11:49 153,870 Your IndiGo Itinerary - BU2DMG.eml
101 File(s) 795,611,844 bytes
5 Dir(s) 120,417,619,968 bytes free

C:\Users\Tnluser\Downloads>ssh -i "RahulKP.pem" ubuntu@ec2-54-208-29-41.compute-1.amazonaws.com
The authenticity of host 'ec2-54-208-29-41.compute-1.amazonaws.com (54.208.29.41)' can't be established.
ED25519 key fingerprint is SHA256:Ai6PEsbltITGAnBrYYlVwK1TTUmzQBJza5PgScL4hhM.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-54-208-29-41.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1014-aws x86_64)

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

System information as of Mon Apr 1 08:25:51 UTC 2024

System load:  0.0          Processes:    96
Usage of /:   20.7% of 7.57GB Users logged in: 0
Memory usage: 21%         IPv4 address for eth0: 172.31.83.171
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

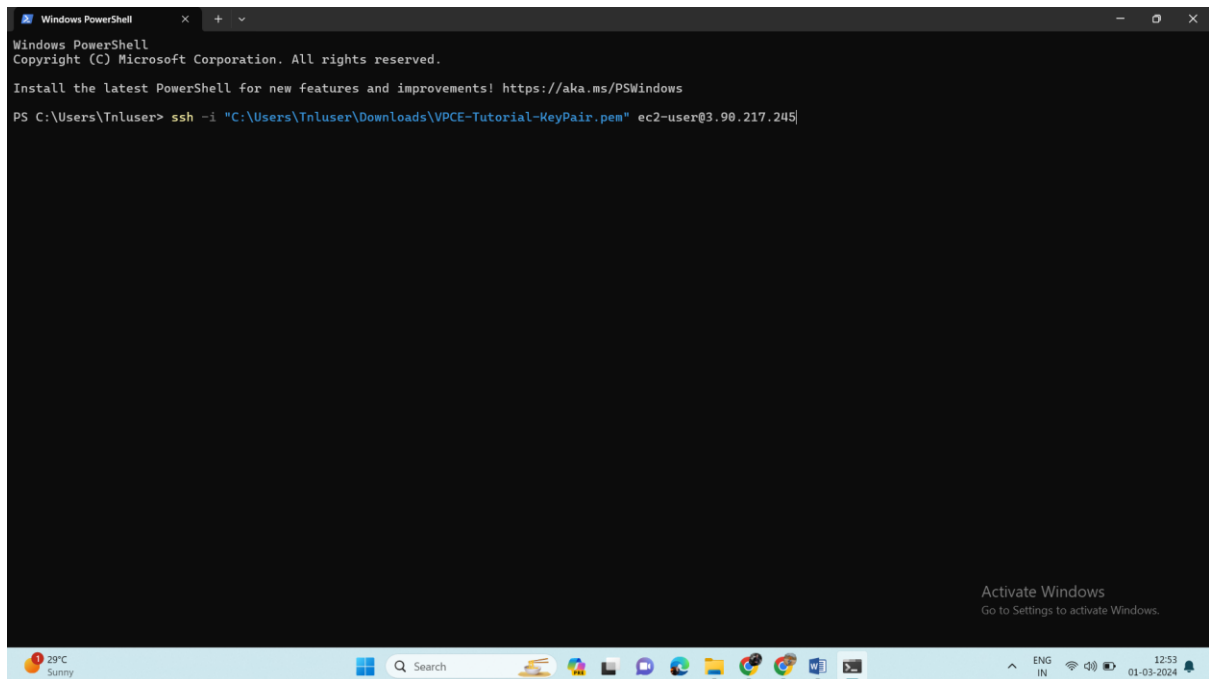
Last login: Mon Apr 1 08:07:06 2024 from 117.206.164.96
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-83-171:~$ |
```

Or For Windows PowerShell

We are using cmd

```
ssh -i "C:\Users\Tnluser\Downloads\VPCE-Tutorial-KeyPair.pem"
ec2-user@(instance ip)
```



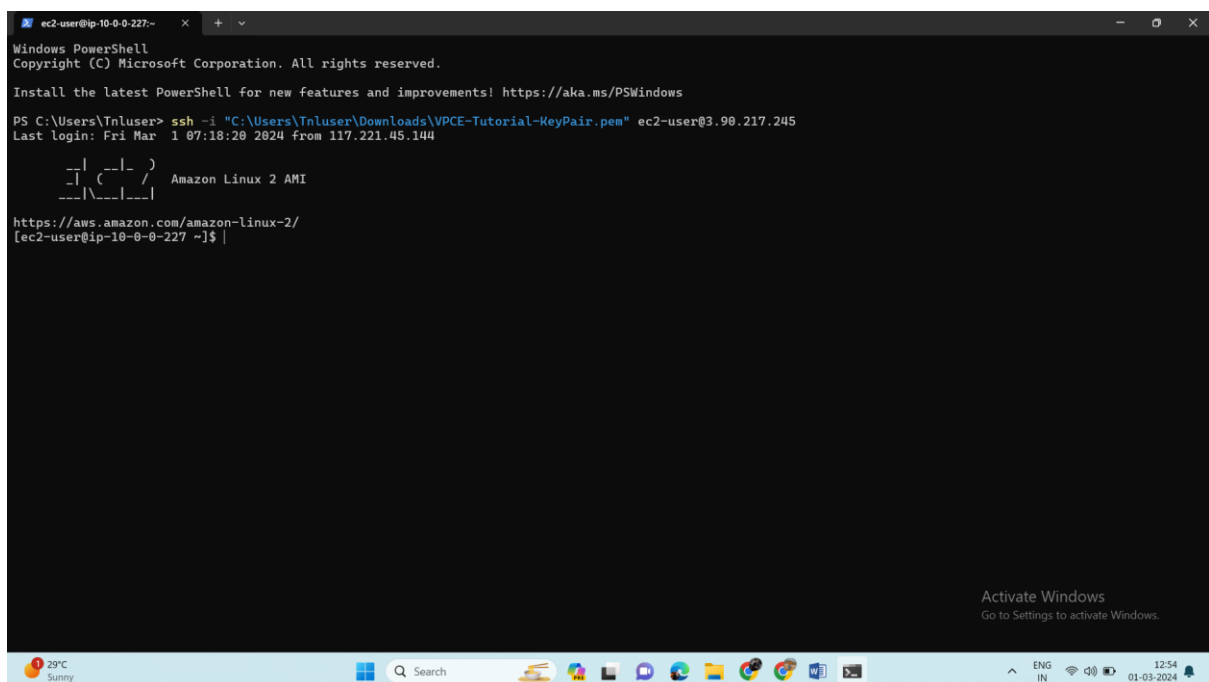
A screenshot of a Windows PowerShell terminal window. The title bar reads "Windows PowerShell". The terminal text shows the standard PowerShell startup messages, followed by the command `ssh -i "C:\Users\Tnluser\Downloads\VPCE-Tutorial-KeyPair.pem" ec2-user@3.90.217.245` being entered at the prompt. The terminal is currently empty, waiting for the command's output. The Windows taskbar is visible at the bottom, showing the date and time as 12:53 on 01-03-2024.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Tnluser> ssh -i "C:\Users\Tnluser\Downloads\VPCE-Tutorial-KeyPair.pem" ec2-user@3.90.217.245
```

