Steps for **AWS – "EC2"** Configuration

TESTYANTRA

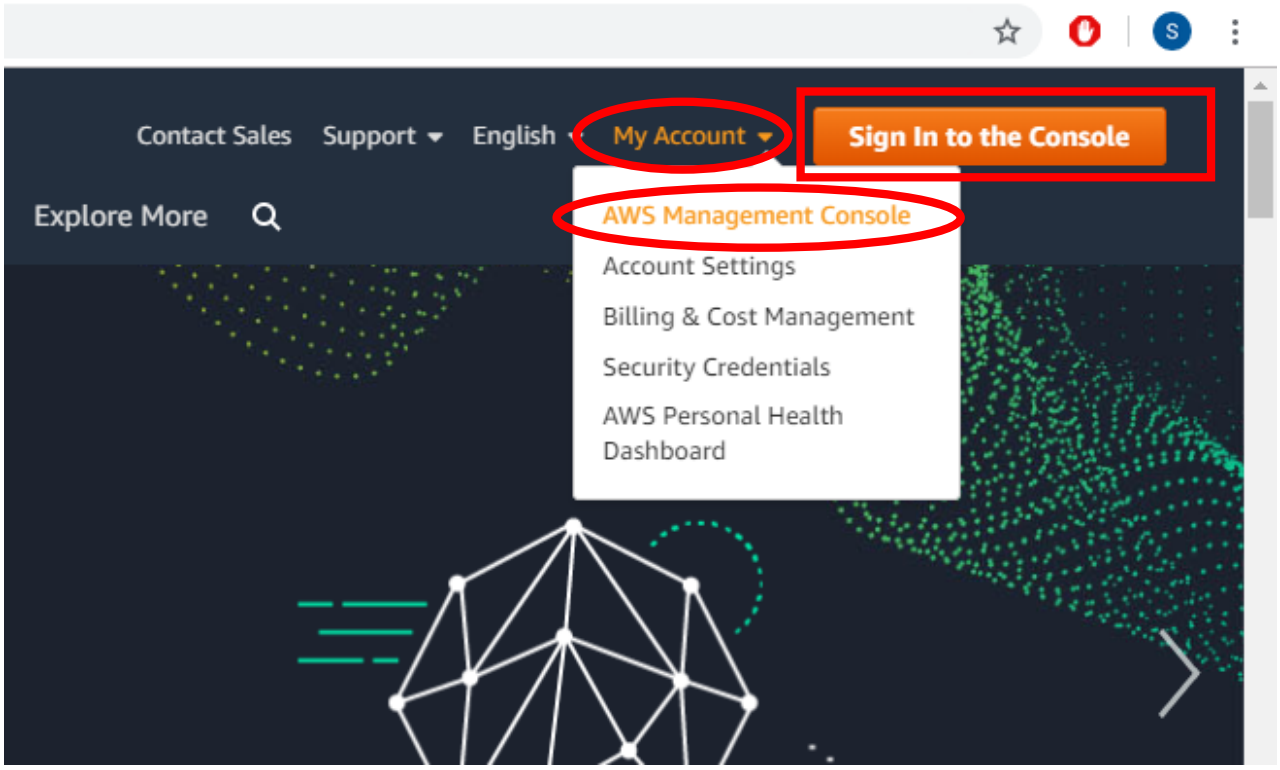
[NOTE- To **connect to your instance** using key pair, **PuTTY** and **PuTTYgen** software are **required**]

[Refer **"Putty installation steps.pdf"** to install the PuTTY.]

How to Create AWS Account? Click –

AWS - Account Creation.pdf

1. Login to AWS Management Console
   - ➔ Go To - https://aws.amazon.com/
   - ➔ Click on "**Sign In to the Console**" button.
     OR
     Hover the mouse pointer to "**My Account**" drop down menu and click on "**AWS Management Console**"



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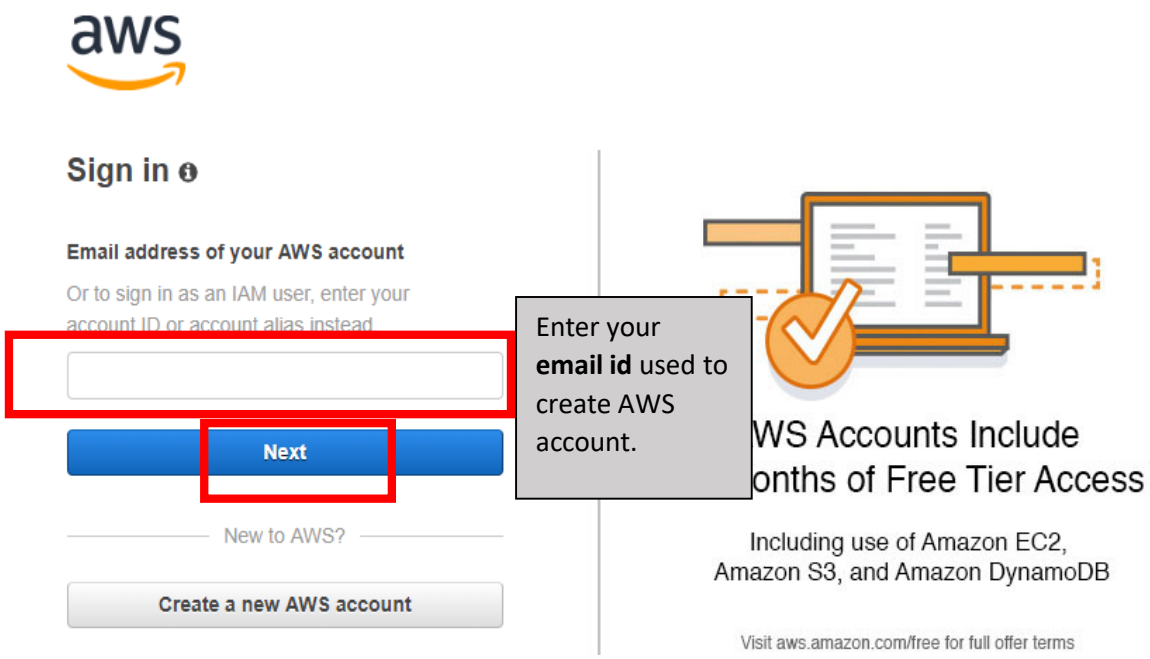
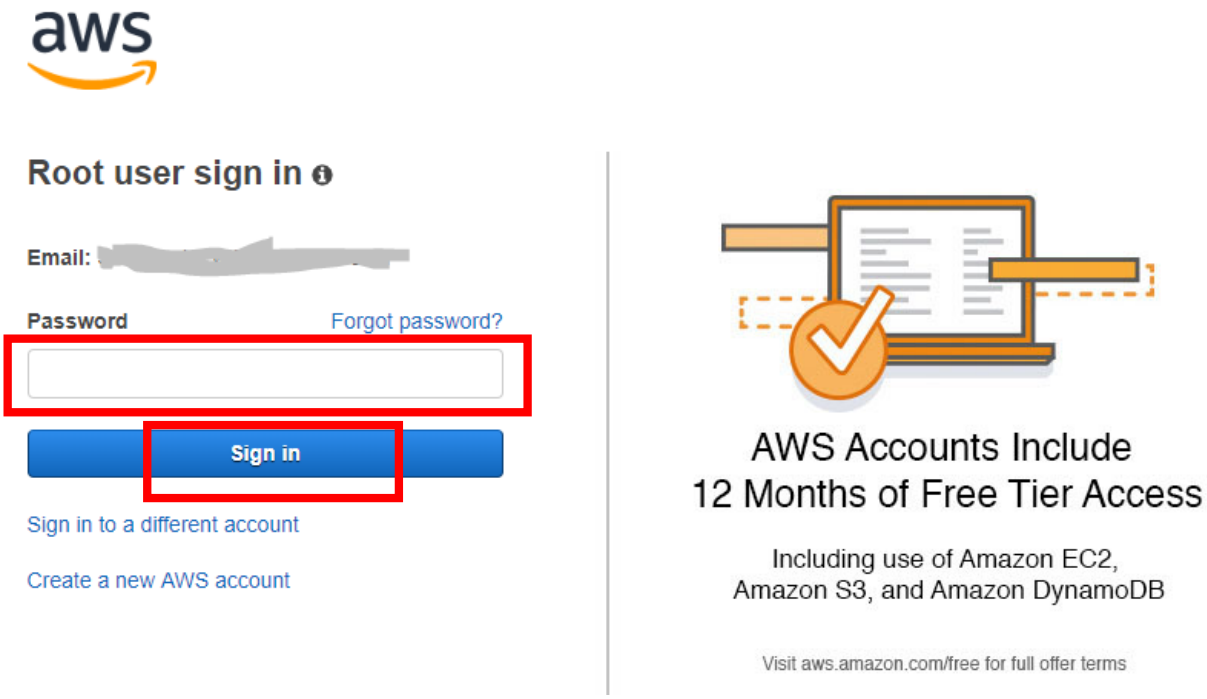
➔ Enter **Email Id**
➔ Click on "Next" button



➔ Enter your password
➔ Click on "**Sign in**" button.



