Connecting to an EC2 instance (Windows)

To access the EC2 instance, you must go to the EC2 dashboard. The following steps will be helpful in accessing the 'EC2' instance **from a Windows machine**.

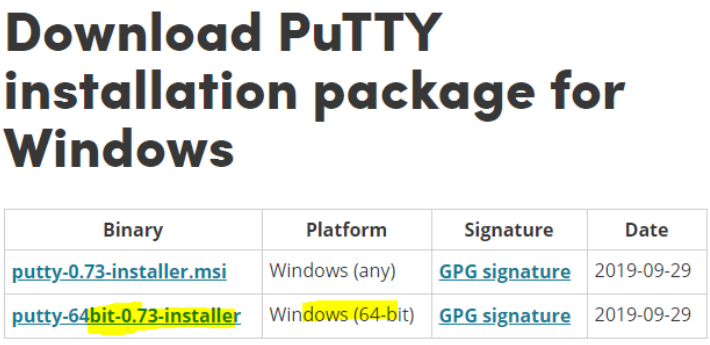
You must download the following softwares to connect to the EC2 instance:

a. PuTTY

b. PuTTYgen

1. Download and install PuTTY and PuTTYgen from the link below.
   https://www.ssh.com/ssh/putty/download#sec-Download-PuTTY-installation-package-for- Windows

   Click on the first link:



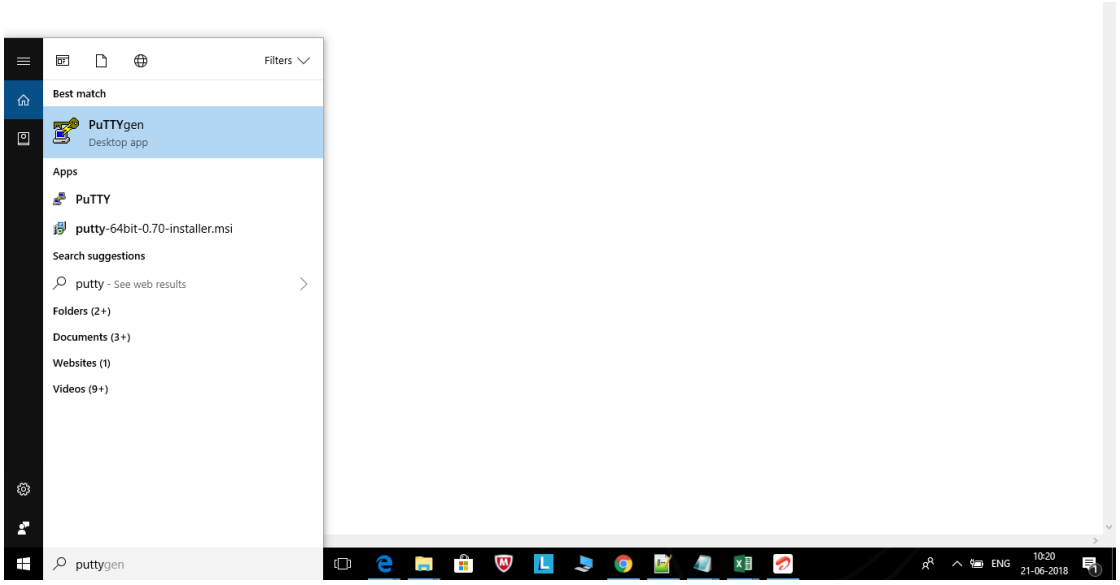
Download PuTTY installation package for Windows

Binary	Platform	Signature	Date
putty-0.73-installer.msi	Windows (any)	GPG signature	2019-09-29
putty-64bit-0.73-installer	Windows (64-bit)	GPG signature	2019-09-29

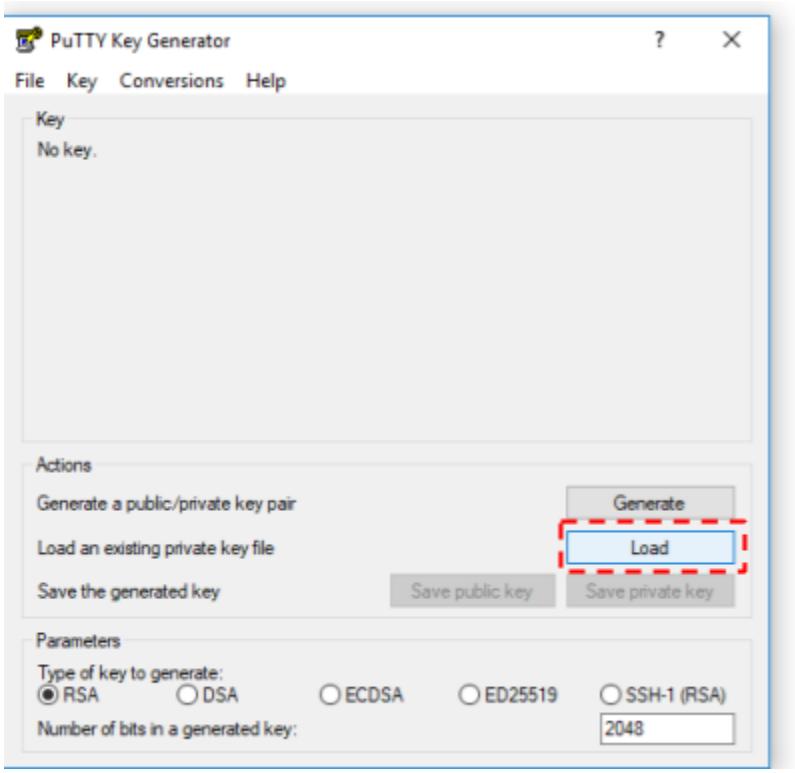
2. If you have a 32-bit OS, then you need to install putty-0.73-installer.msi. And if you have a 64-bit OS, then choose the latest 64-bit installer file. The file will automatically download after you click on the link.

3. Run the installer in your machine. Follow the steps and you will have successfully installed both PuTTY and PuTTYgen in your machine.