We have successfully logged in



A screenshot of a Windows PowerShell terminal window showing the successful execution of the SSH command. The terminal title is `ec2-user@ip-10-0-0-227:~`. The output shows the SSH banner for Amazon Linux 2, including the ASCII art logo and the URL `https://aws.amazon.com/amazon-linux-2/`. The prompt has changed to `[ec2-user@ip-10-0-0-227 ~]$`. The Windows taskbar at the bottom shows the date and time as 12:54 on 01-03-2024.

```
ec2-user@ip-10-0-0-227:~
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

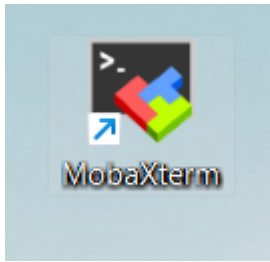
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Tnluser> ssh -i "C:\Users\Tnluser\Downloads\VPCE-Tutorial-KeyPair.pem" ec2-user@3.90.217.245
Last login: Fri Mar 1 07:18:20 2024 from 117.221.45.144

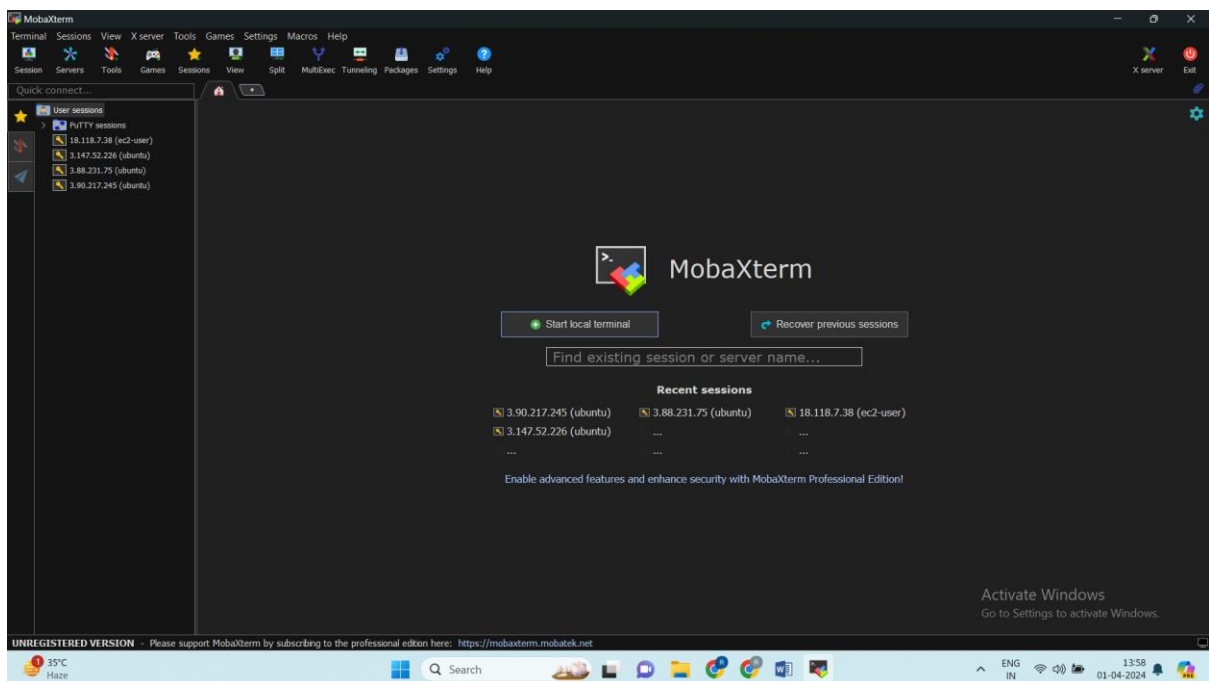
  _ _ _ _ _
 _|   _|   |_)   Amazon Linux 2 AMI
 _| (   _|   /
  _| \___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-0-227 ~]$
```

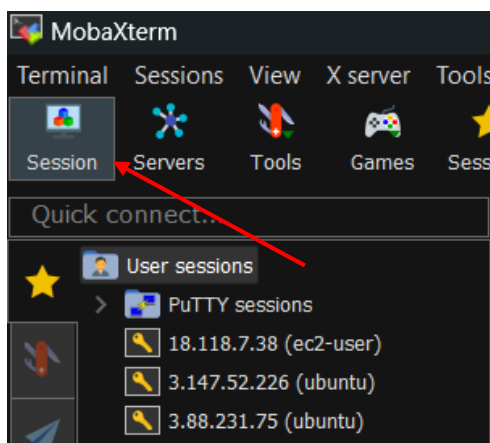
Method 3: you have to install 3rd party application like MobaXterm, putty etc..
Let's try to connect using **MobaXterm first.**



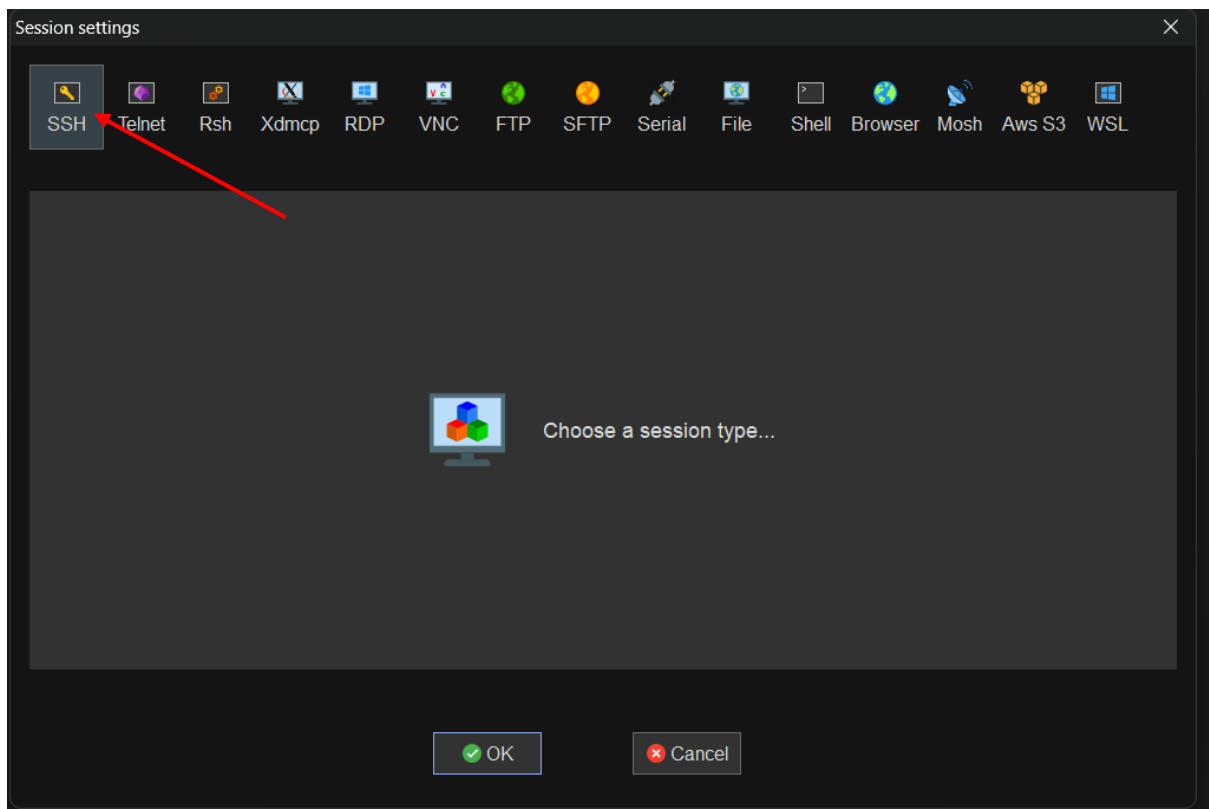
This how MobaXterm looks



Click on sessions



And now click on SSH



Copy your Instance IP Address

Instances (1/1) [Info](#) Refresh Connect Instance s

All states ▼

<input checked="" type="checkbox"/>	Name ✎	Instance ID	Instance state	Instance type	St
<input checked="" type="checkbox"/>	My_instance	i-019893ffd5263a8bc	Running 🔍 🔍	t2.micro	🟢

Instance: i-019893ffd5263a8bc (My_instance)

[Details](#) | [Status and alarms New](#) | [Monitoring](#) | [Security](#) | [Networking](#) | [Storage](#) | [Tags](#)