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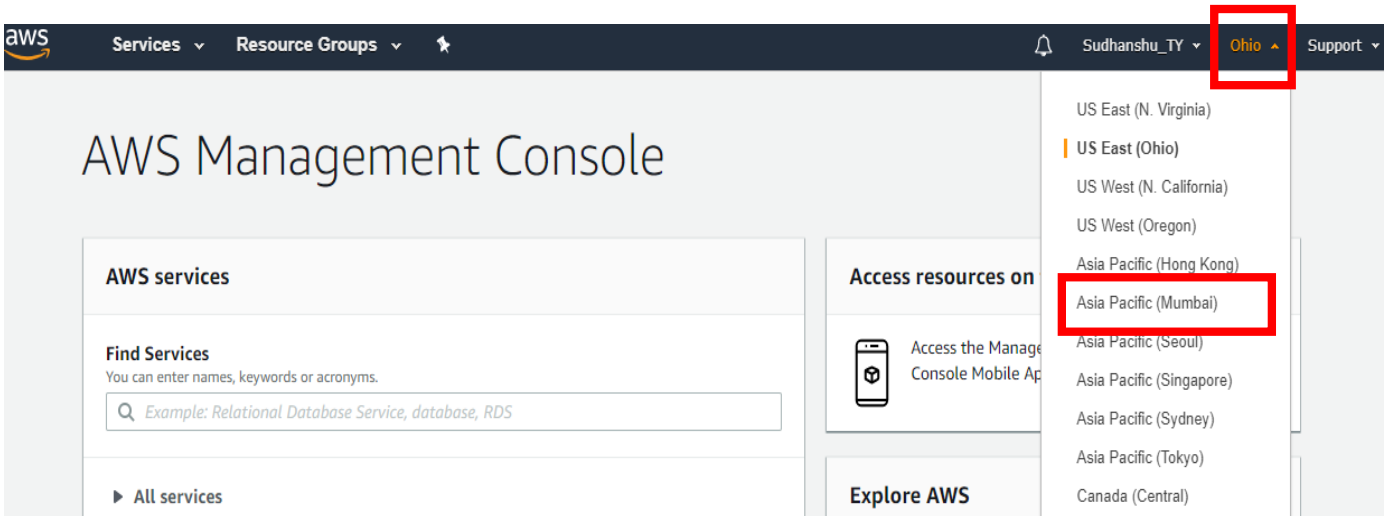
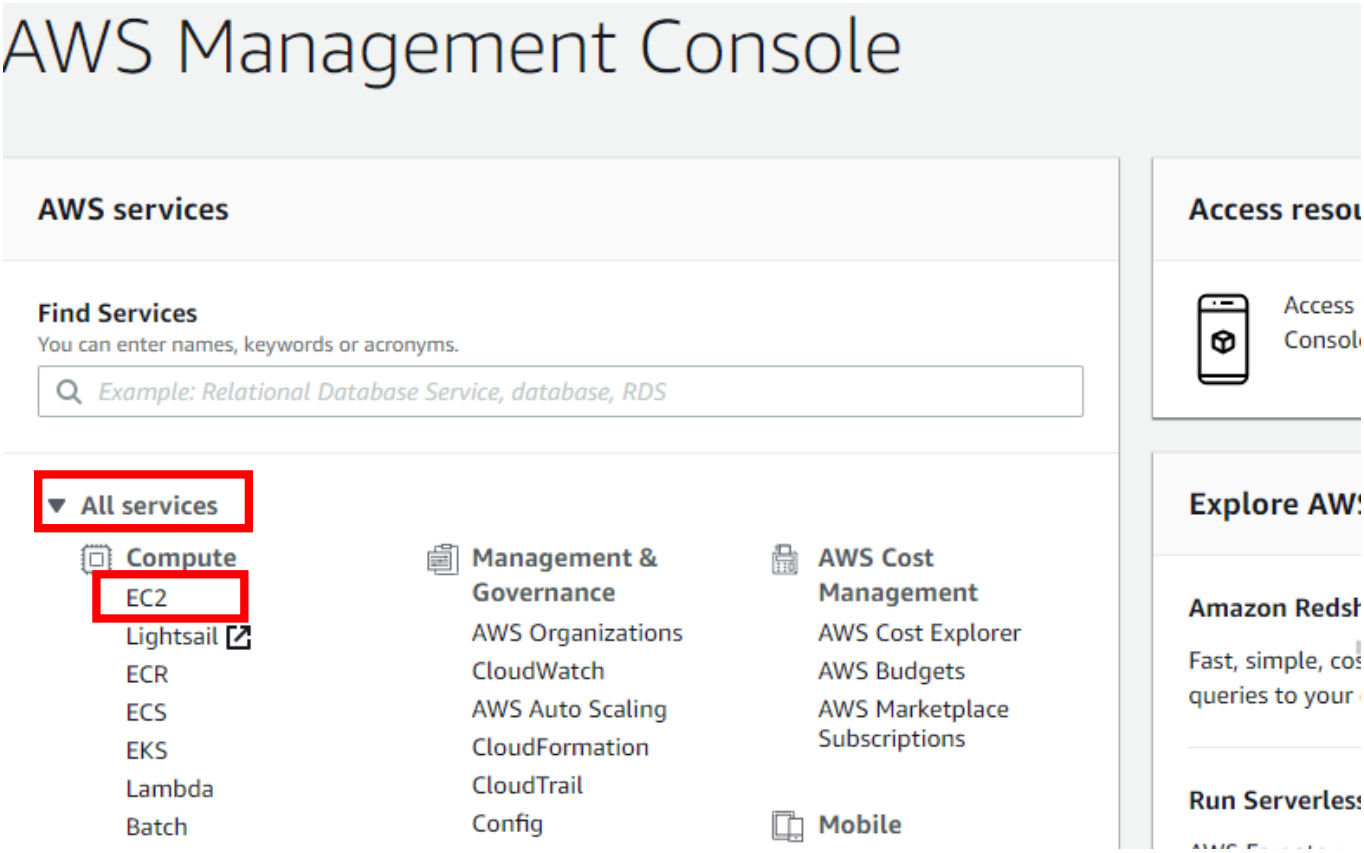
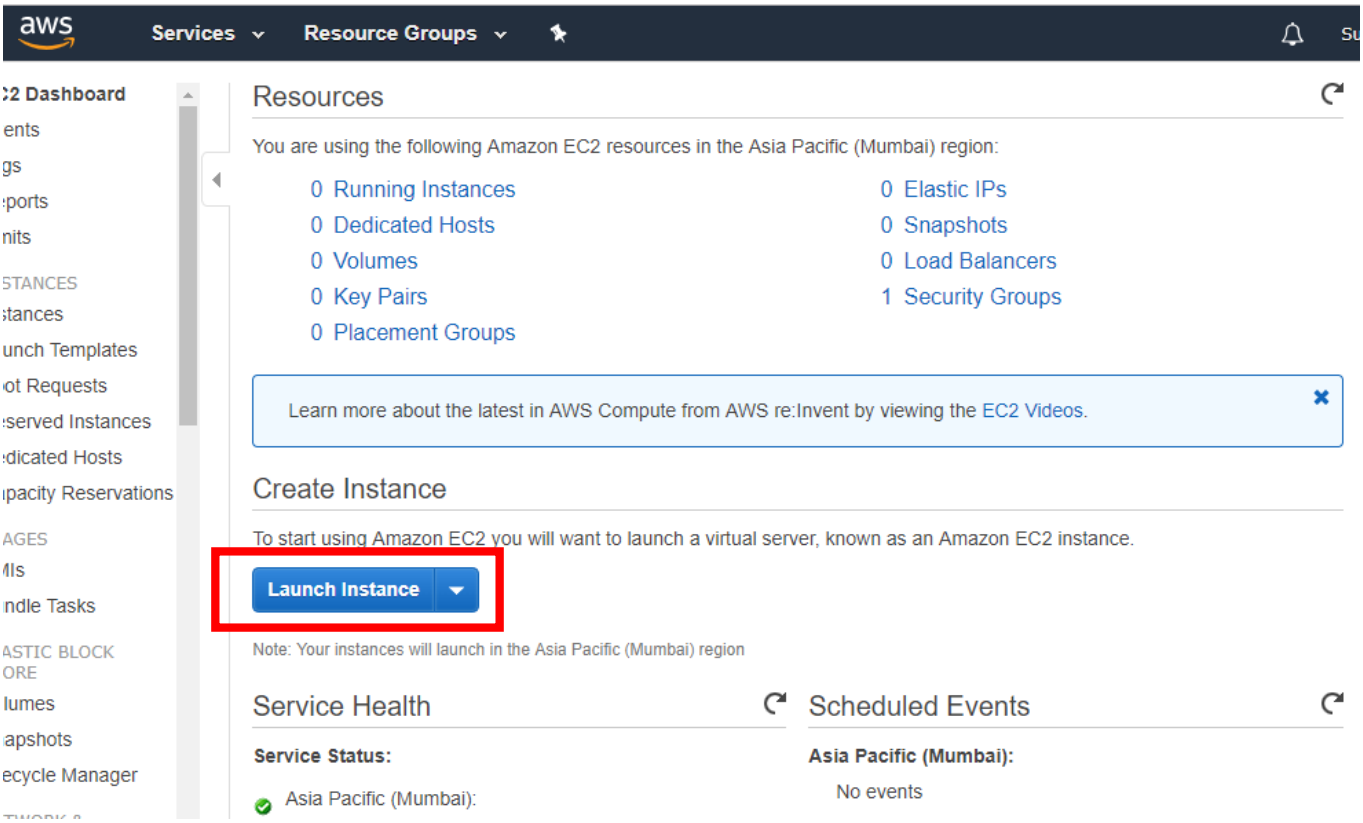
2. On the top right corner (next to your AWS Account Name), **change the region (location)** to "**Asia Pacific (Mumbai)**"
   - ➔ Hover mouse to Ohio or whatever location it shows (next to your AWS Account Name).
   - ➔ Select "**Asia Pacific (Mumbai)**" from the drop down list.



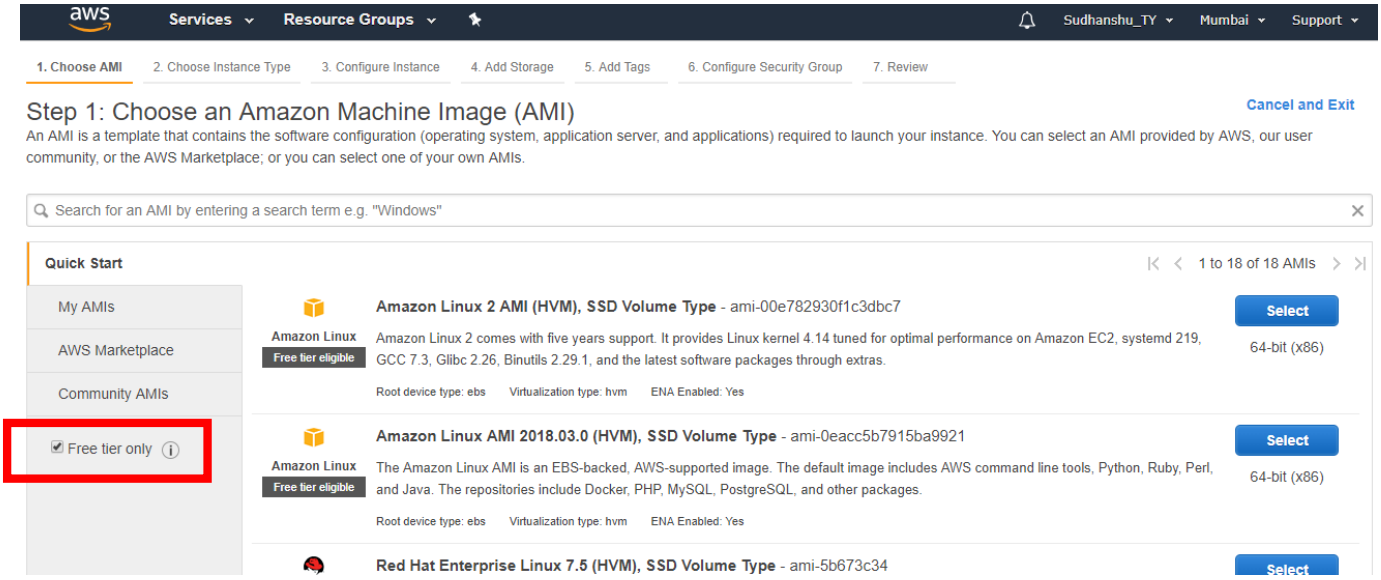
3. Expand "**All services**" → under 'Compute' select "**EC2**".



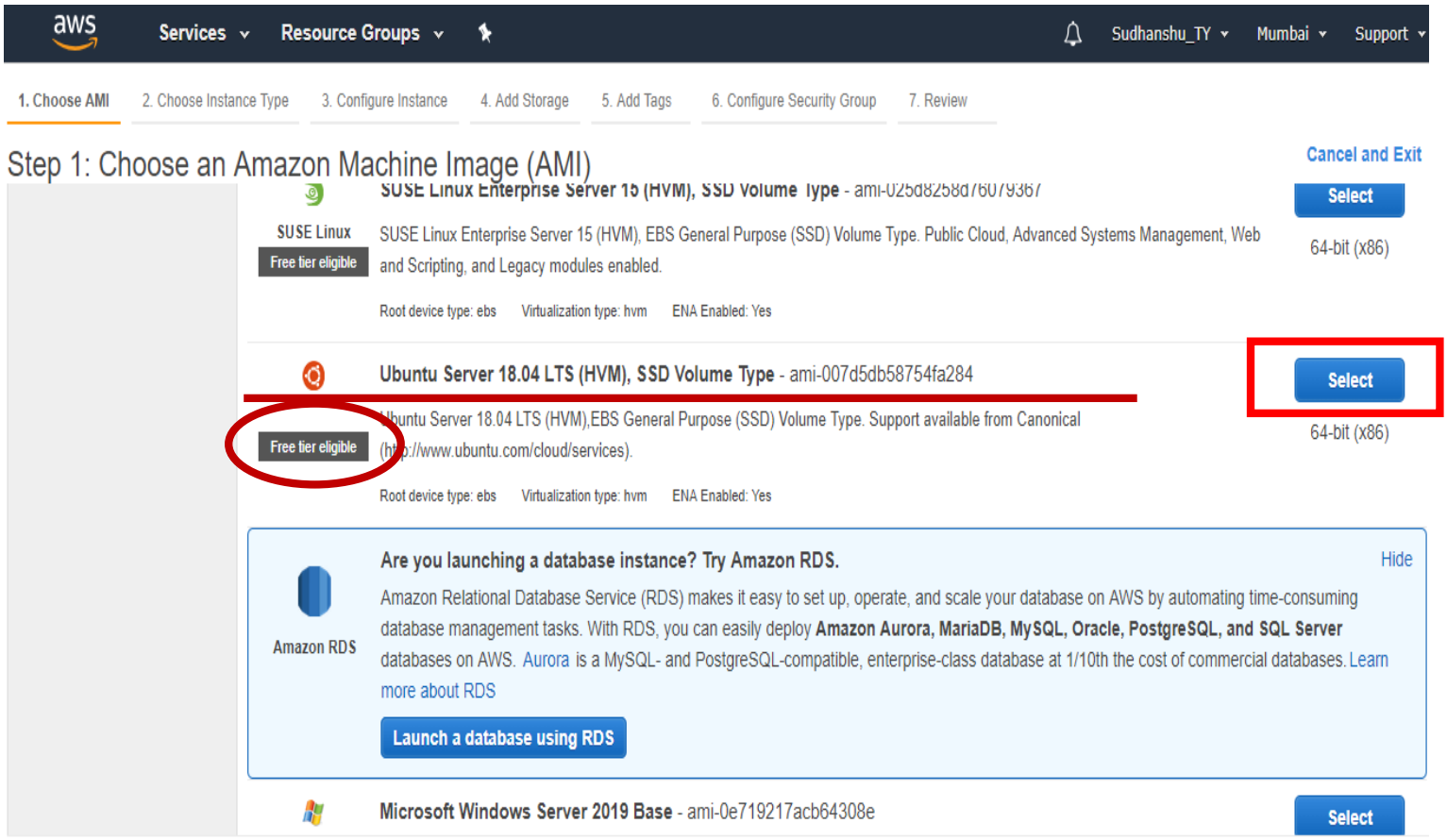
4. Click on "**Launch Instance**" button.