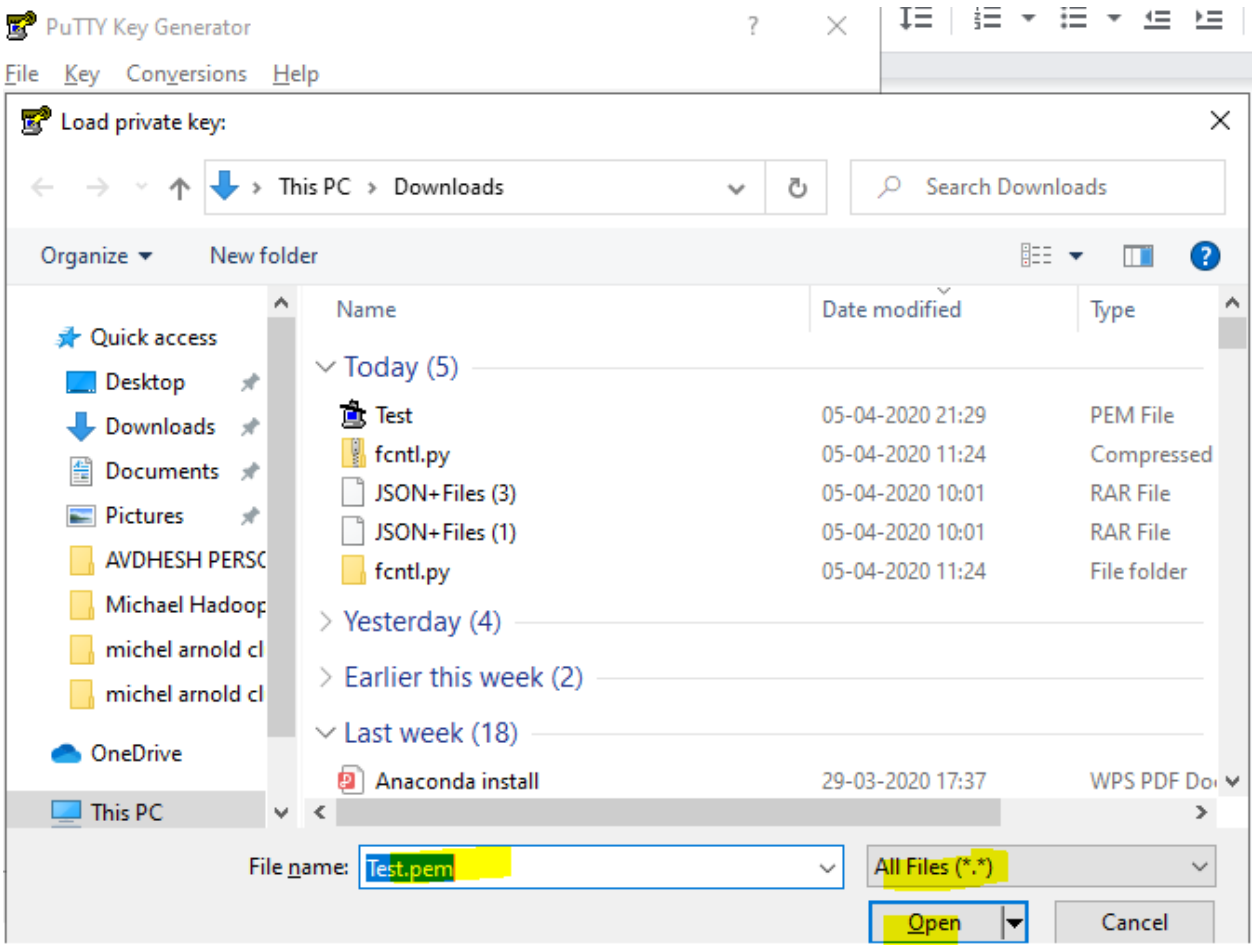
4. Now, go to the ‘Search’ tab on your laptop and type ‘putty’; the results will show both PuTTY and PuTTYgen.



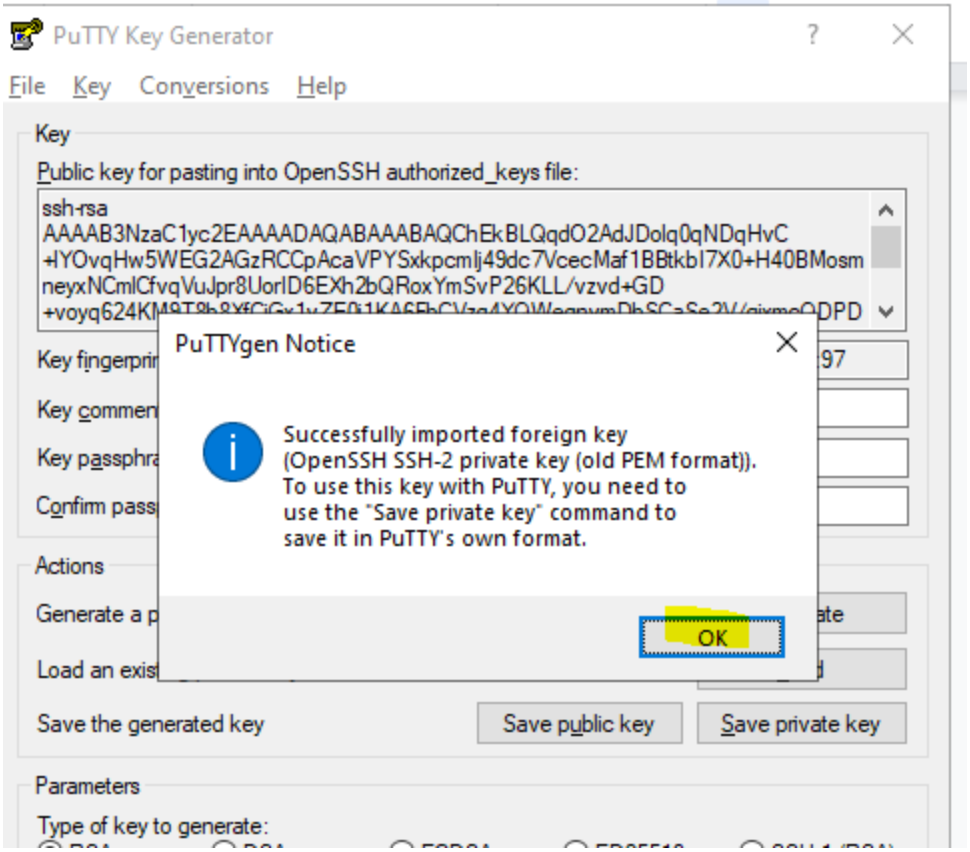
5. Windows doesn’t support .pem files and hence, PuTTYgen is used to convert .pem file to a .ppk file. To do this, **open PuTTYgen** and click on **‘Load’**.