▼ **Instance summary** [Info](#)

Instance ID

[📄](#) i-019893ffd5263a8bc (My_instance)

IPv6 address

—

Hostname type

IP name: ip-172-31-83-171.ec2.internal

Answer private resource DNS name

Public IPv4 address

[📄](#) 54.208.29.41 [open address](#) [🔗](#)

Instance state

Running

Private IP DNS name (IPv4 only)

[📄](#) ip-172-31-83-171.ec2.internal

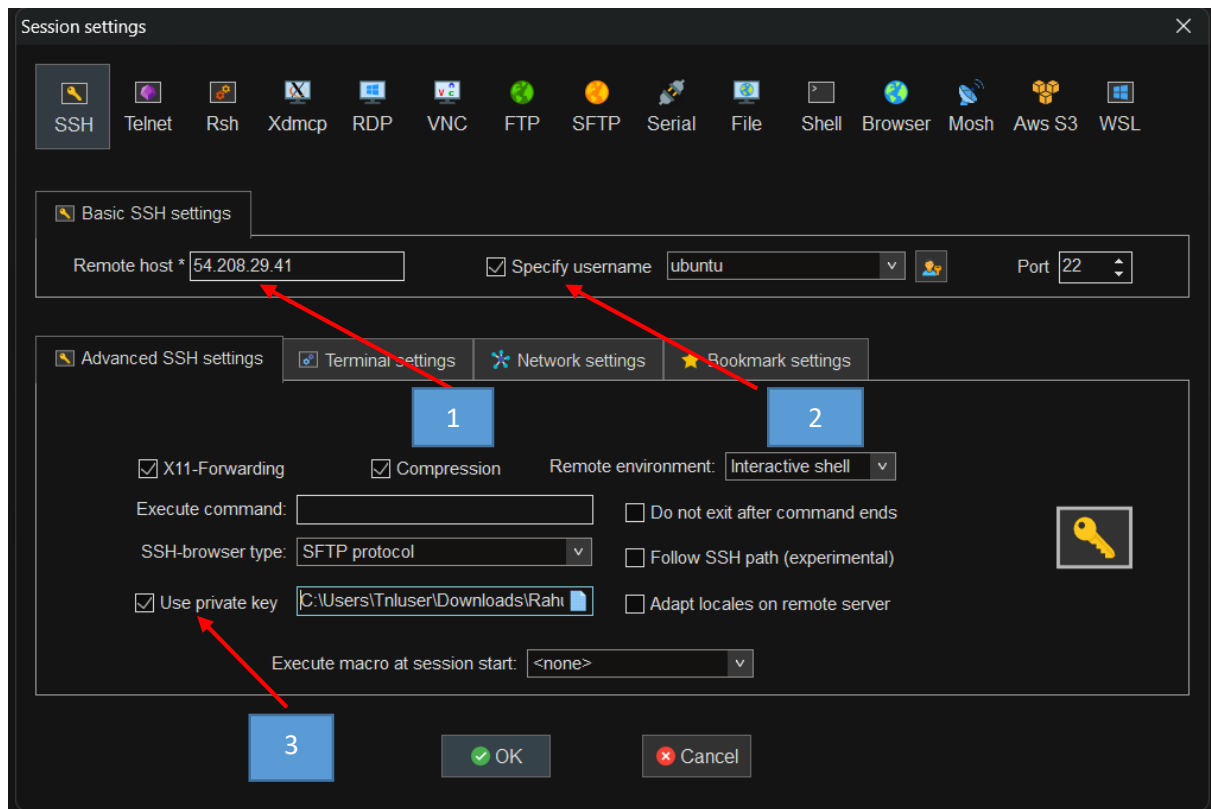
Instance type

Afterwards

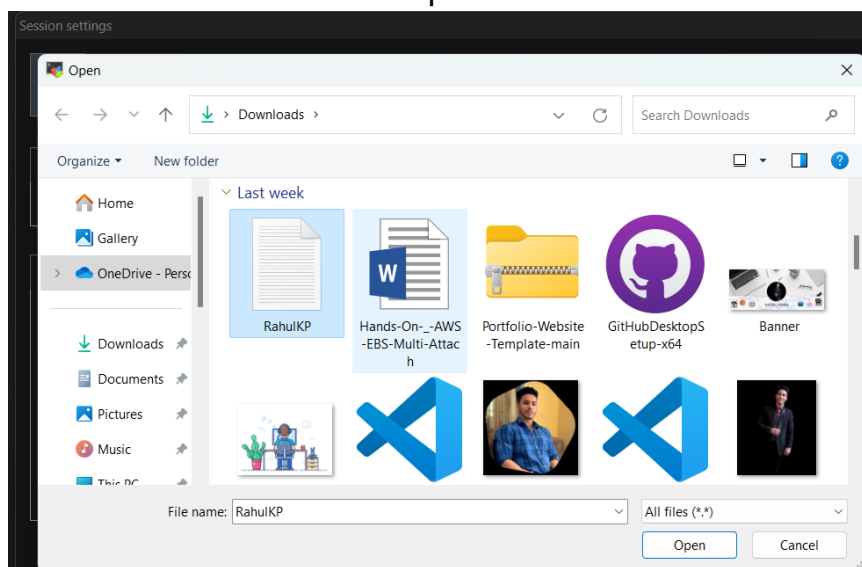
In Remote host- copy paste your instance public IP address

Enable or tick specify username- write “ubuntu” (if using Ubuntu OS) or write “ec2-user” (for amazon linux)

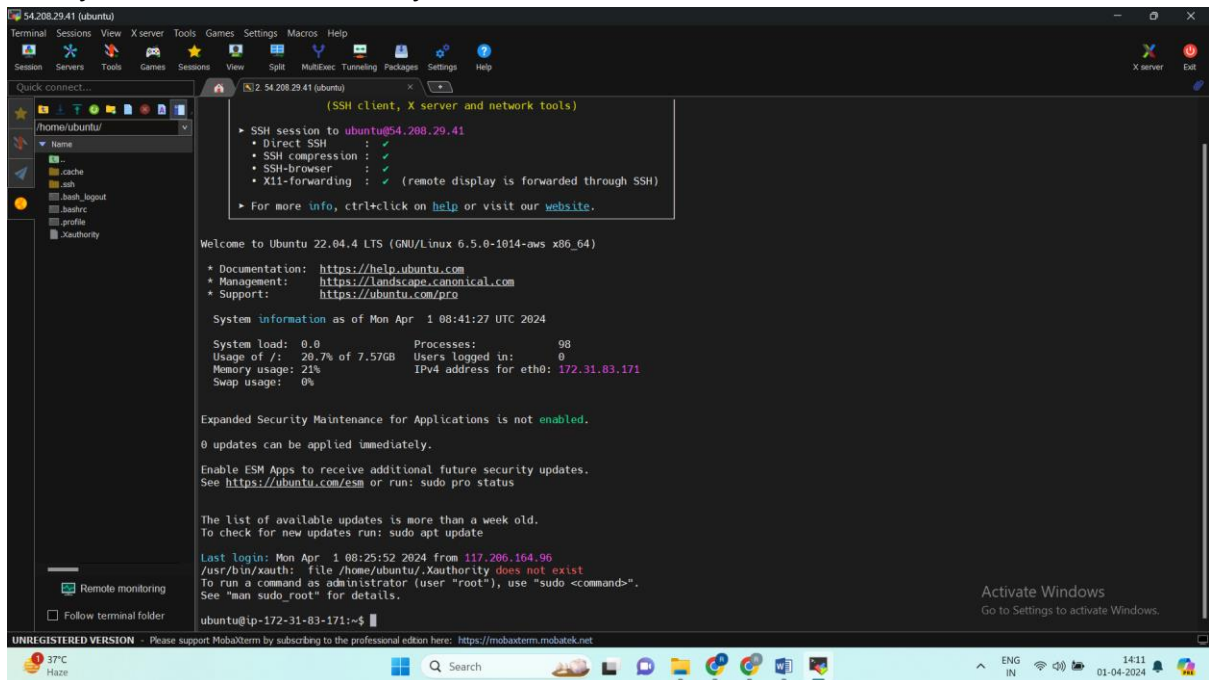
And click on Advanced SSH settings under that click on use private key browse your file and select it.