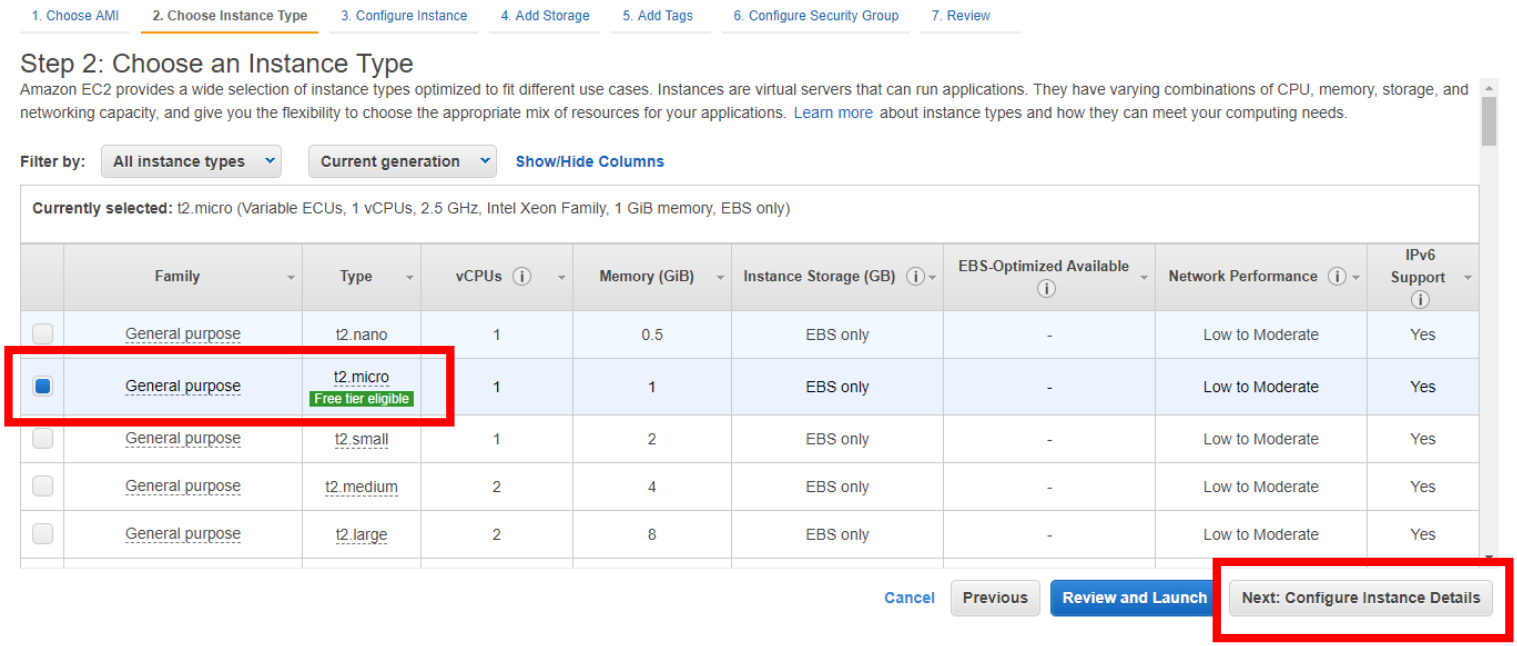
5. Check the "**Free tier only**" checkbox



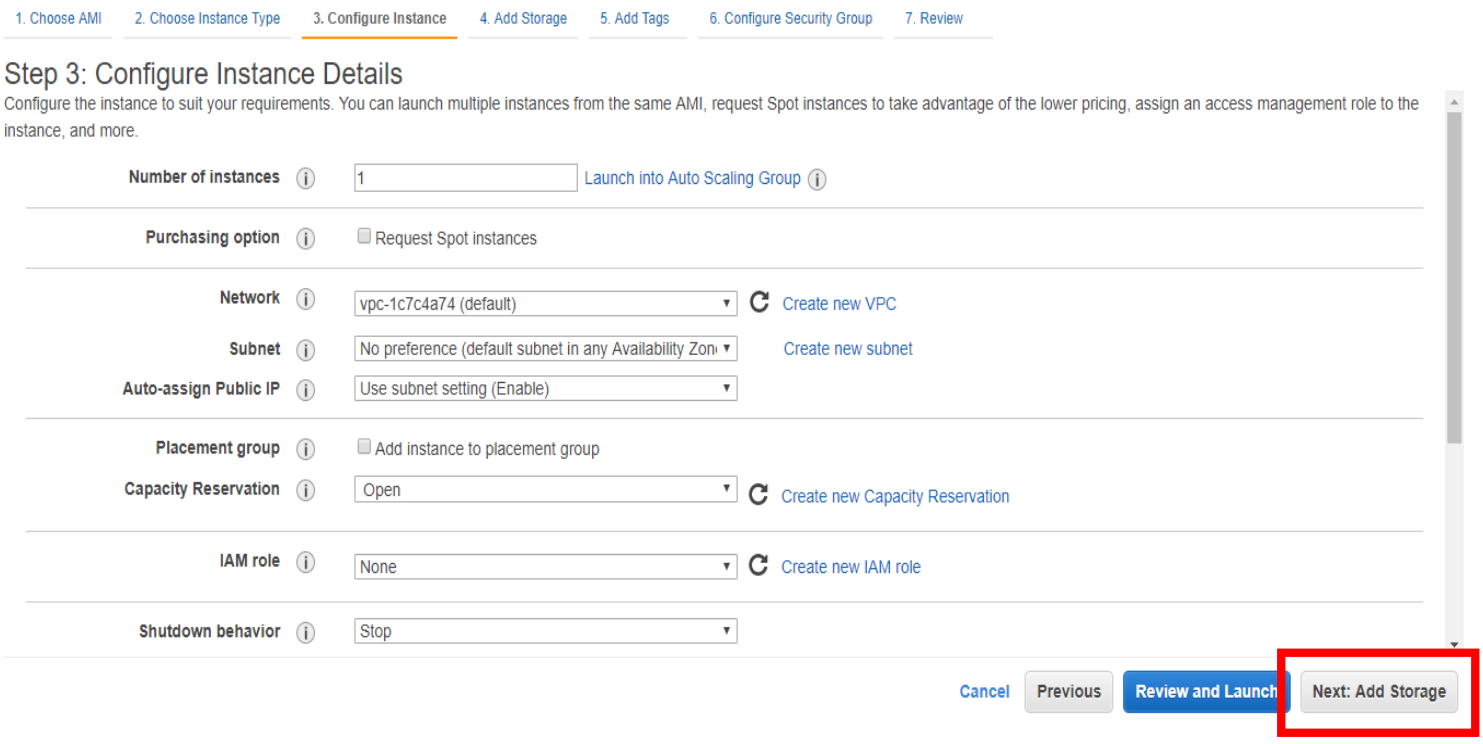
6. Scroll down and click on "**Select**" button against "**Ubuntu Server**". (ensure that it is eligible for Free Tier if you have not checked the 'free tier only' checkbox in previous step).



7. Select the instance type "**t2.micro" (free tier eligible)** and click on "**Next: Configure Instance Details**" button –

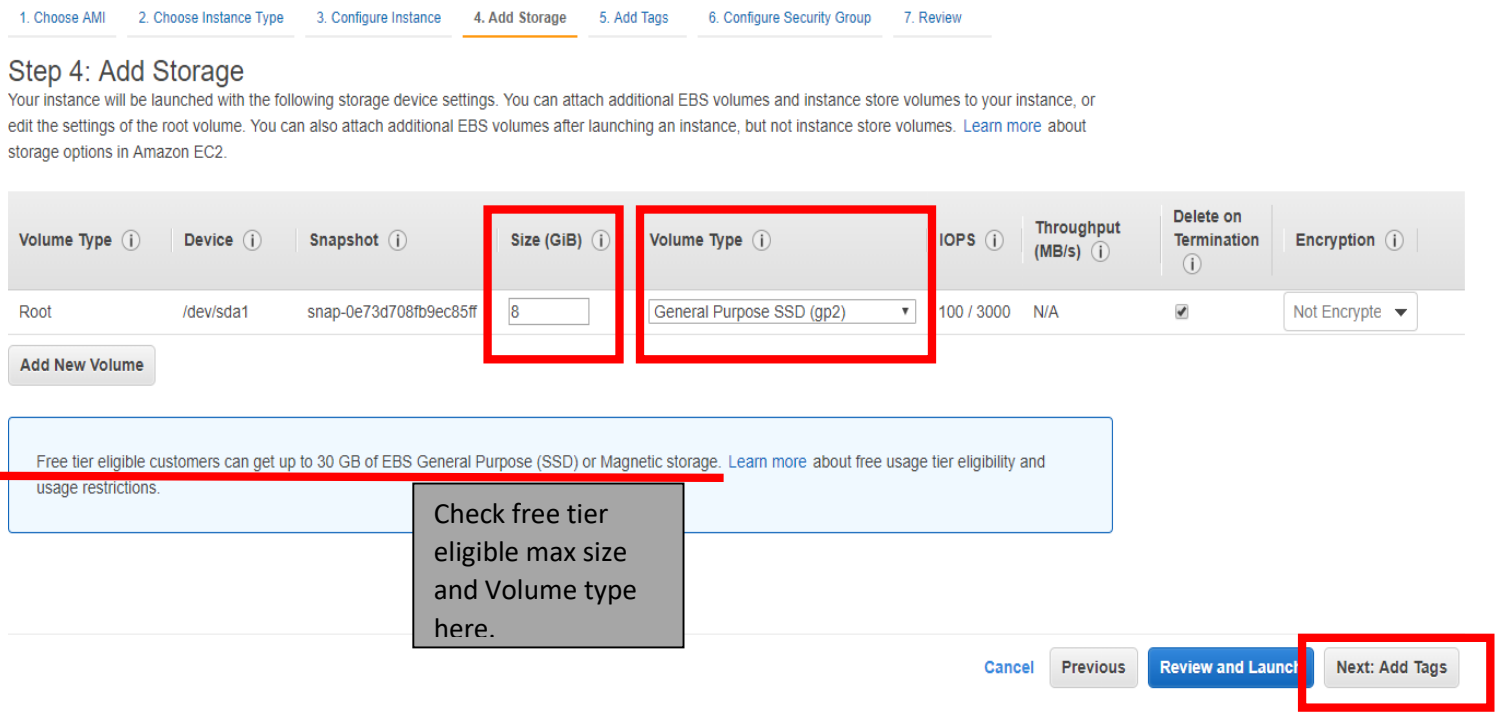


8. On the 'Configure Instance' page keep the default configuration. Click on "**Next: Add Storage**" button –

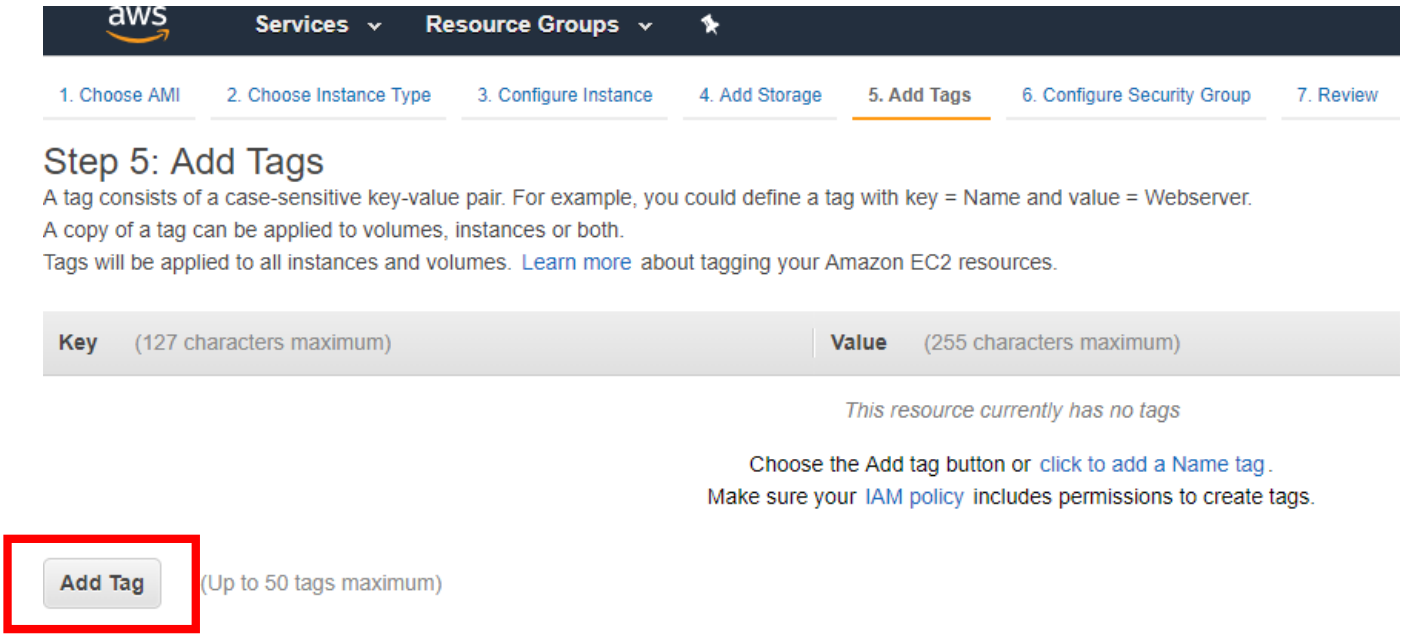


9. On the 'Add Storage' page –
   - ➔ **Size(GiB)** : **8** or **10** (must be less than free tier eligible size (**<= 30**)
   - ➔ **Volume Type** : **General Purpose SSD (gp2)**