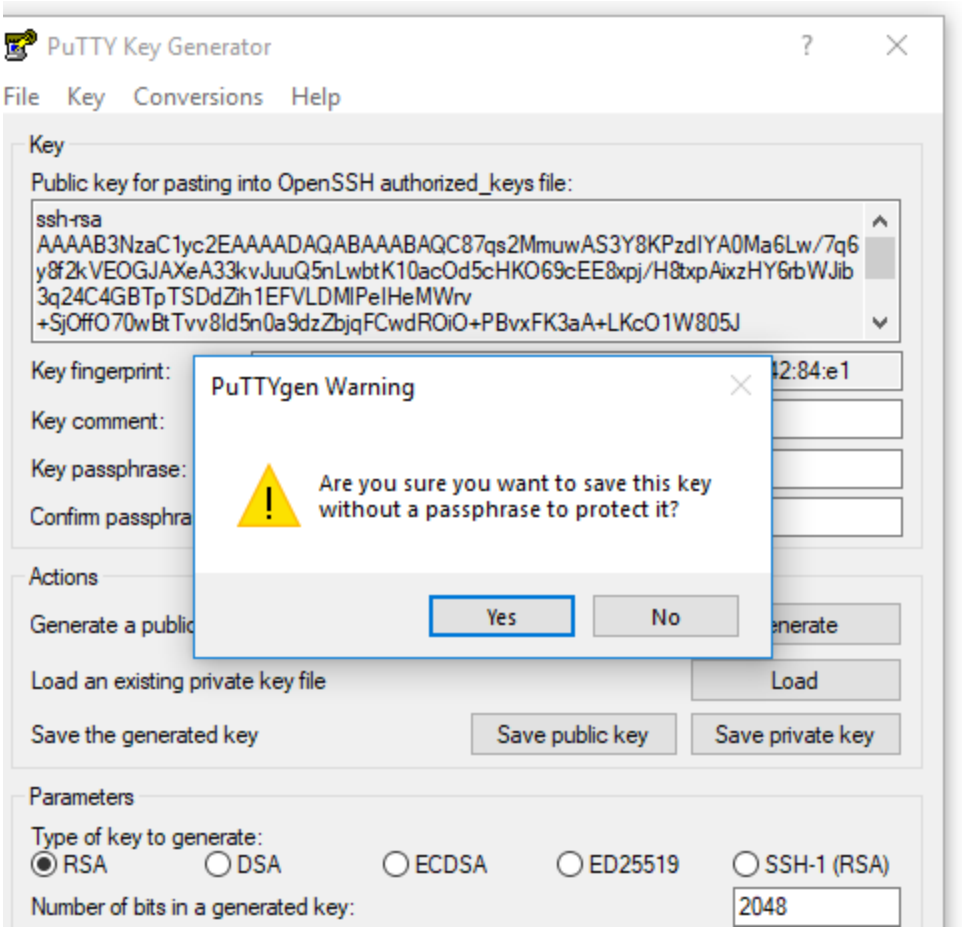
6. Locate the .pem file that you downloaded on your computer and select it. Do not forget to change the file type from .ppk to '**All files**' to locate your **.pem file**.



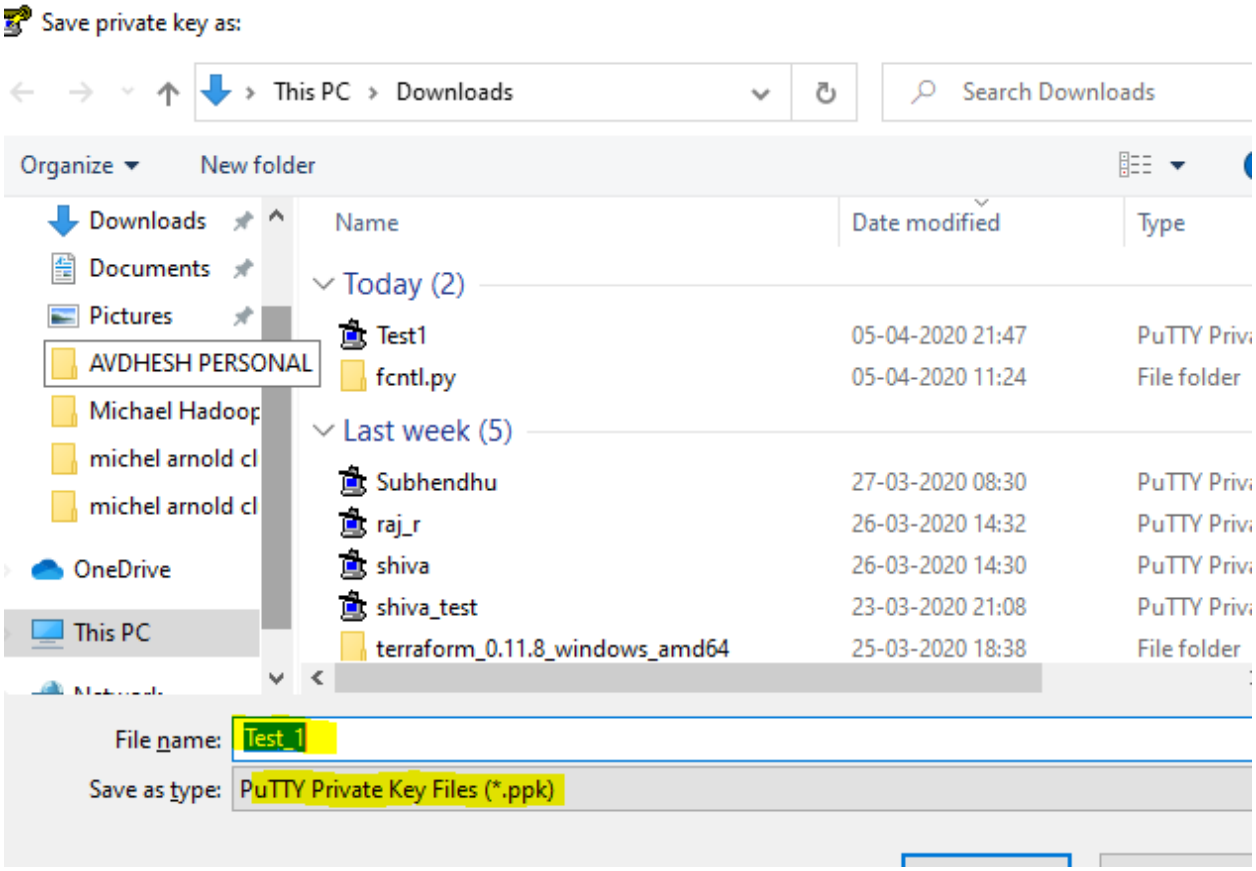
7. Click on **'Open**' and then click on **'Ok'** on the pop up that appears on the screen.