Browse file select file and open-



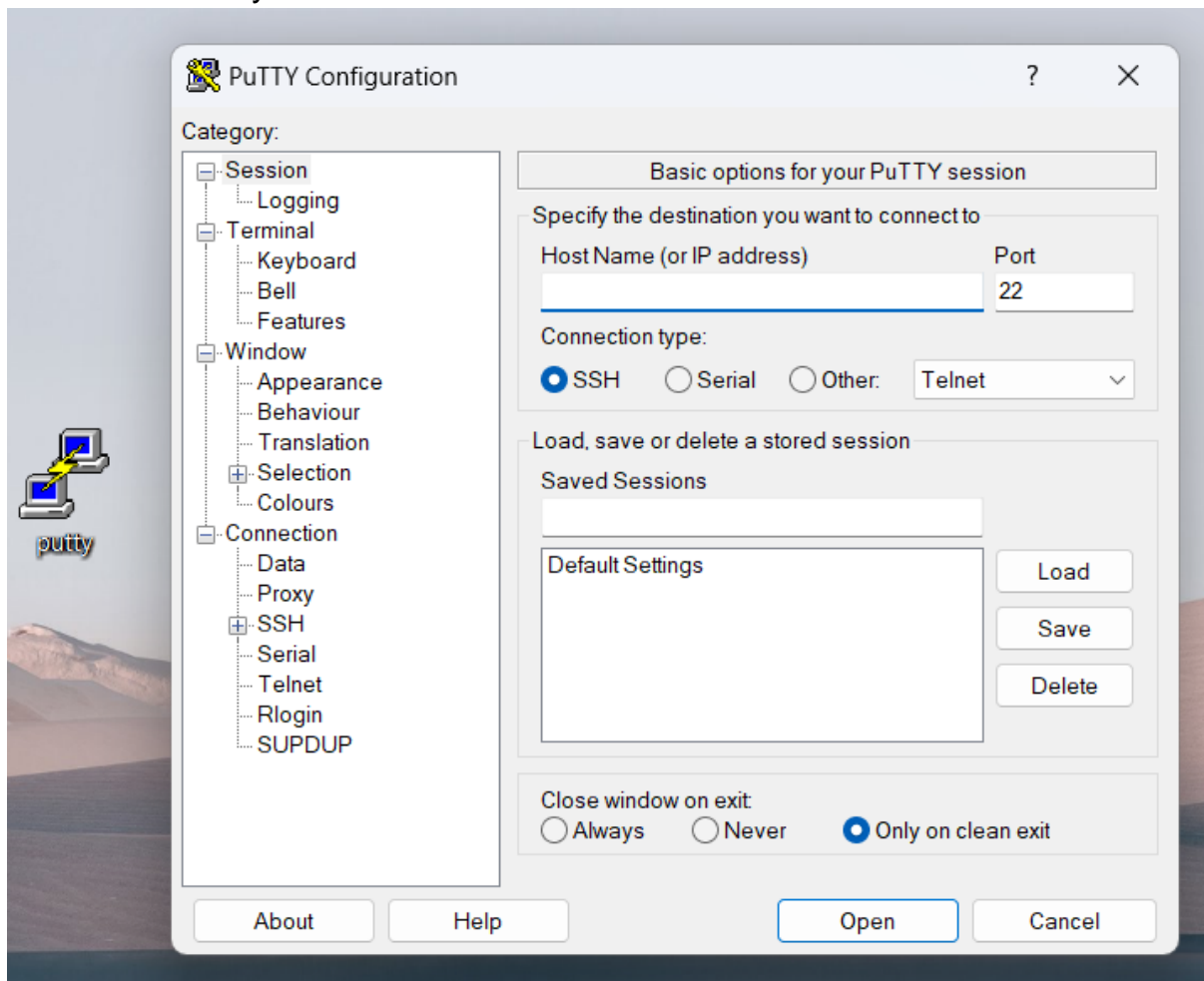
And you are connected to your instance now



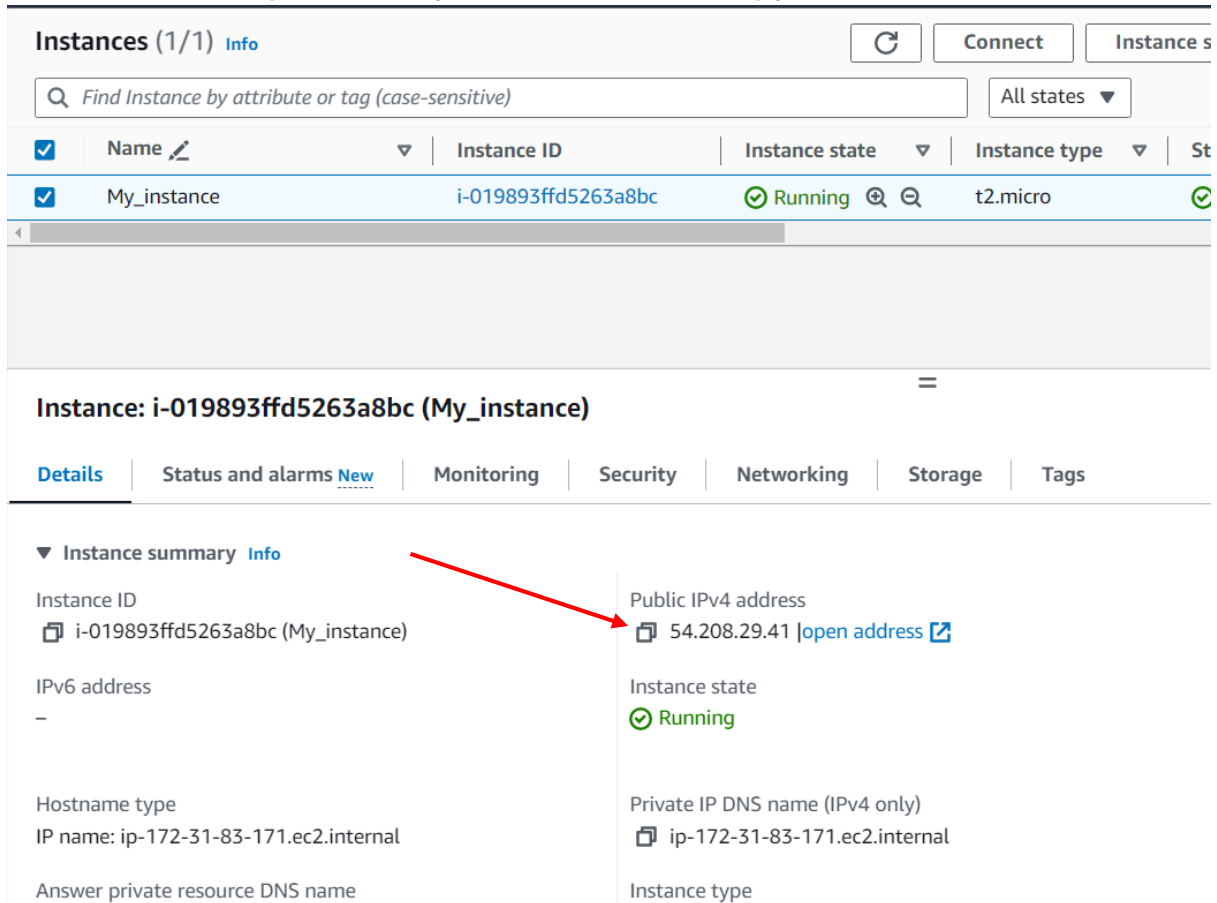
Now let's try with putty



This is how Putty looks



Now to SSH to our Instance we have to copy the public IP address from our AWS console so just select your instance and copy the IP address-



The screenshot shows the AWS Management Console interface for an EC2 instance. At the top, there's a header 'Instances (1/1) Info' with a search bar and a 'Connect' button. Below this is a table with columns: Name, Instance ID, Instance state, Instance type, and St. The table contains one entry: 'My_instance' with ID 'i-019893ffd5263a8bc', state 'Running', and type 't2.micro'. Below the table, there's a section 'Instance: i-019893ffd5263a8bc (My_instance)' with tabs for Details, Status and alarms, Monitoring, Security, Networking, Storage, and Tags. The 'Details' tab is active, showing an 'Instance summary' section. A red arrow points from the 'Public IPv4 address' field, which contains '54.208.29.41', to the 'Host Name (or IP address)' field in the PuTTY Configuration window shown in the next image.