- Click on "**Next: Add Tags**" button



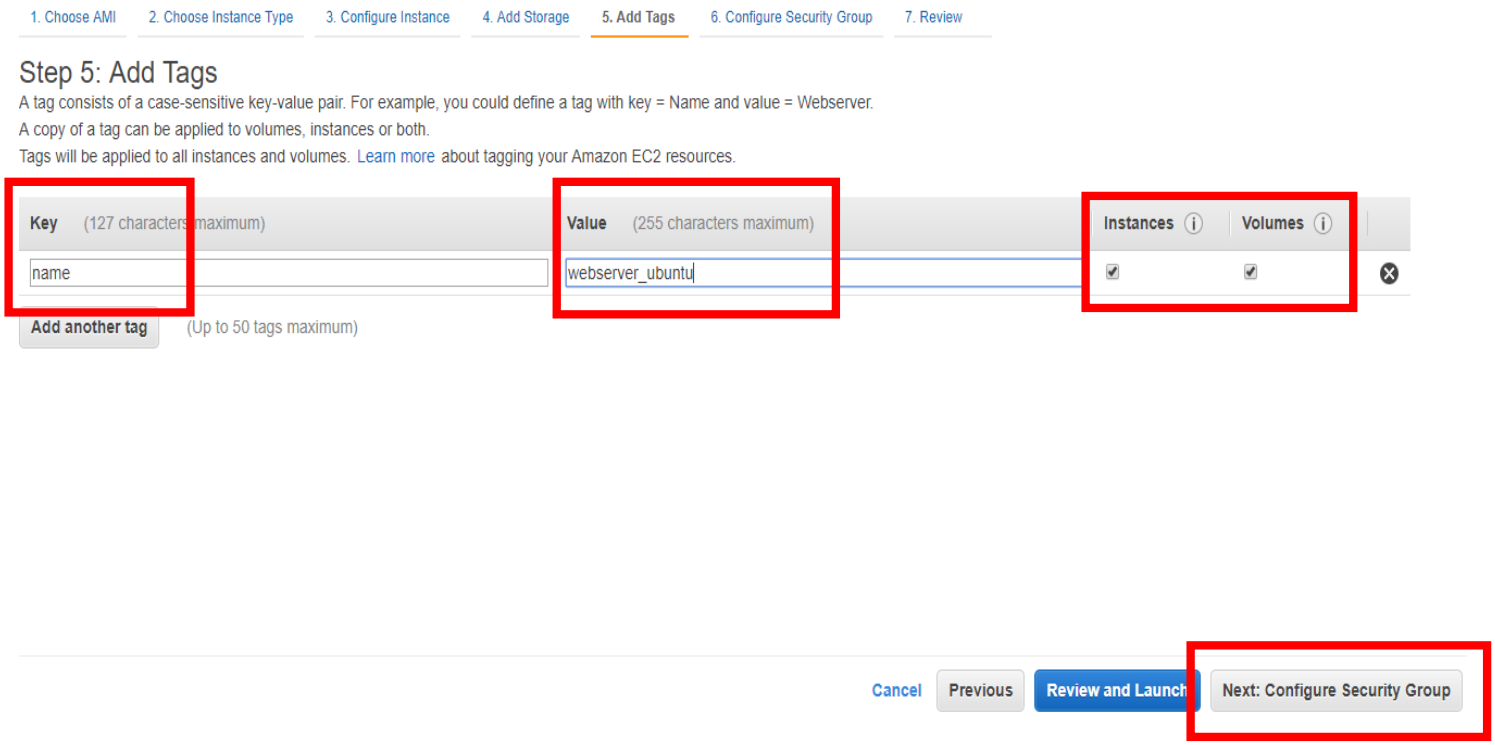
10. On 'Add Tags' page click on "**Add Tag**" button –



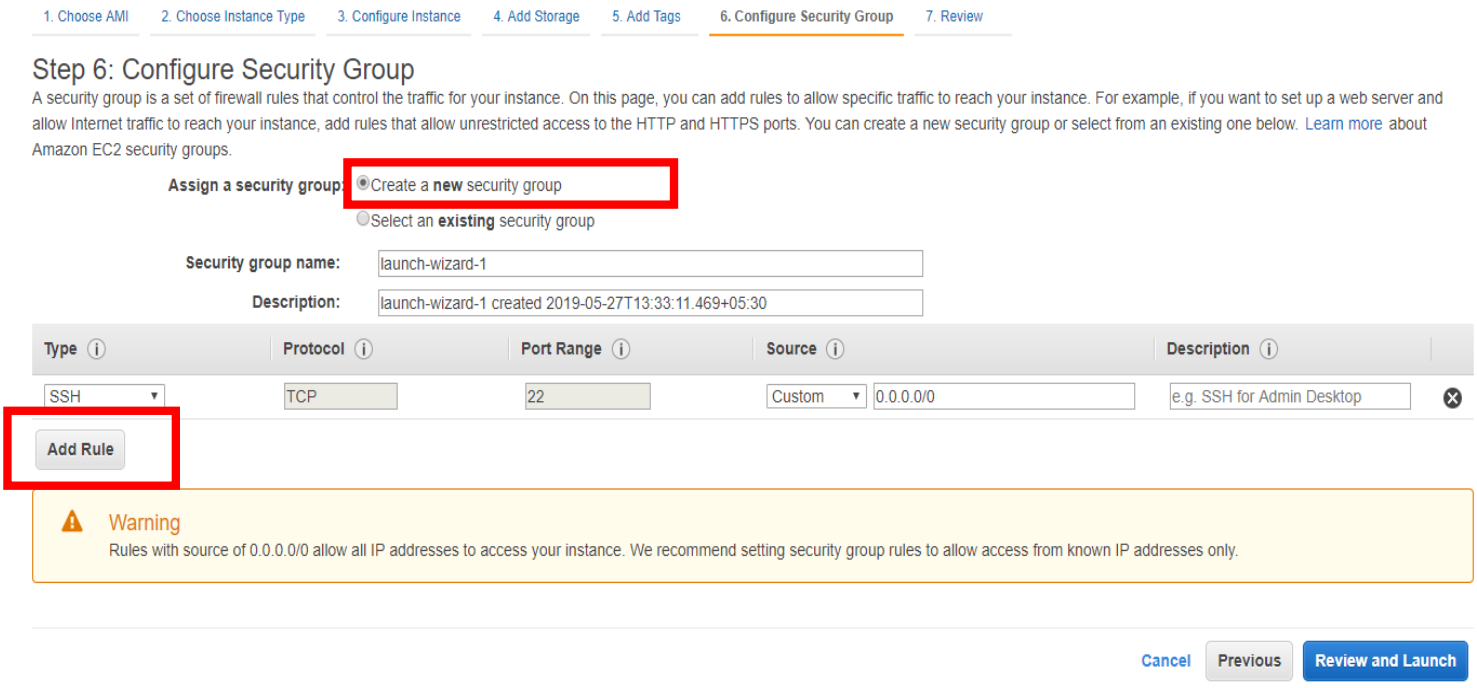
11. On the 'Add Tags' page, Enter the key and value (case sensitive) –
    - ➔ **Key : name**
    - ➔ **Value : webserver_ubuntu**

- Check "Instances" & "Volumes" checkboxes.

- Click on "**Next: Configure Security Group**" button.

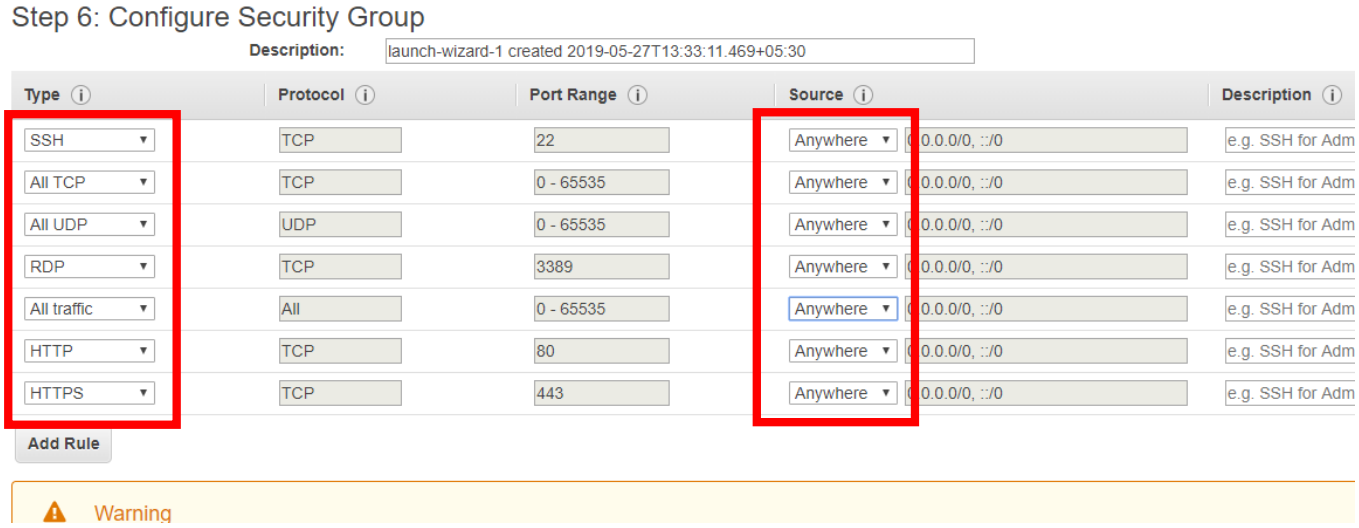


12. On "Configure **Security Group**"
    - ➔ Select "Create a **new** security group" radio button, then
    - ➔ click on "Add Rule" button –

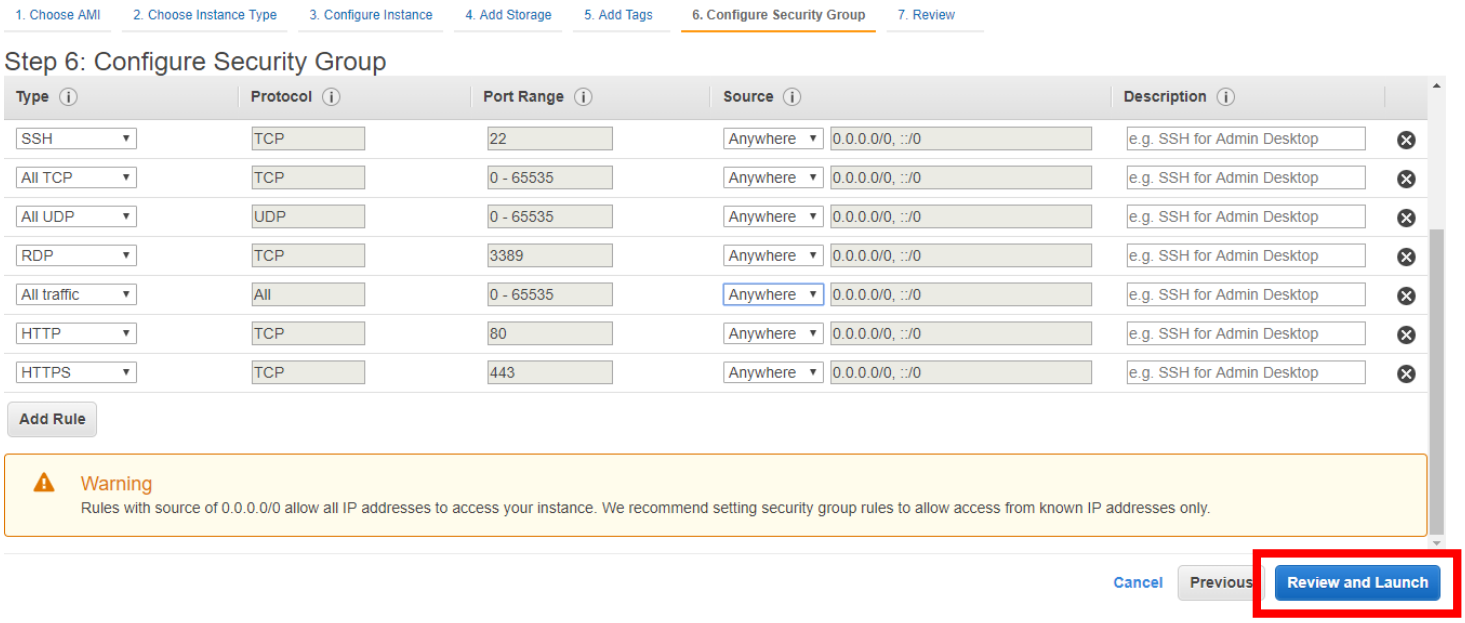


13. Add the following protocols –

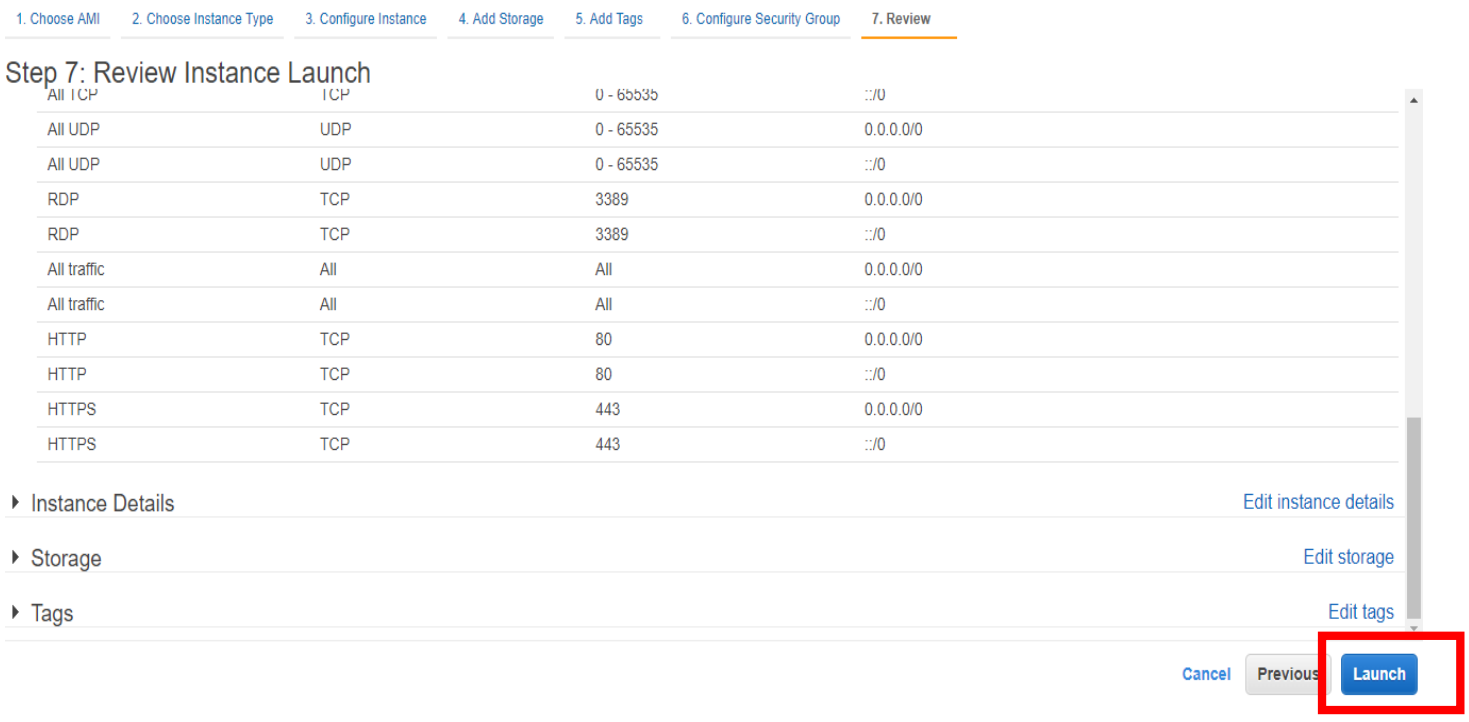
	Type	Source
➔	SSH	Anywhere (--> required to connect to instance using PuTTY)
➔	All TCP	Anywhere
➔	All UDP	Anywhere
➔	RDP	Anywhere
➔	All Traffic	Anywhere
➔	HTTP	Anywhere
➔	HTTPS	Anywhere