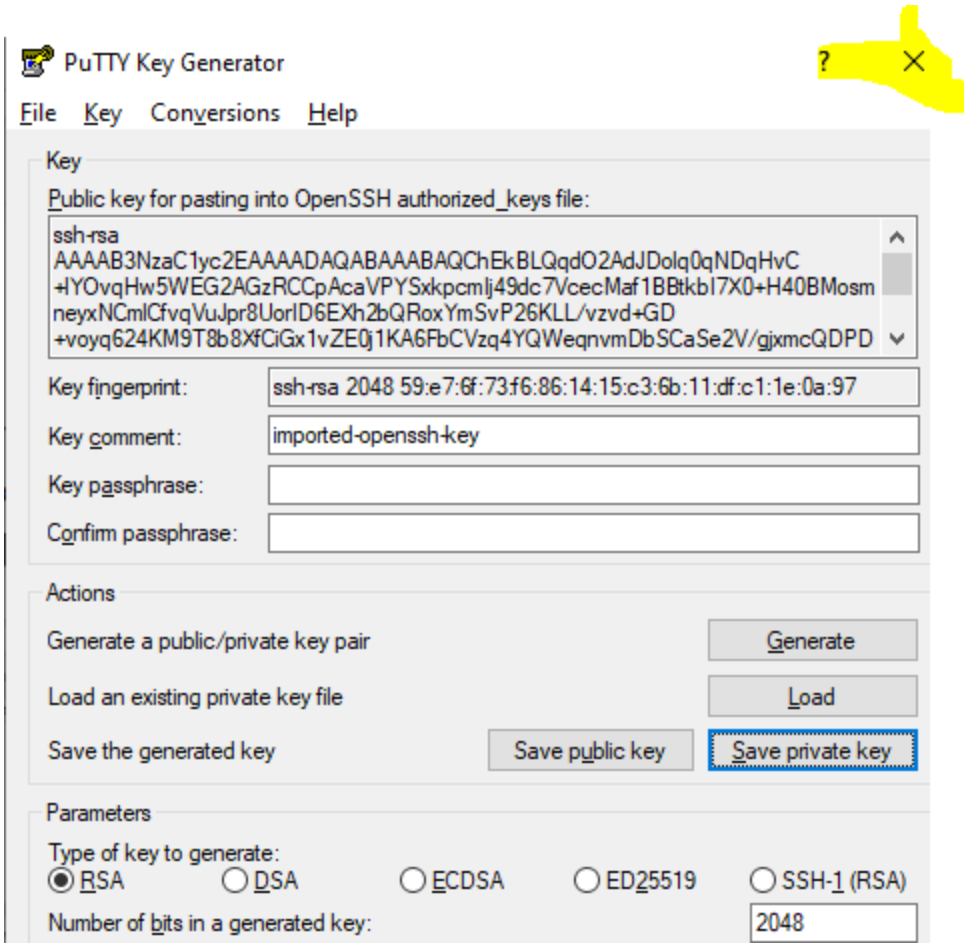
8. The '**Key Passphrase**' is an optional element. It will act as a password when you launch the instance using the ppk file. If you want to set a Key Passphrase, then remember to store it in a safe place. Click on '**Save private key**' and then click on '**Yes**'.



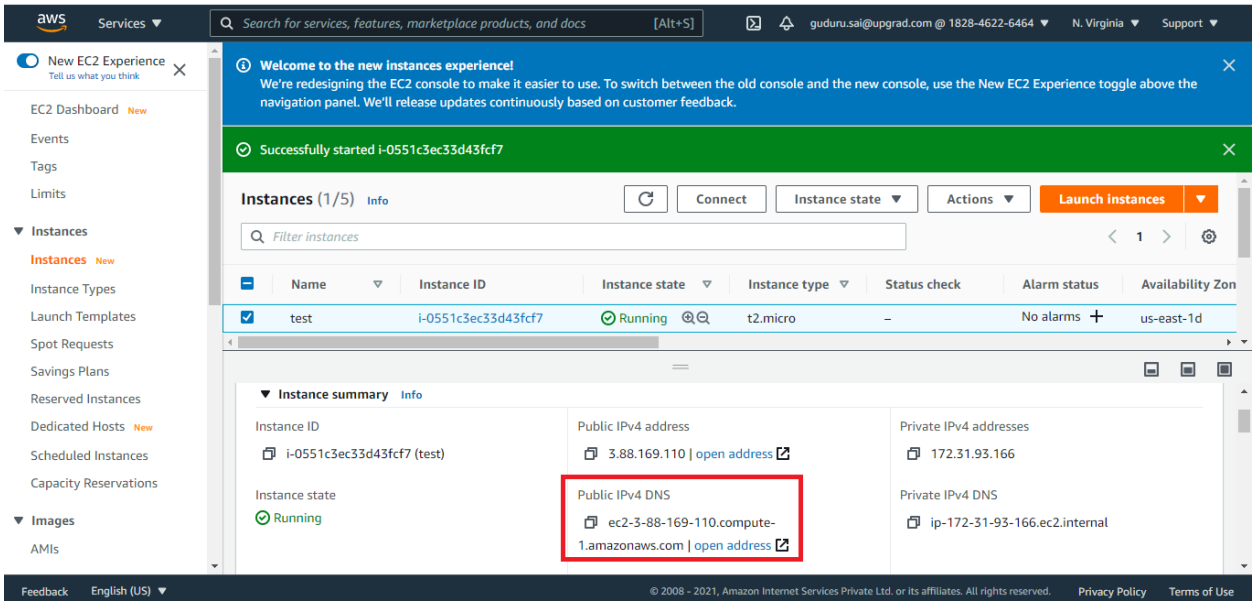
9. Now, save your .ppk file in a safe location (**Test_1** in our case).