Name	Instance ID	Instance state	Instance type	St
My_instance	i-019893ffd5263a8bc	Running	t2.micro	

Instance: i-019893ffd5263a8bc (My_instance)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance summary Info

Instance ID
i-019893ffd5263a8bc (My_instance)

IPv6 address
-

Hostname type
IP name: ip-172-31-83-171.ec2.internal

Answer private resource DNS name

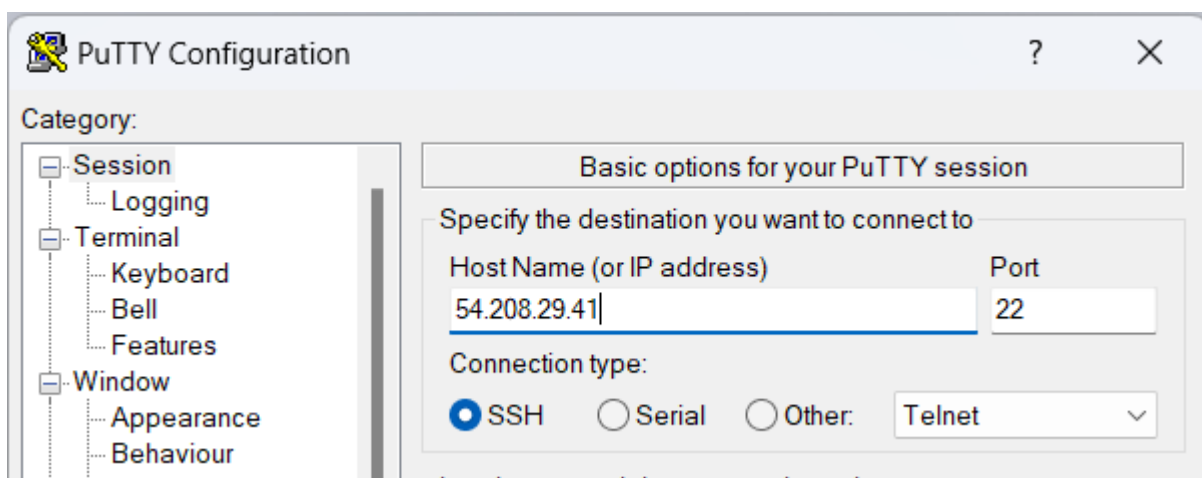
Public IPv4 address
54.208.29.41 | [open address](#)

Instance state
Running

Private IP DNS name (IPv4 only)
ip-172-31-83-171.ec2.internal

Instance type

Paste that IP address here



The screenshot shows the PuTTY Configuration window. On the left, there's a tree view with categories: Session, Logging, Terminal, Keyboard, Bell, Features, Window, Appearance, and Behaviour. The 'Session' category is selected. On the right, there's a section 'Basic options for your PuTTY session'. It contains a text box for 'Host Name (or IP address)' with the value '54.208.29.41' and a text box for 'Port' with the value '22'. Below these, there's a 'Connection type:' section with three radio buttons: 'SSH' (selected), 'Serial', and 'Other:'. There's also a dropdown menu for 'Telnet'.

PuTTY Configuration

Category:

- Session
- Logging
- Terminal
- Keyboard
- Bell
- Features
- Window
- Appearance
- Behaviour

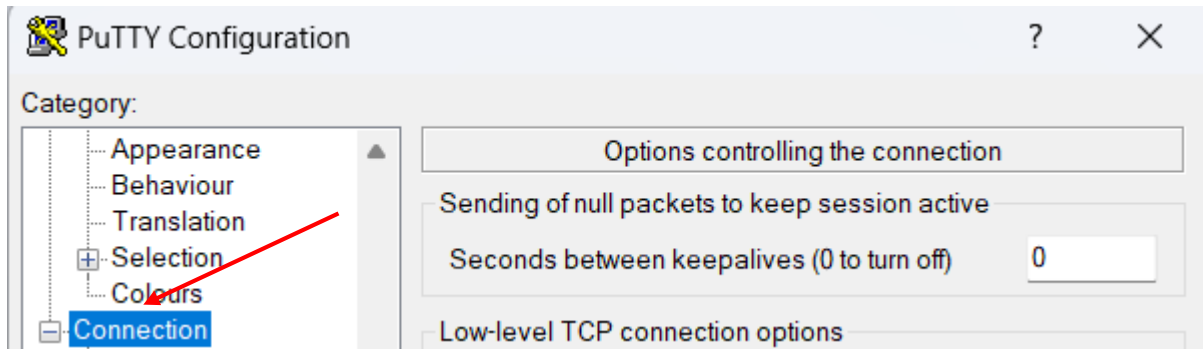
Basic options for your PuTTY session

Specify the destination you want to connect to

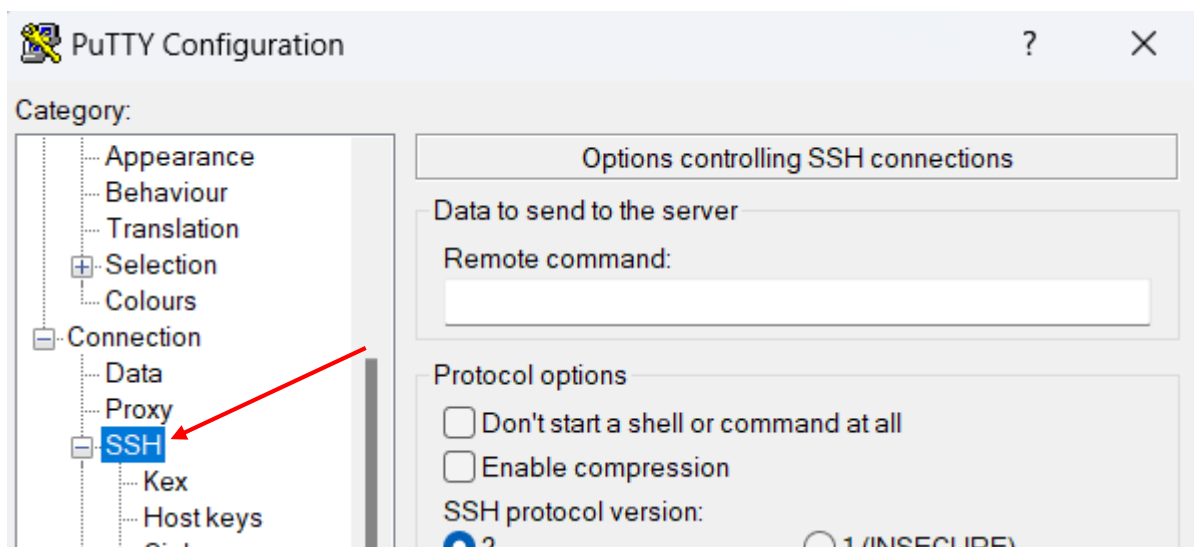
Host Name (or IP address) Port
54.208.29.41 22