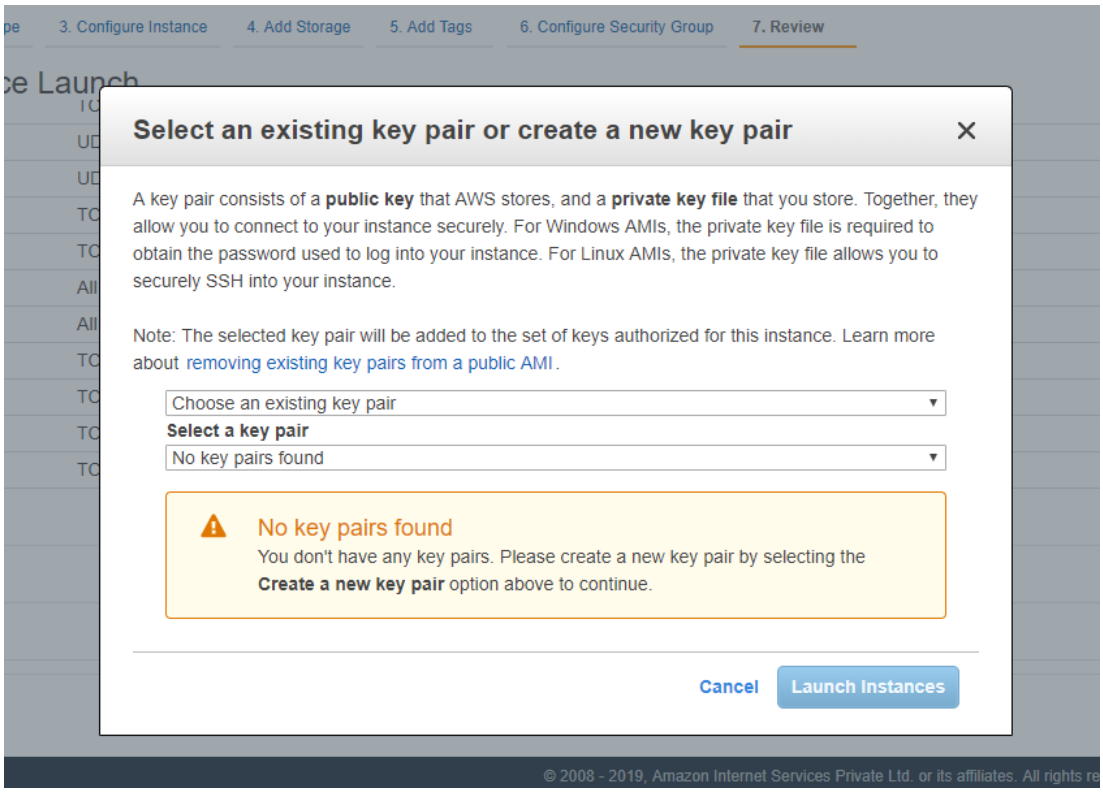
14. Click on "**Review and Launch**" button –



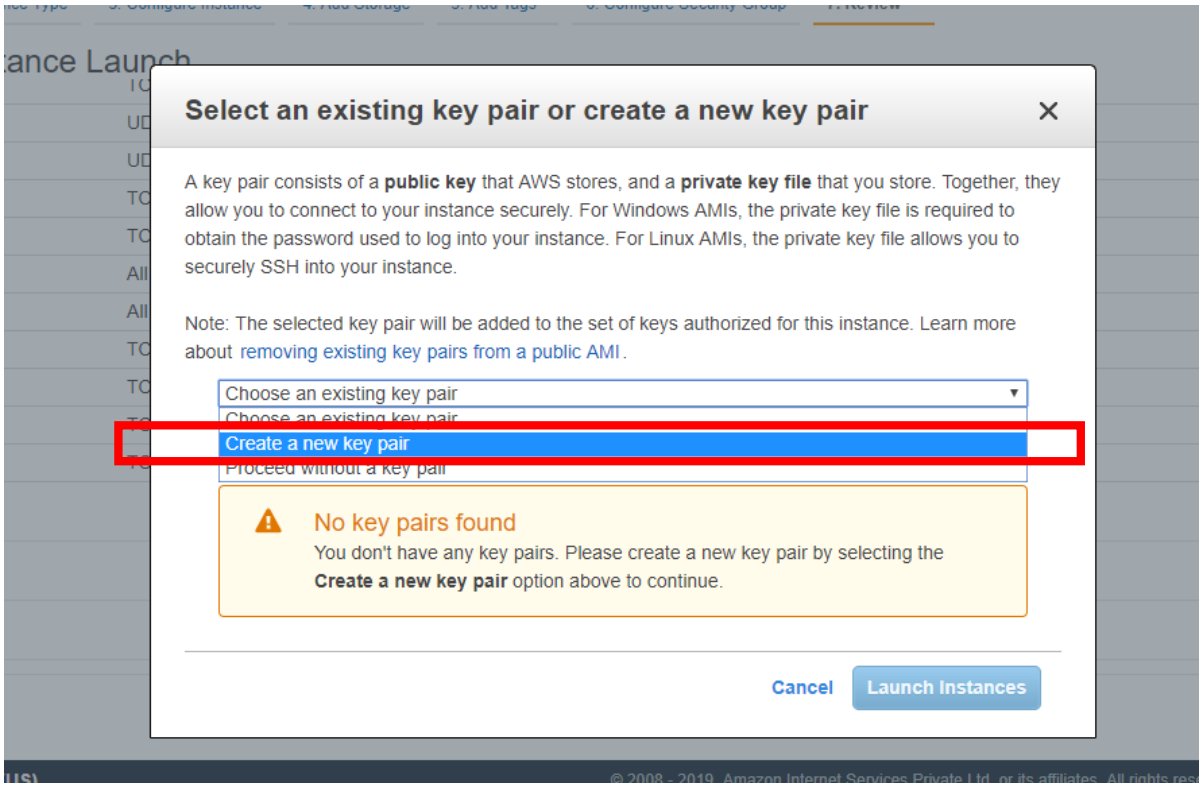
15. On the "Review" page, scroll down and click "**Launch**" button –



16. One "**Key-Pair**" popup will be launched –

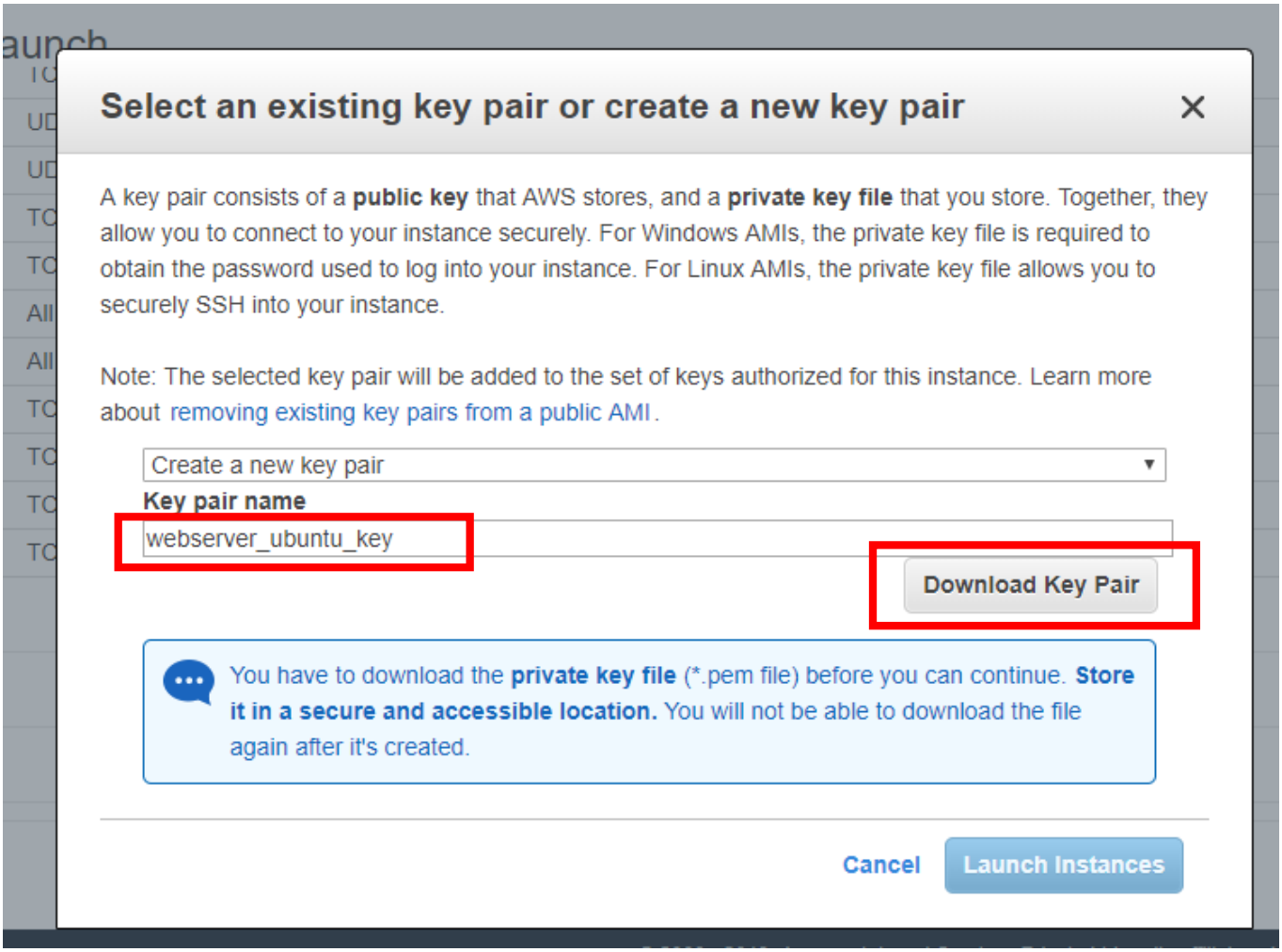


17. Open the first drop-down and select "**Create a new key pair**" from the list.



18. Enter "**Key Pair Name**" as –
    webserver_ubuntu_key

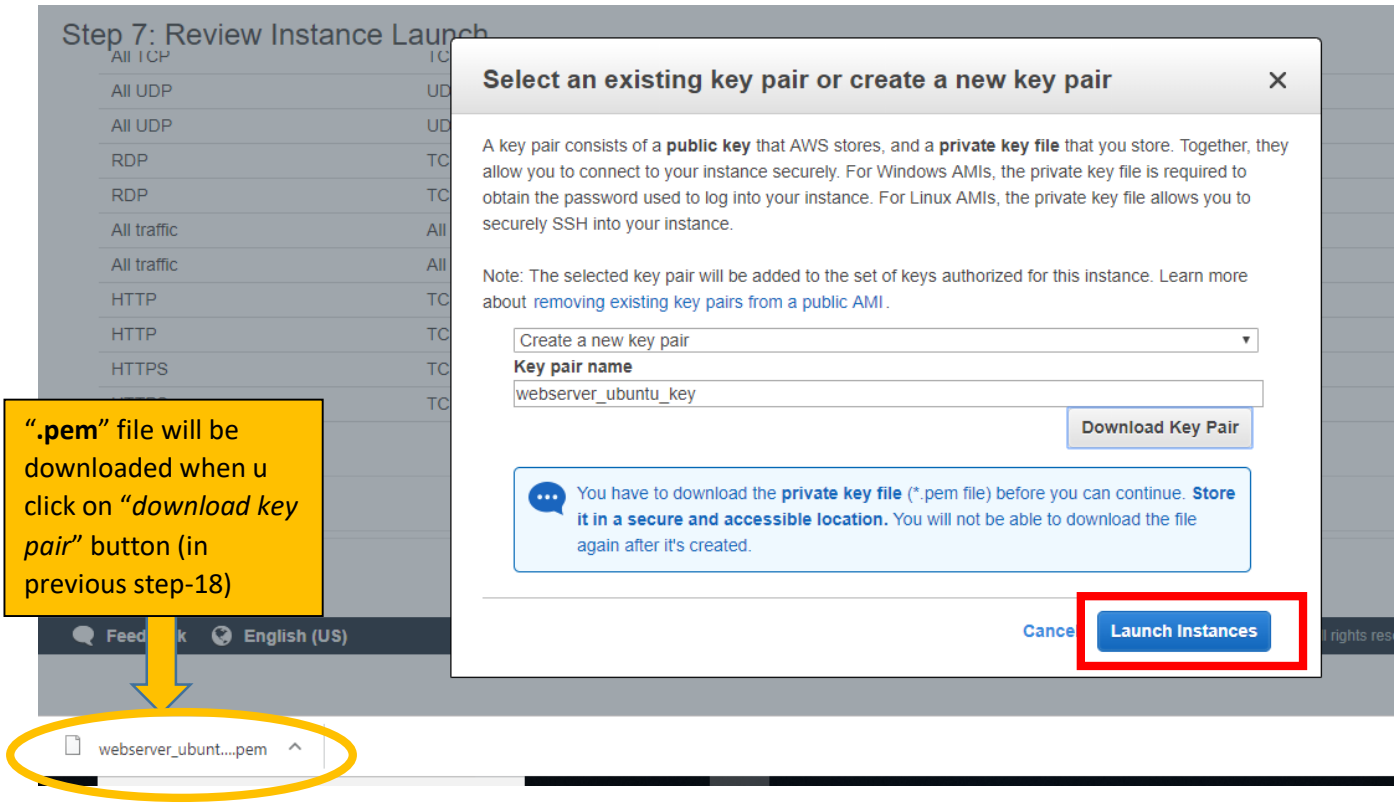
- Click on "**Download Key Pair**" button