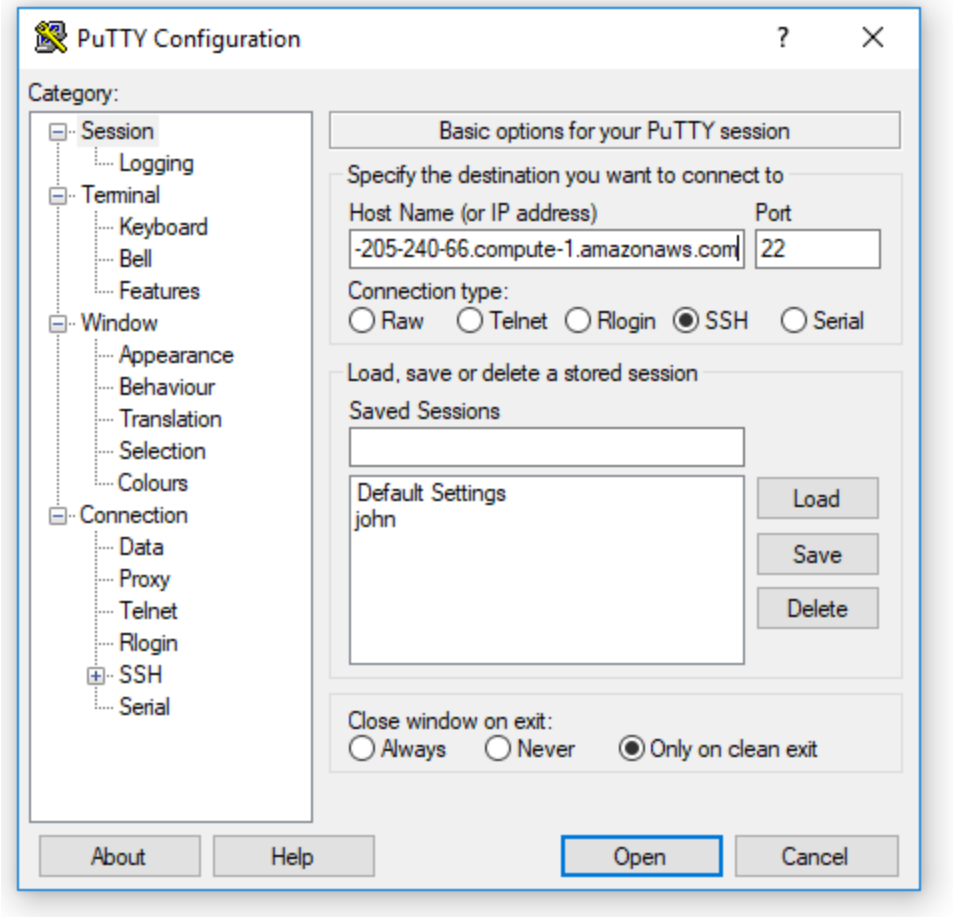
10. You can close PuTTYgen now.



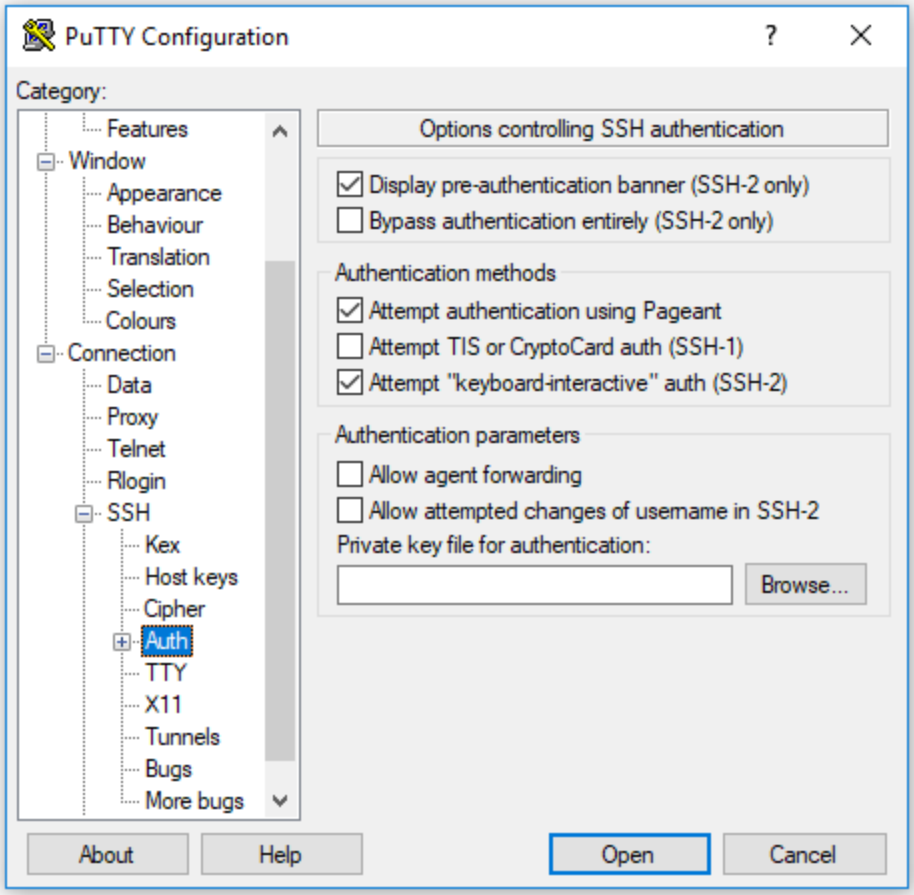
11. Now, you need to open PuTTY to access the instance. But before that, open your EC2 dashboard and select your instance. Copy the '**Public DNS (IPv4)**' of your instance as shown below.