Connection type:
☒ SSH ☐ Serial ☐ Other: Telnet

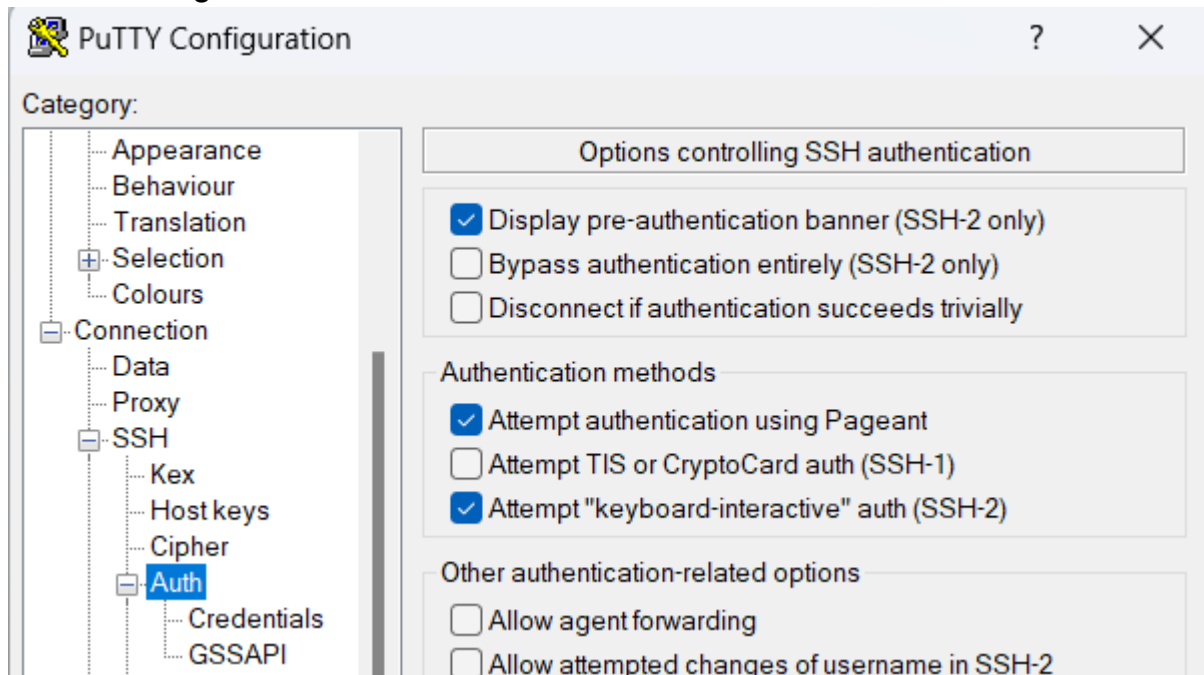
And now we have to provide the public key path
So click on “**Connections**”



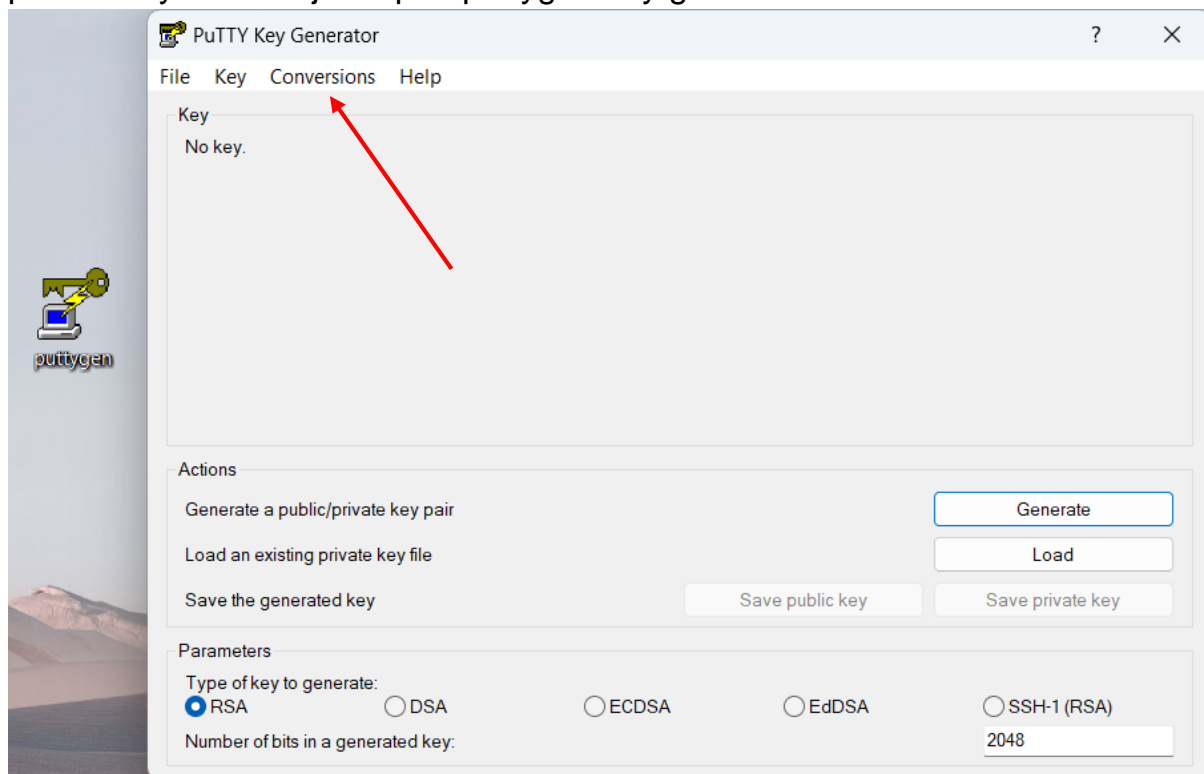
Under that click on “**SSH**”



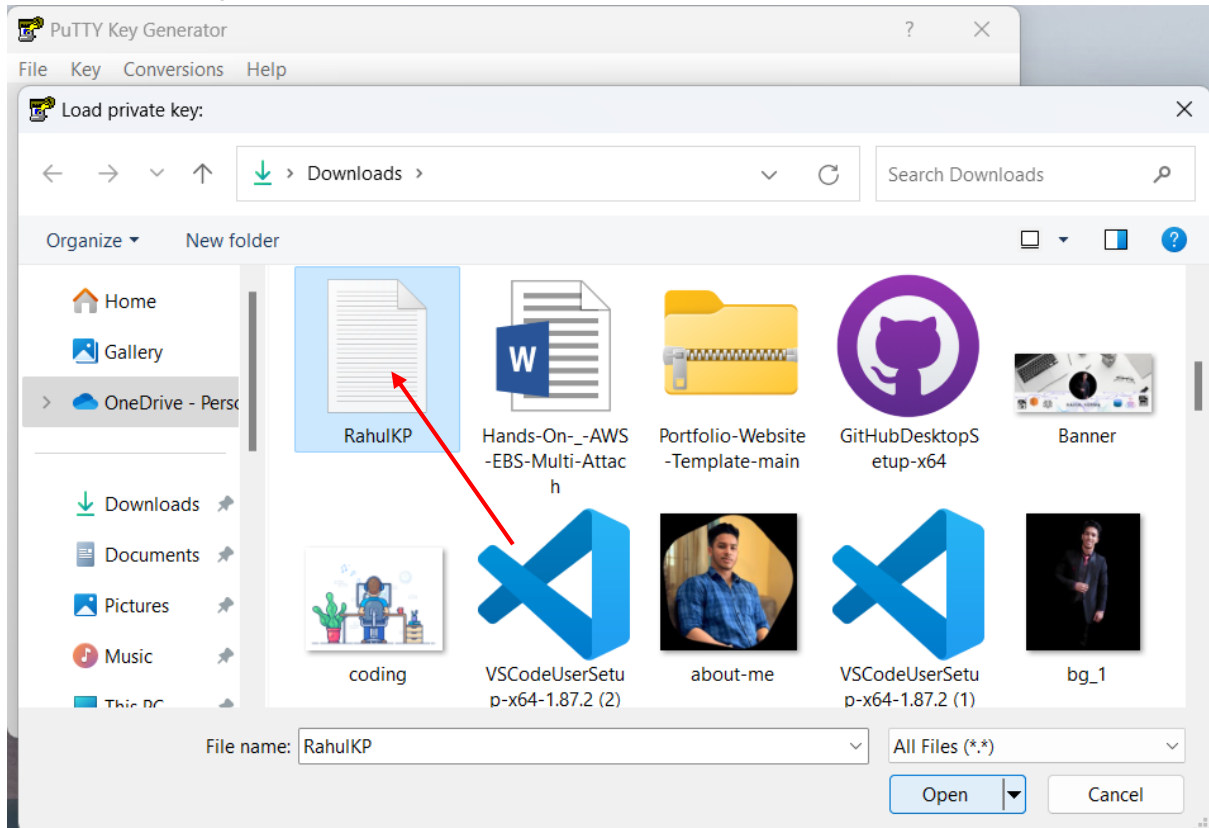
Under SSH go to “**AUTH**” and under Auth click on Credentials