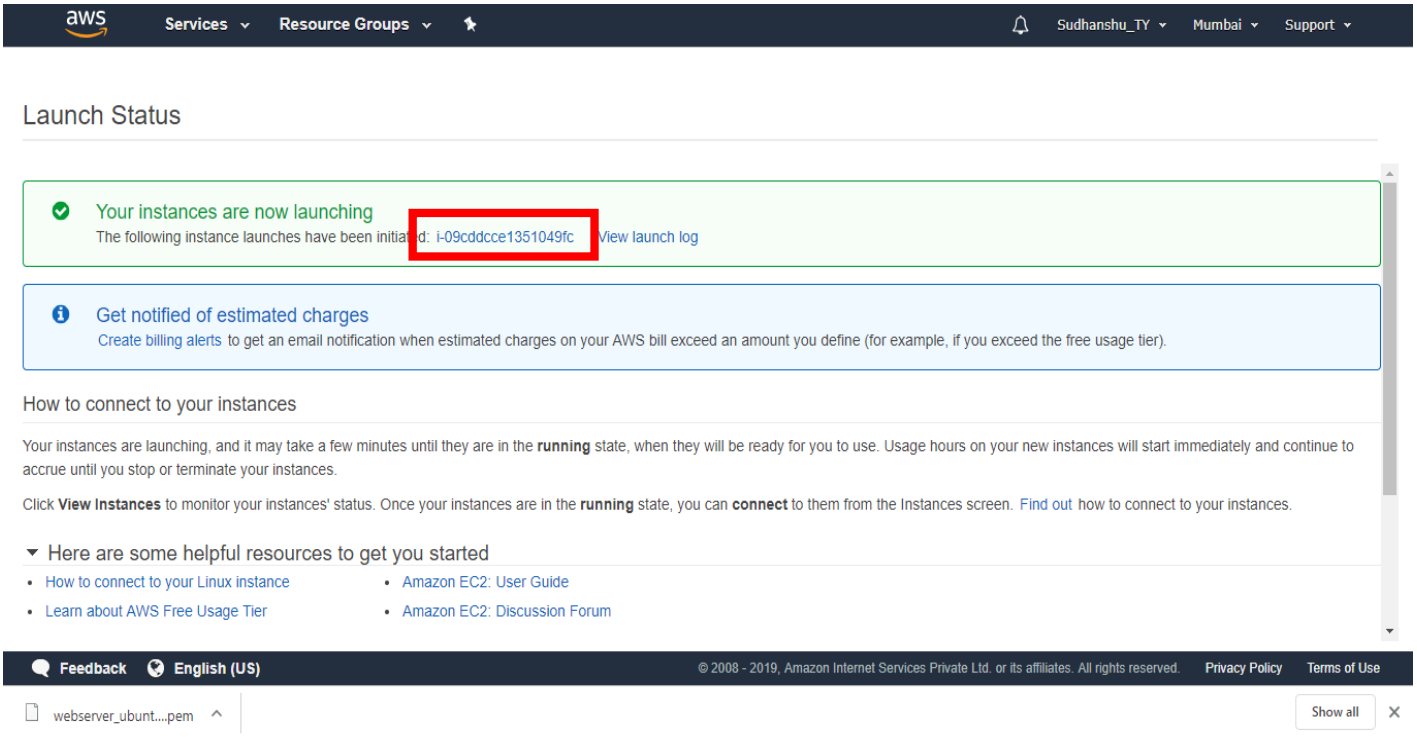
- It will download the "**webserver_ubuntu_key.pem**" file. Save this ".pem" file ***(we need this file in future to connect to this instance using PuTTY)*.**

[NOTE: - This ".pem" file is an important file. It will be required in future as well. So, save this file in a place u can easily remember and also in the drive other than your OS installed drive.]

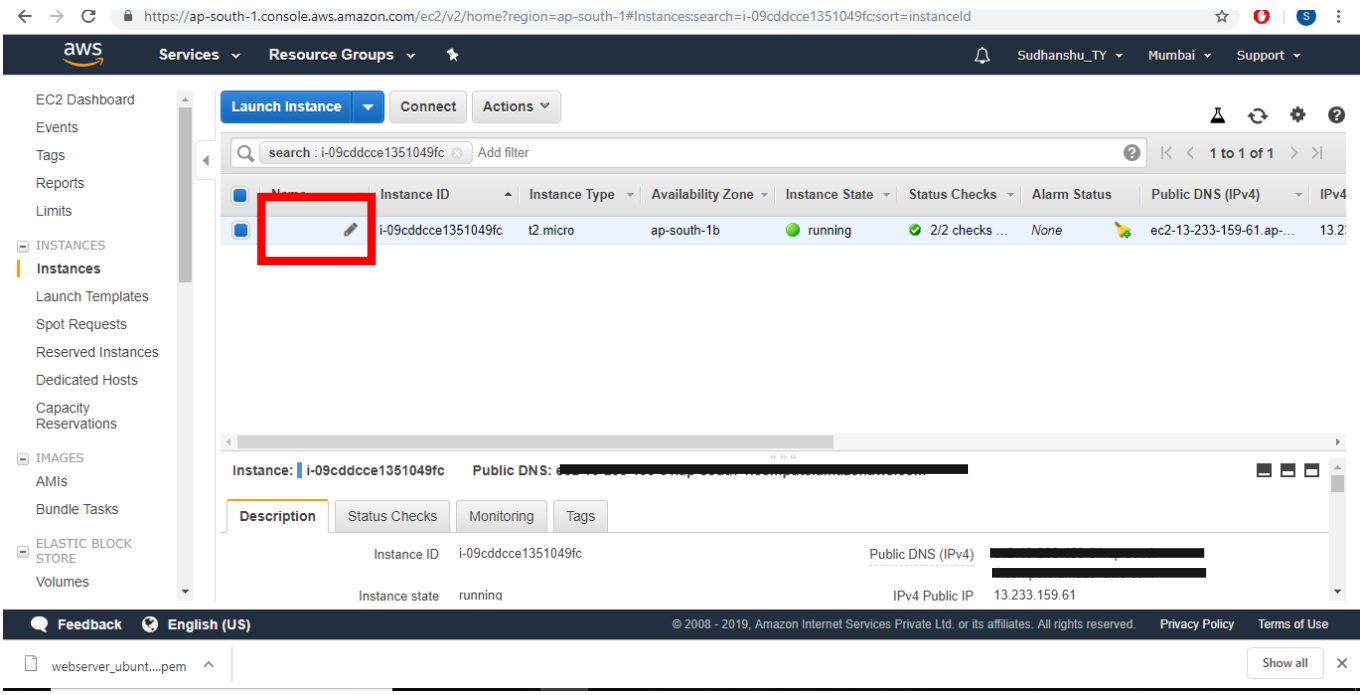
19. Click on "**Launch Instances**" button.



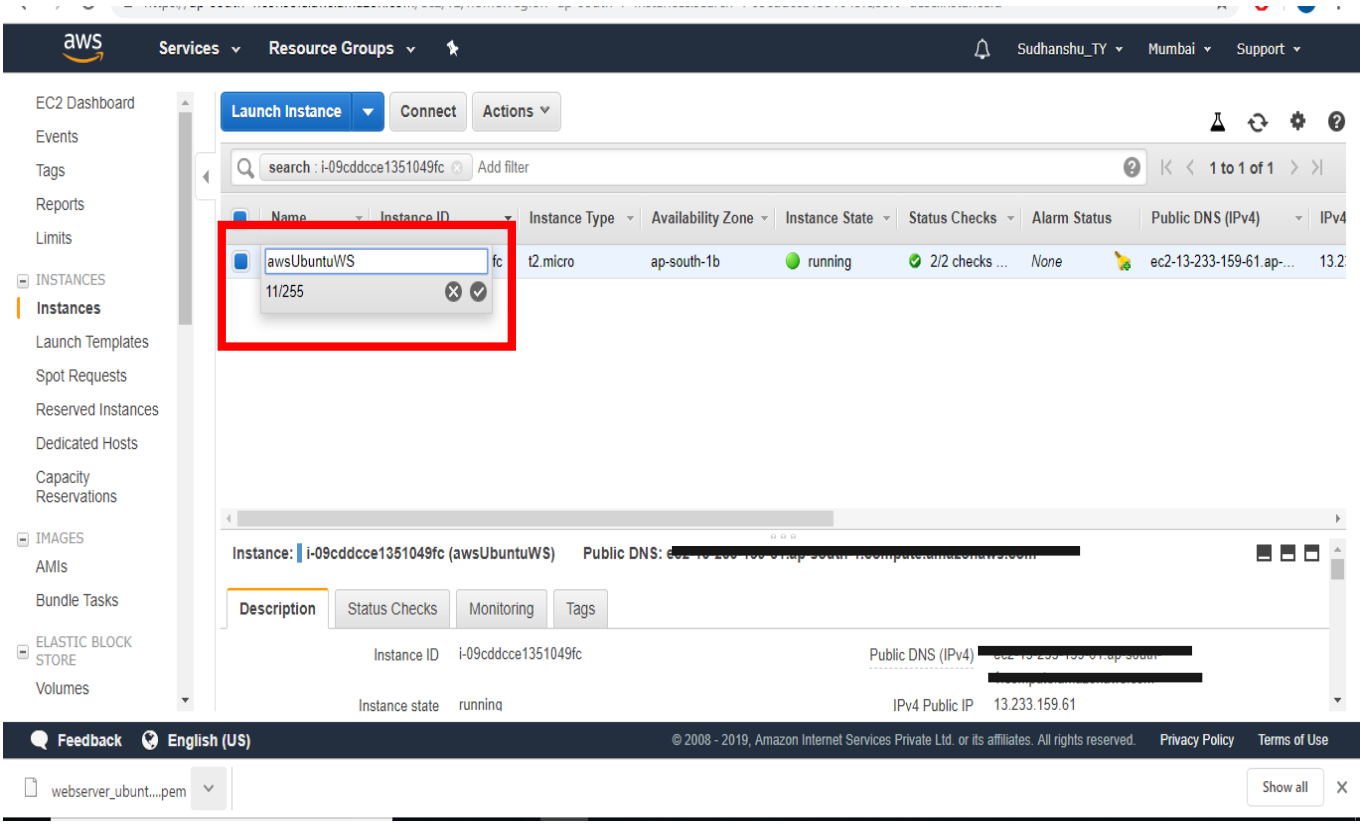
20. The '**Launch Status**' page will be displayed.
    - Click on your **instance link.** Link will be present inside *"Your instances are now launching"* box after *"The following instance launches have been initiated:"* message.



21. Hover the mouse on the "**Name"** field of the instance and click on **pensil / edit icon.**



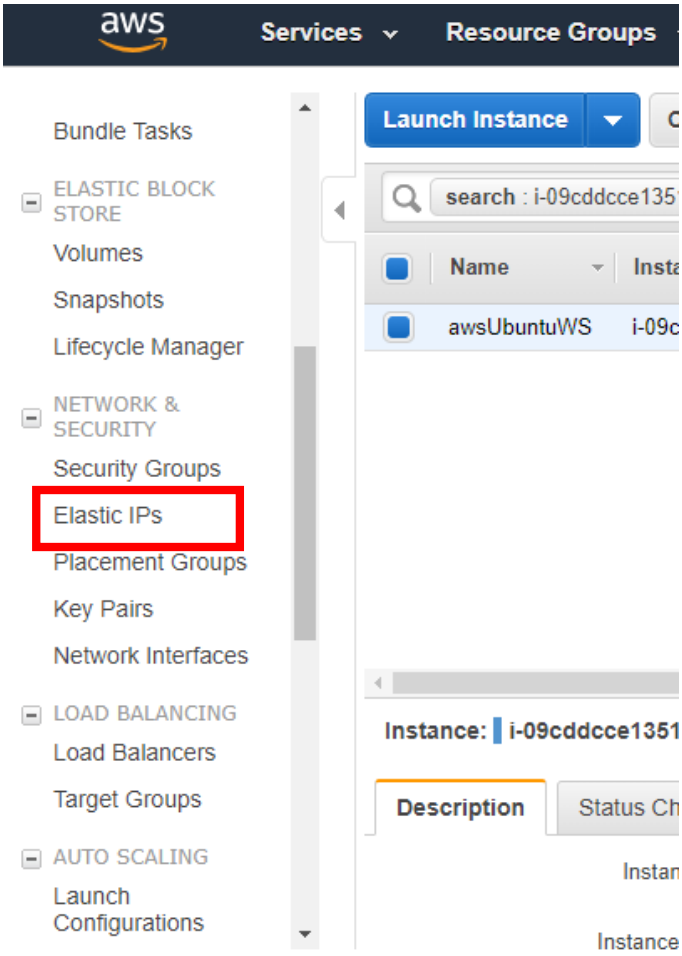
- Give some **name** to your instance (ex. - awsUbuntuWS) and press Enter or click on ✓ mark.