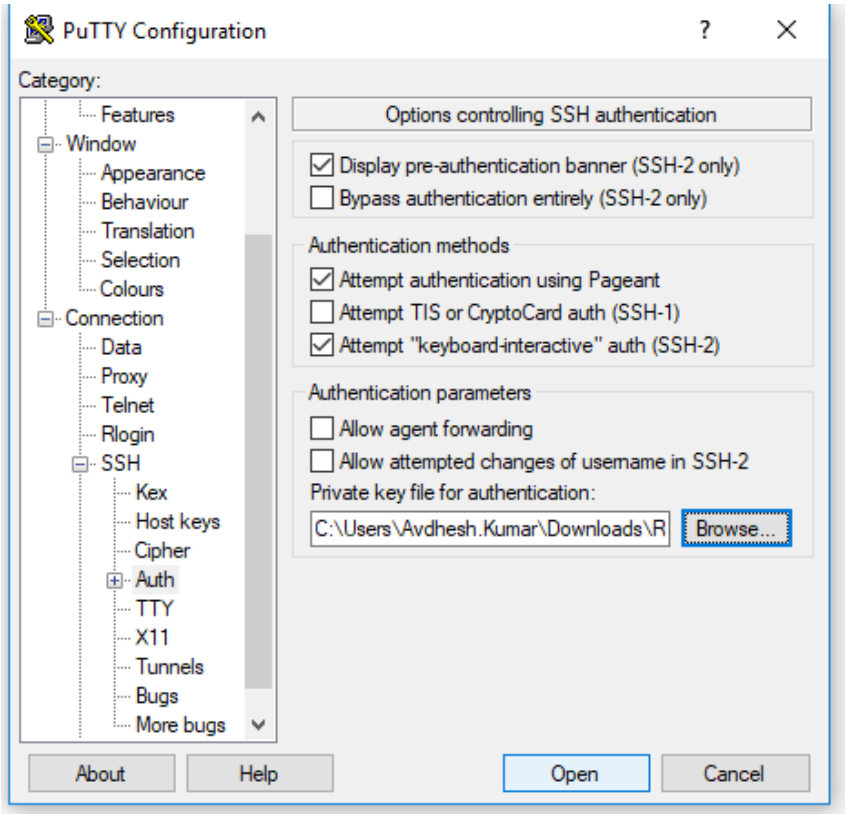


12. Now, open PuTTY. Paste the copied information under the **'Host Name'** section of the PuTTY window.



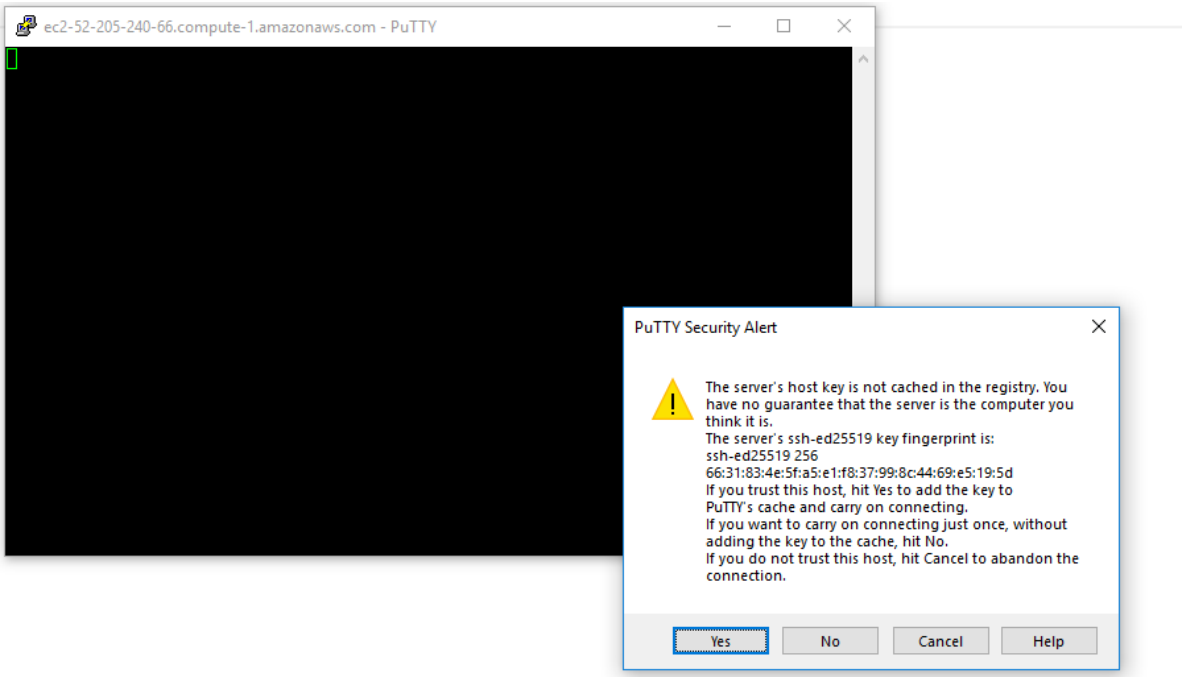
13. On the left-hand side panel, click on **'Connection'**. Then click on **'SSH'** followed by **'Auth'**. You will find the space to provide the In the private key file. Here, click on the **'Browse'** button and select the .ppk file (**Test_1.ppk**) that you generated using PuTTYgen above.



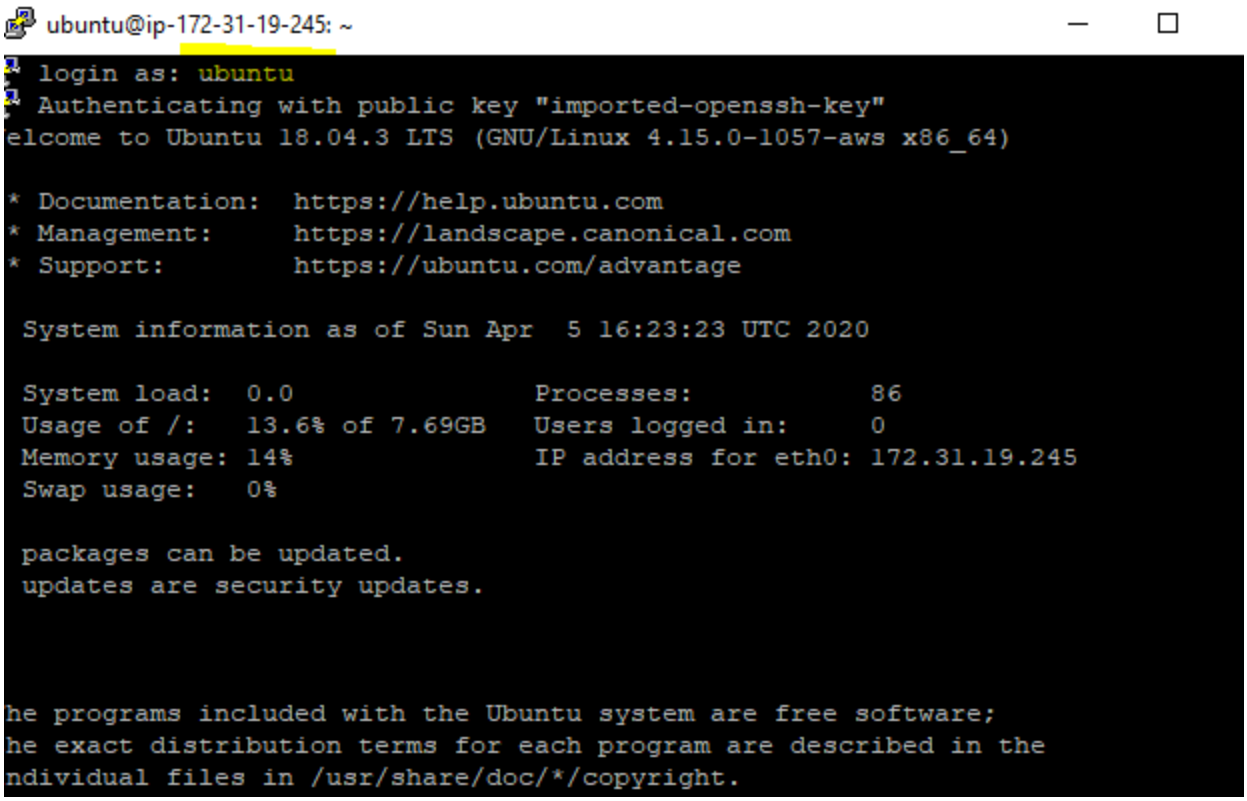


14. Click on '**Open**'. If you have provided correct IP under the Security Groups, you will receive a window prompt. Press **'Yes'** and login with the username as **ubuntu**.