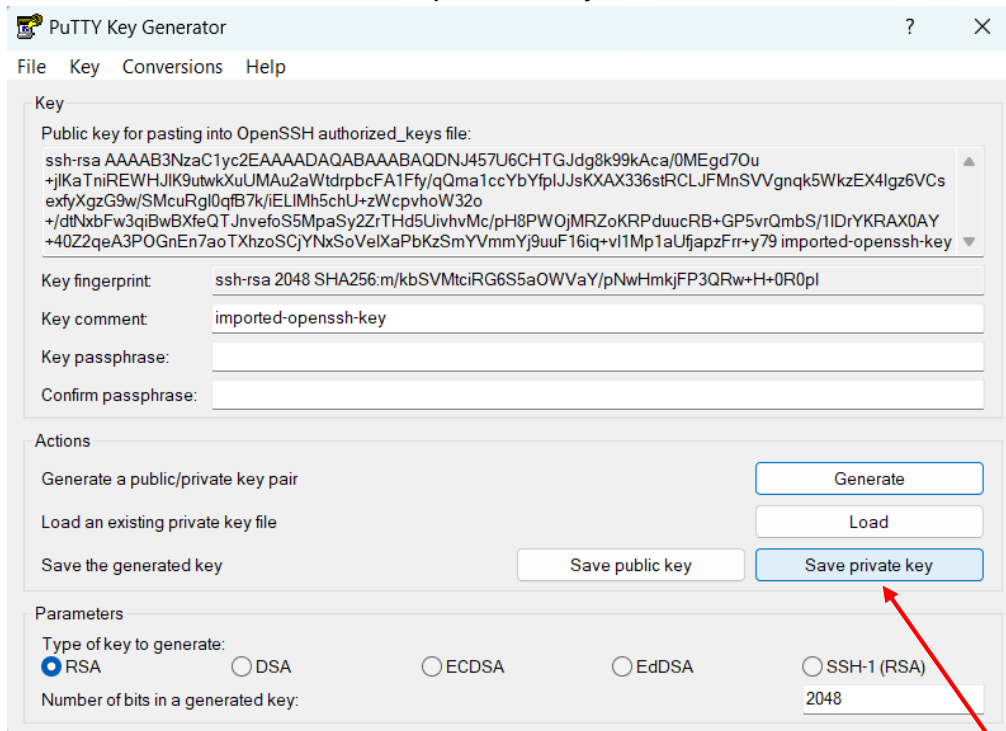
As Putty doesn't allow public key we have to convert our public key into private key first. So just open puttygen key generator



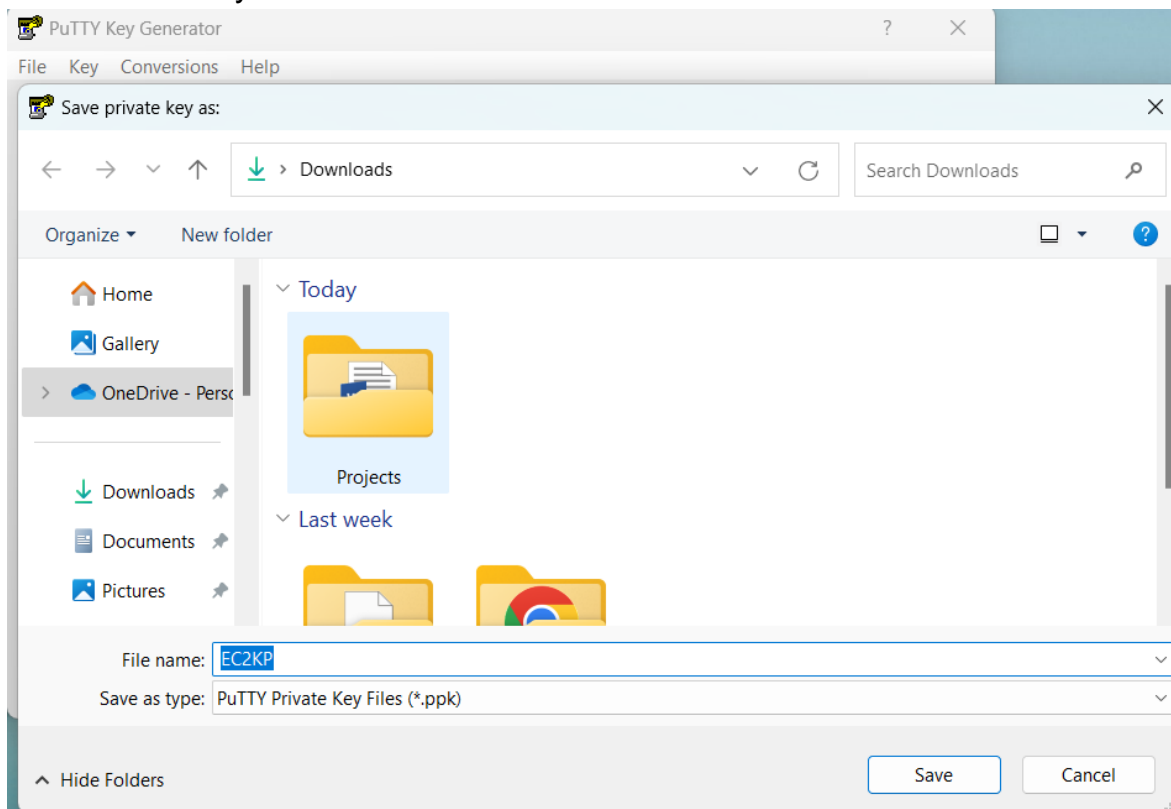
Click on conversions under that click on import and browse your file select it and click on open