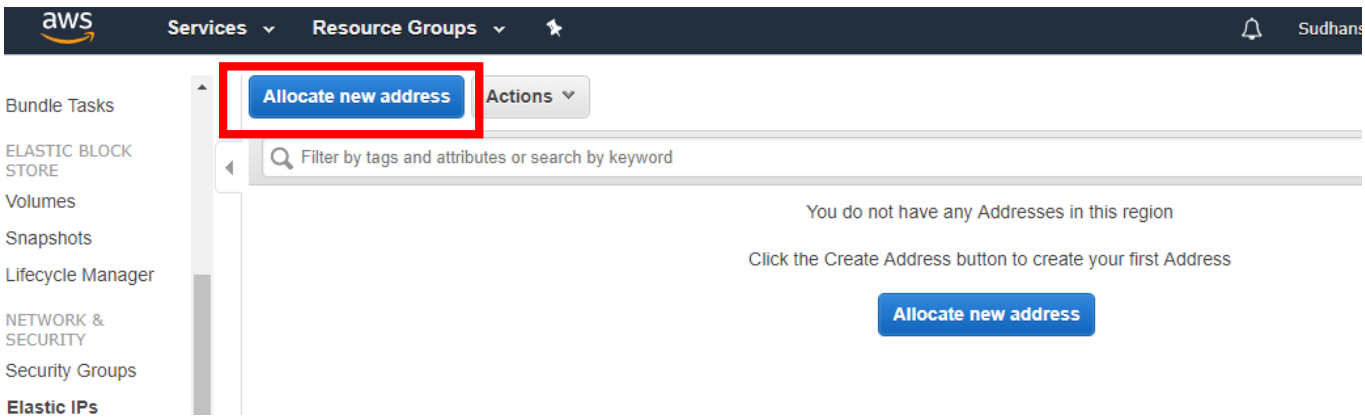
22. Check value of "**Status Check**" column. if it is ***"initializing"***, wait for some time until it gets initialized. When initialization of your instance is completed, the value or "**Status Check**" column will be like "***2/2 checks passed***".

- ***Let the initialization complete.***

23. Now, **Create your own "Elastic IP"** –
    a. Scroll down the left hand side navigation pane, under "**Network & Security**" click on "**Elastic IPs**"



    b. Click on "**Allocate new address**" button



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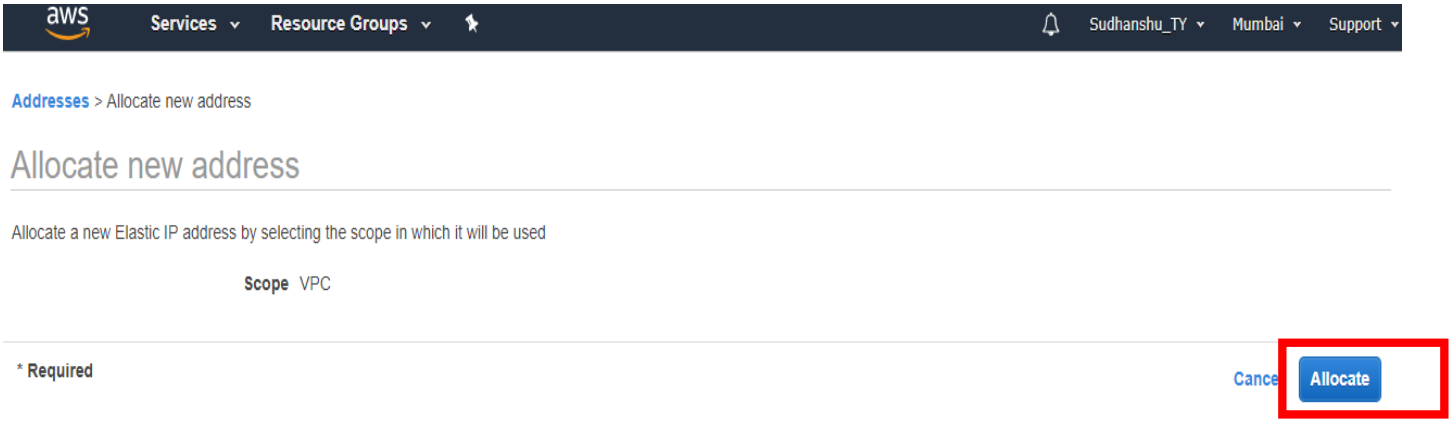
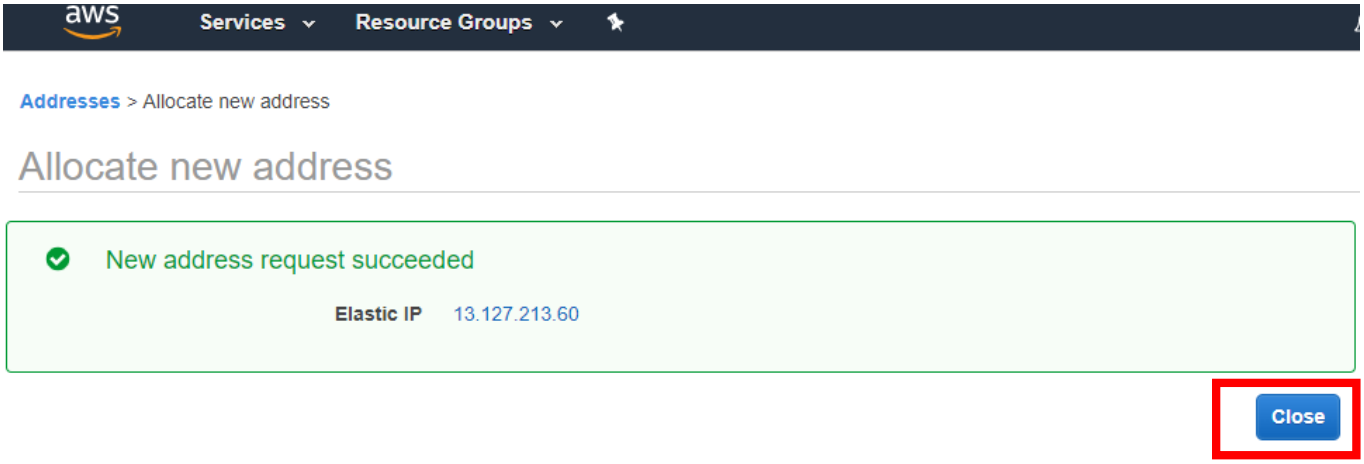
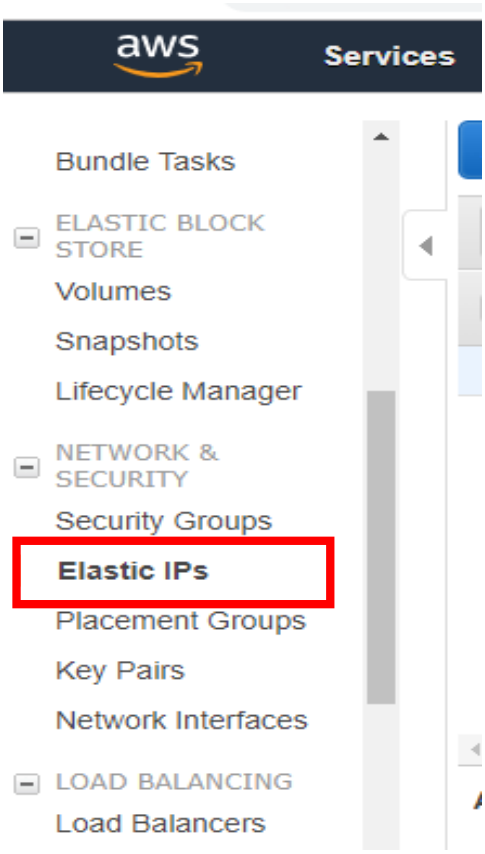
c. Click on "**Allocate**" button –



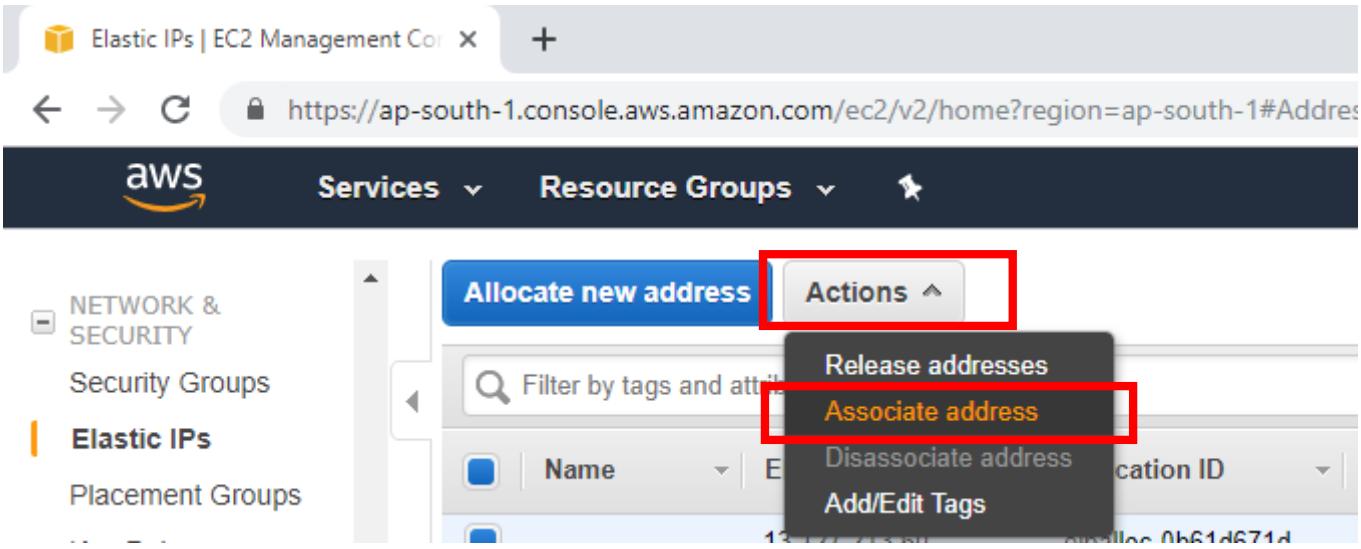
d. New IP will be allocated. Click on "**Close**" button.



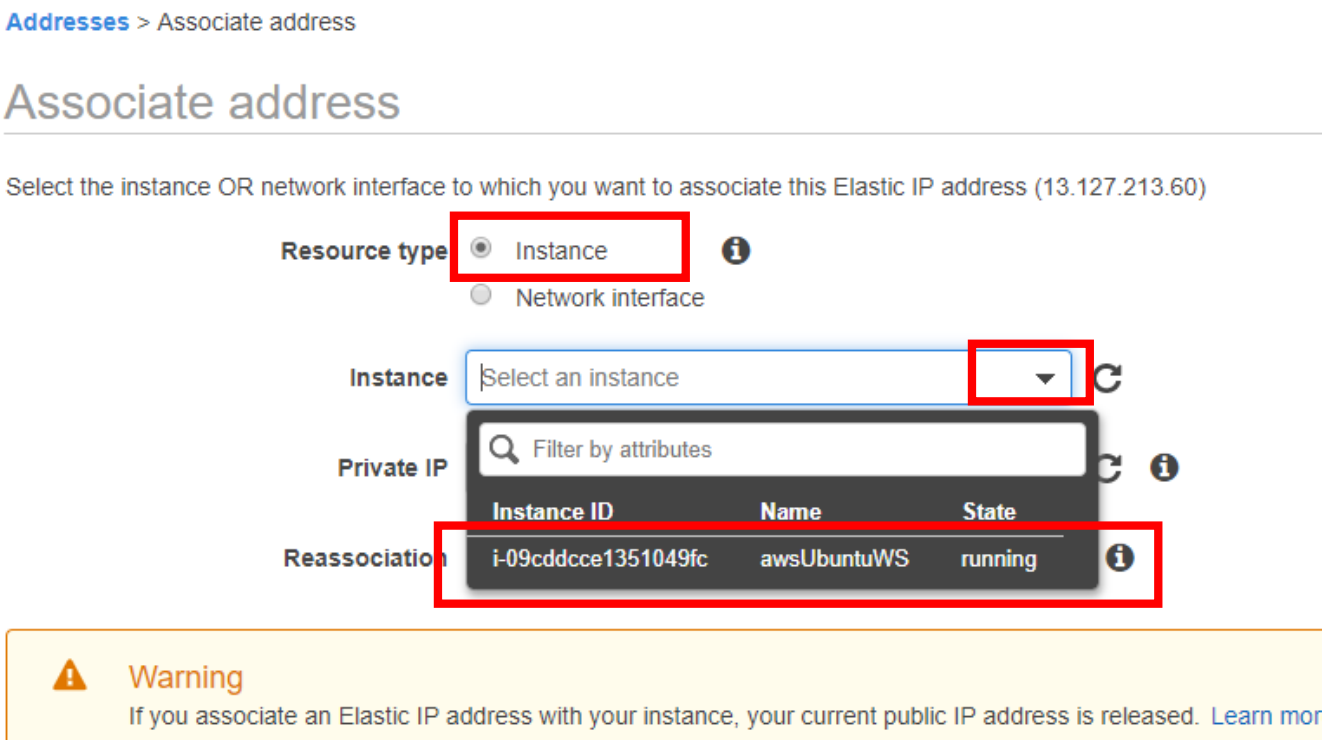
24. **Associate your Private IP with Elastic IP** –
    a. On the left hand side navigation pane, scroll down --> under "**Network & Security**" click on "**Elastic IPs**"