    (In case you are working with Amazon Linux instead of Ubuntu instance, the username will change to **ec2-user** from **ubuntu**.)



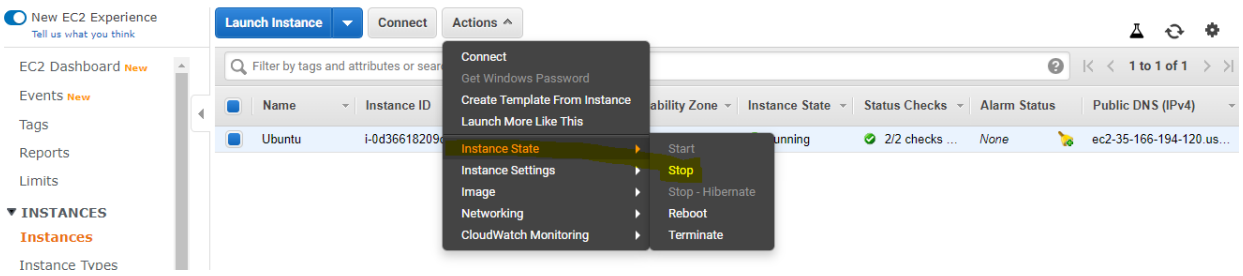
(If you have added a security keyphrase, you will have to provide that to login.)



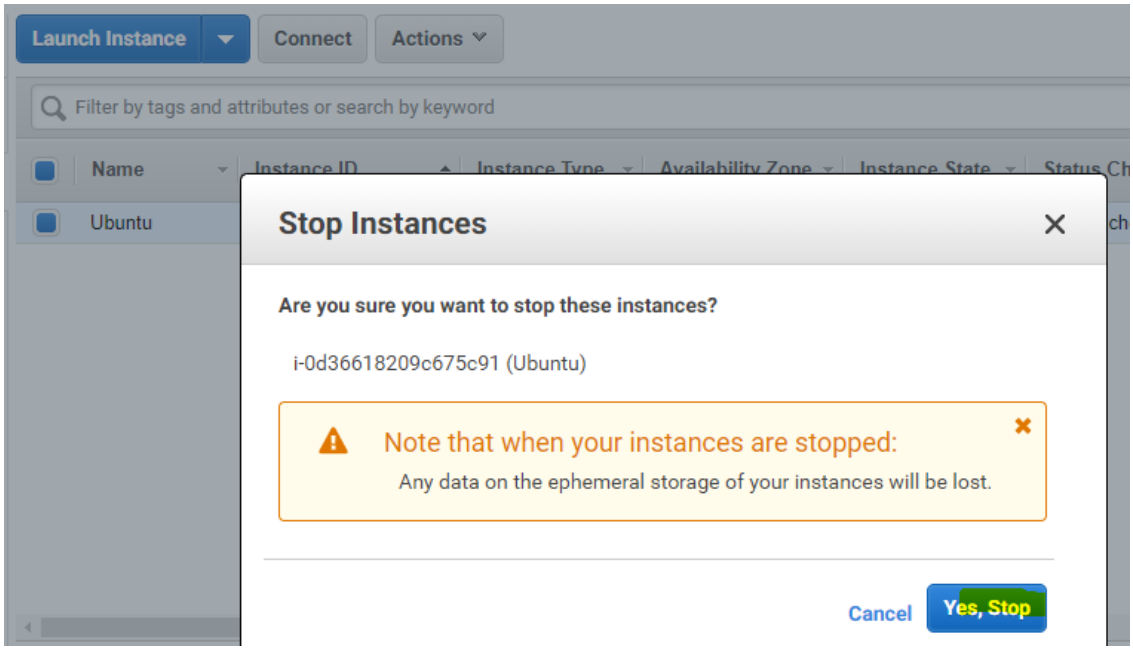
15. Now, your local machine has successfully established a connection with the EC2 Instance.

NOTE-: After you have created the instance, please stop the t2.micro instance when your work is over. Otherwise, your credits will get deducted. The steps to stop the instance are given below:

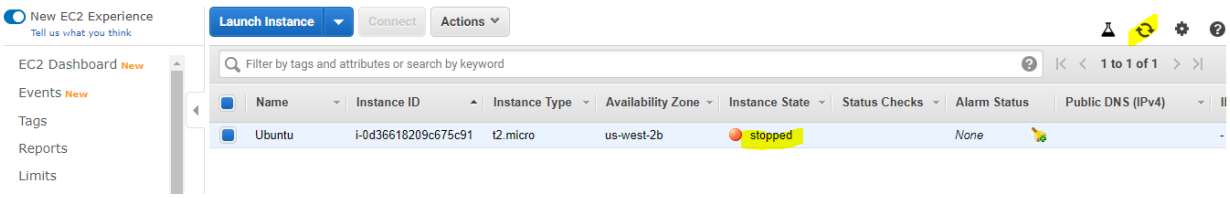
1. Go to your EC2 dashboard and select your ec2 instance then click to “Action” > Instance State > Stop



2. Click on **Yes, Stop.**



3. Verify with Instance state.it should be stopped state and colour state is Red.



For Linux/Mac OS users to connect to the EC2 Instance.

For Linux/Mac systems, **you don't need to convert your .pem file to a .ppk file**.