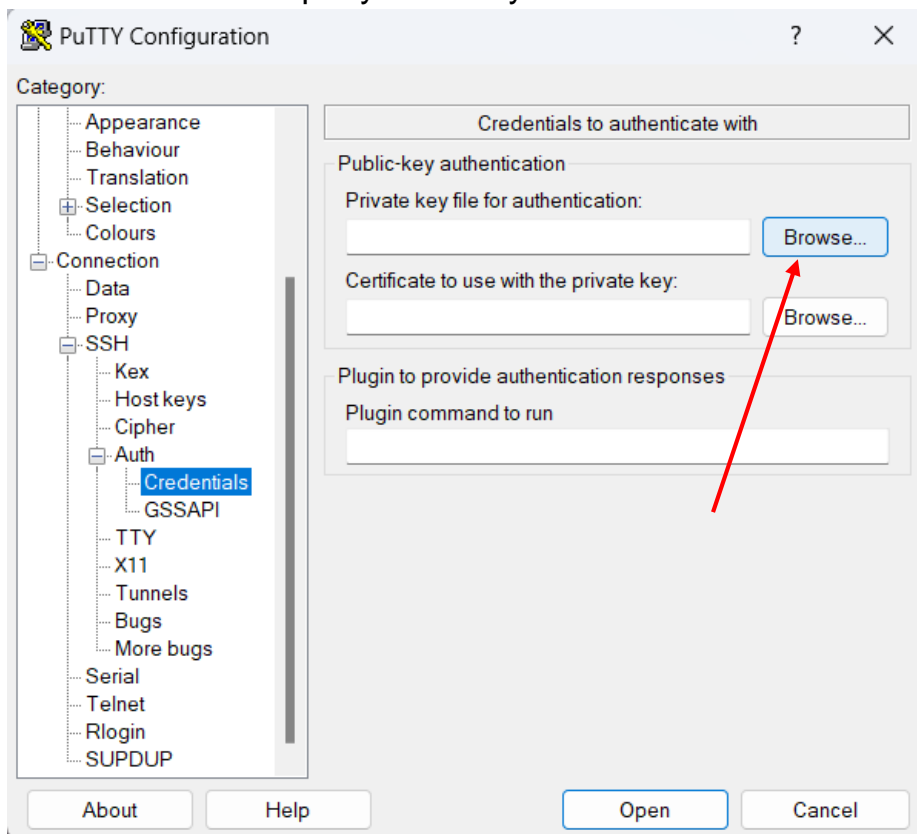
And now click on save it as private key



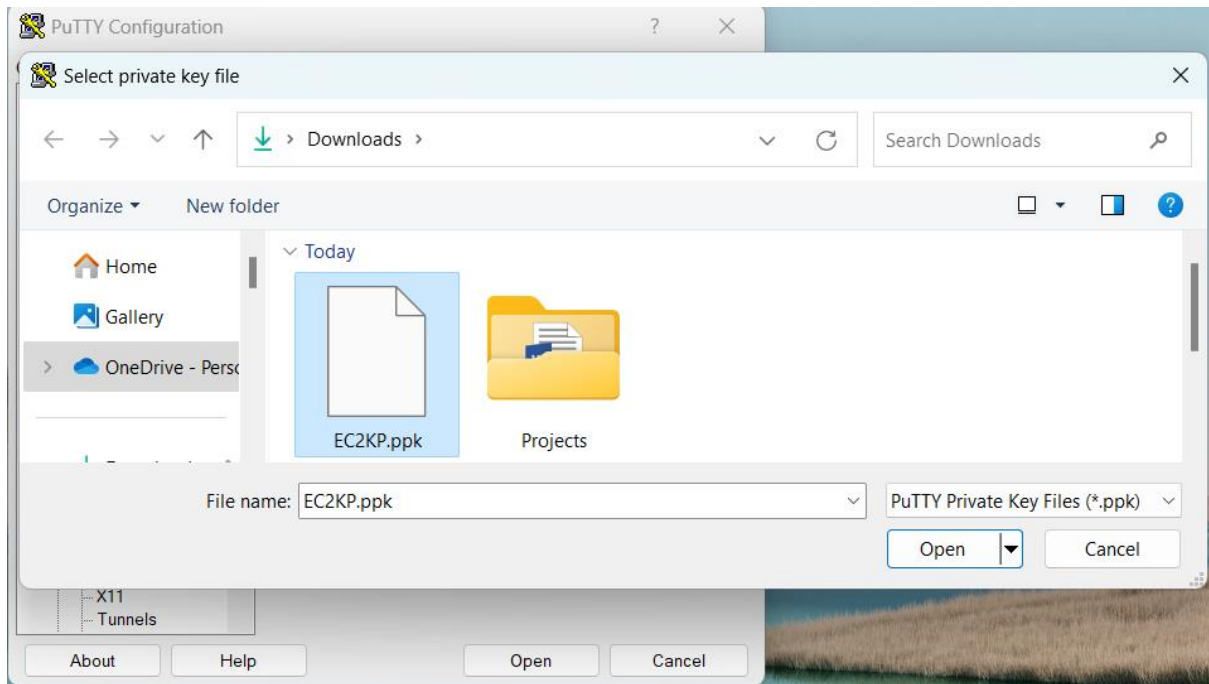
And now save your file with some name



Now come back to putty browse your file

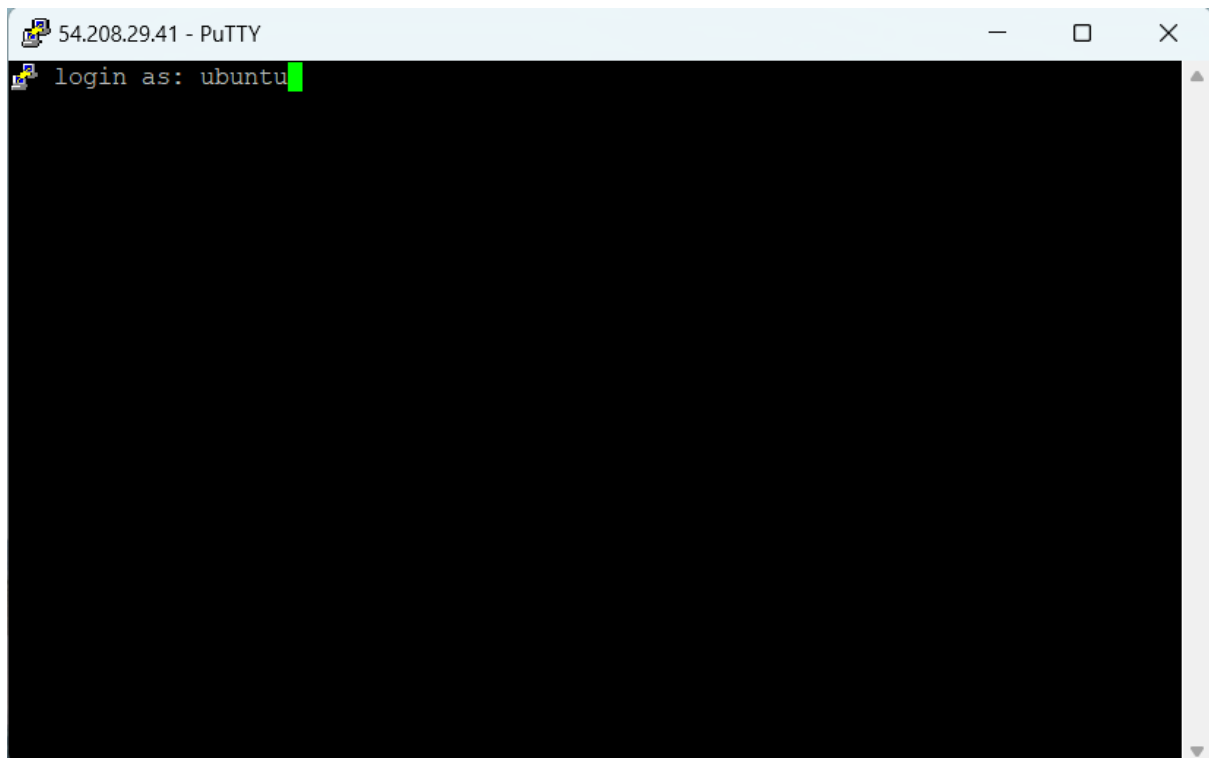


Select your new private key and click on open



Now it will ask you login as: so we are using Ubuntu so we have to write **“Ubuntu”**

If you are using amazon linux OS then you have to write **“ec-2”**



And we are connected to our instance now

```
ubuntu@ip-172-31-83-171: ~  
System information as of Mon Apr  1 08:07:05 UTC 2024  
  
System load:  0.0           Processes:           97  
Usage of /:   20.7% of 7.57GB Users logged in:     0  
Memory usage: 21%          IPv4 address for eth0: 172.31.83.171  
Swap usage:   0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
0 updates can be applied immediately.  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
  
Last login: Mon Apr  1 07:25:46 2024 from 18.206.107.27  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
ubuntu@ip-172-31-83-171:~$
```

Thank You