1. Open **'Terminal'** on your system and go to the location where you downloaded the **.pem file**.

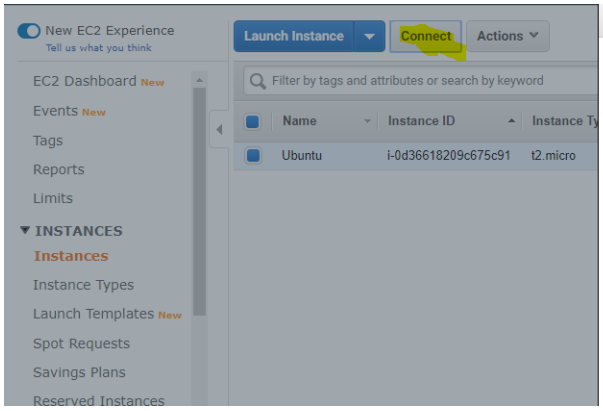
   Let's say that your .pem file was downloaded in the 'Downloads' folder. You need to first change your current working directory to the 'Downloads' directory. To do that, use the following '**cd**' command: **cd ./Downloads/**

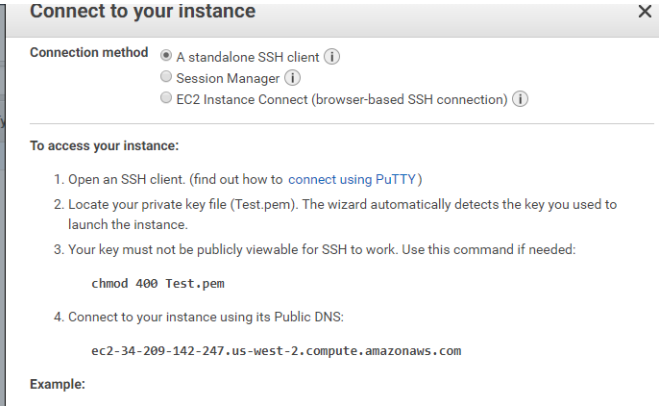
2. Next, run the ' **ls** ' command, which lists all the files in a given Linux directory. Verify that your .pem file exists in the given directory.

3. Change the permissions of the .pem file to 400, which gives the read permission and removes all other permissions from the user. The command is shown below. (Test.pem is the filename in our case.)

   chmod 400 Test.pem

4. Now, go back to your EC2 instance page and click on the 'Connect' button to get the command for the connection. After clicking, you will see the following screen appear.





5. Use the command shown under ‘Example’ on your screen to connect to the instance. The command is

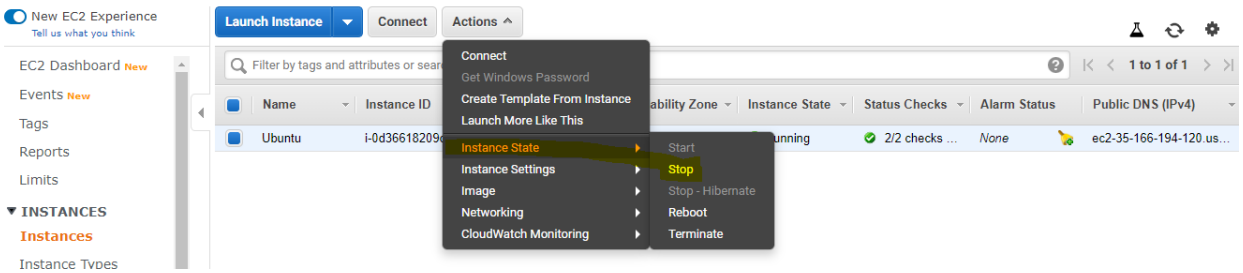
   ssh -i Test.pem ubuntu@public_dns_name

   Replace the public_dns_name with your own public DNS name. Also, before running this command, ensure that you are present in the directory in which your .pem file is present. This can be checked using the ‘ **pwd** ’ command, which writes the full path of the current working directory.

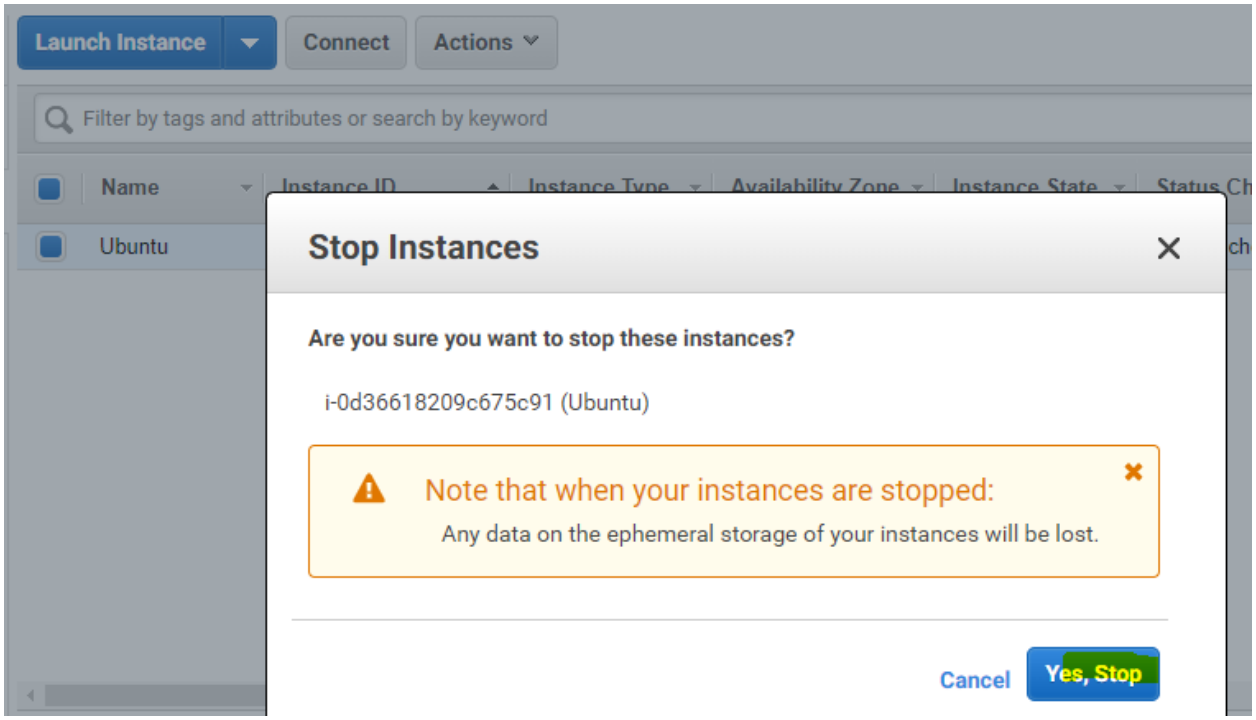
6. If you have provided correct IP under the Security Groups, you will receive a window prompt. Type **‘Yes’**. inside the terminal and press Enter. Instance will be launched.

NOTE-: After you have created the instance, please stop the t2.micro instance when your work is over. Otherwise, your credits will get deducted. The steps to stop the instance are given below:

1. Go to your EC2 dashboard and select your ec2 instance then click to “Action” > Instance State > Stop



2. Click on **Yes.Stop.**



3. Verify with Instance state.it should be stopped state and colour state is Red.