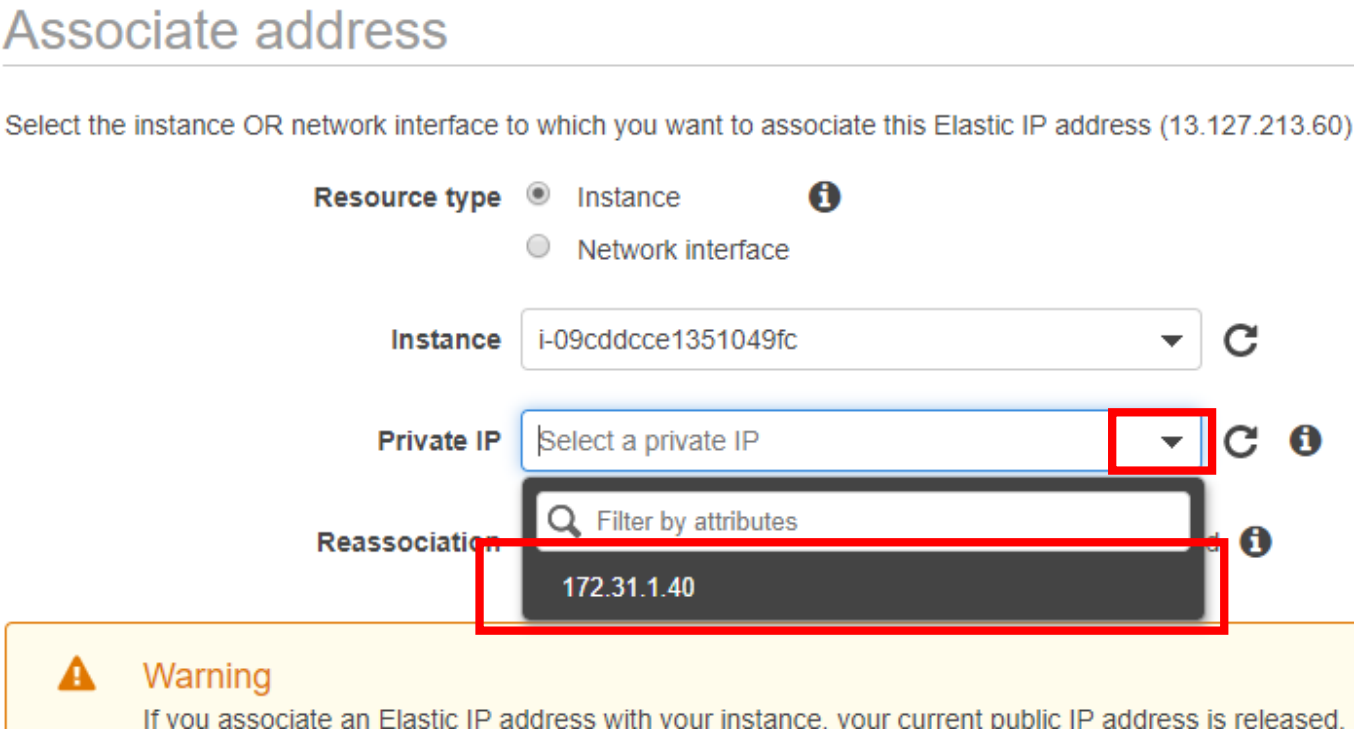
    b. Click on "**Action**" and select "**Associate Address**"



c. Select the "**Instance**" radio button against "*Resource Type*"
And expand ***Instance*** dropdown and **select your instance**.



d. Expand ***Private IP*** dropdown and **select your Private IP** –



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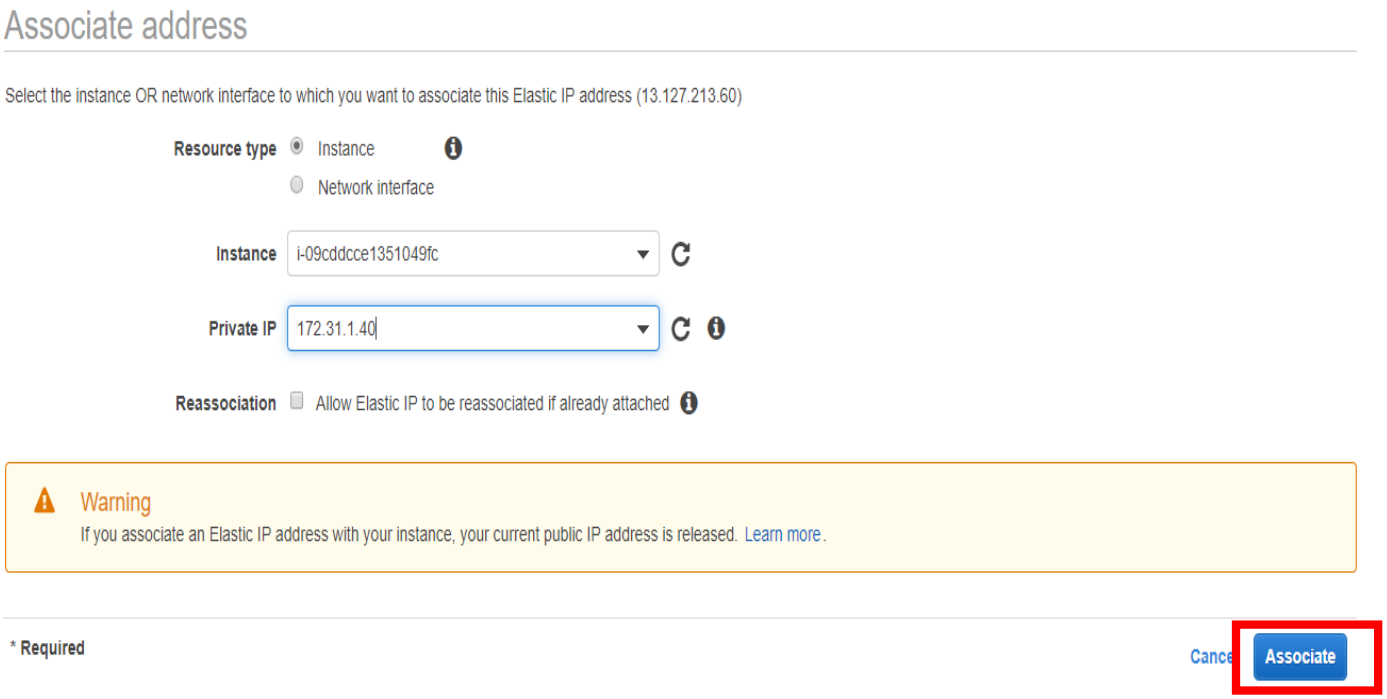
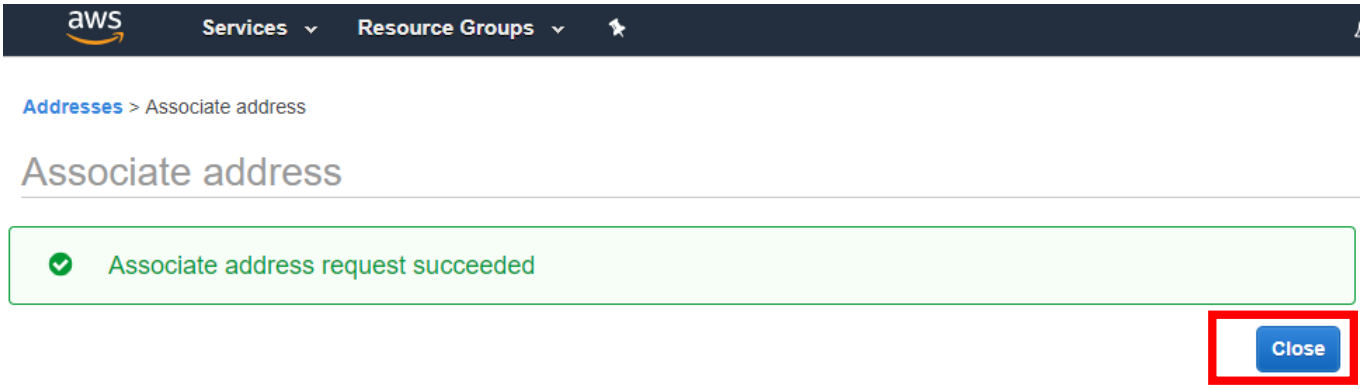
e. Click on "**Associate**" button



f. Click on "**Close**" button –



- ***Your EC2 instance is configured now.***

- **Now you can Connect to your EC2 Instance Using PuTTY.**

  [PuTTY & **PuTTYgen** Software are **required]**

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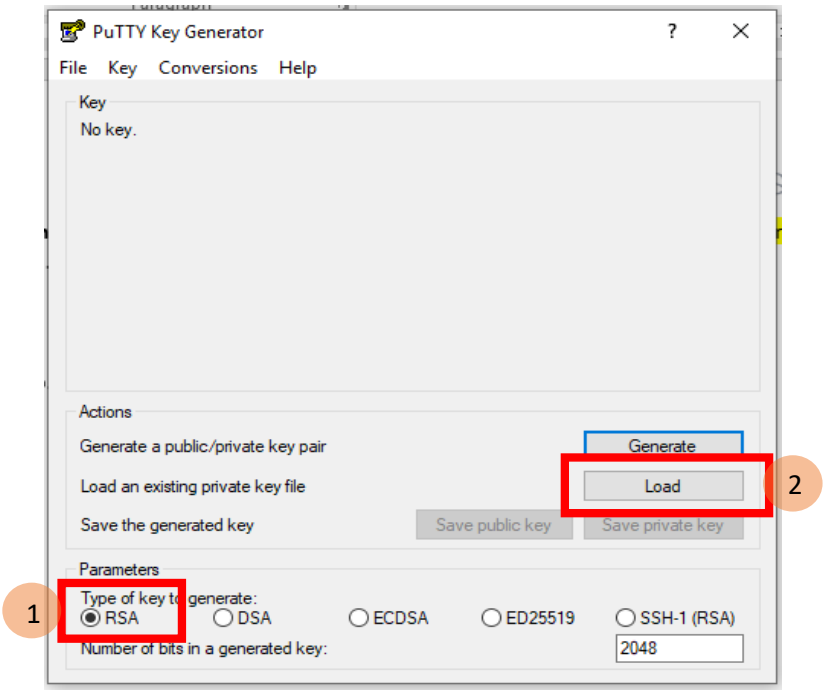
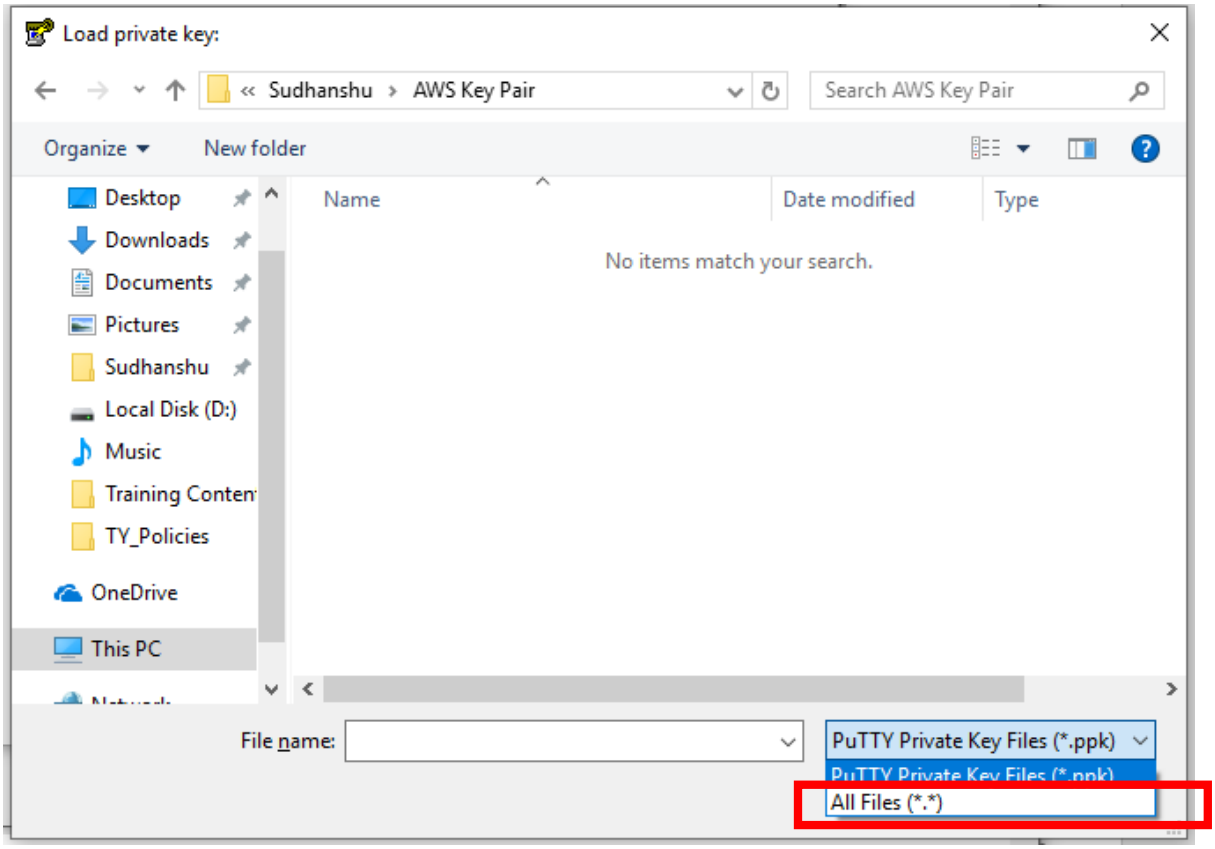
25. Open "**PuTTYgen**" software

a. select the *'type of key to generate'* as "**RSA**"

- Click on "**Load** button



b. Select "**All Types (*.*)**" from file types dropdown –



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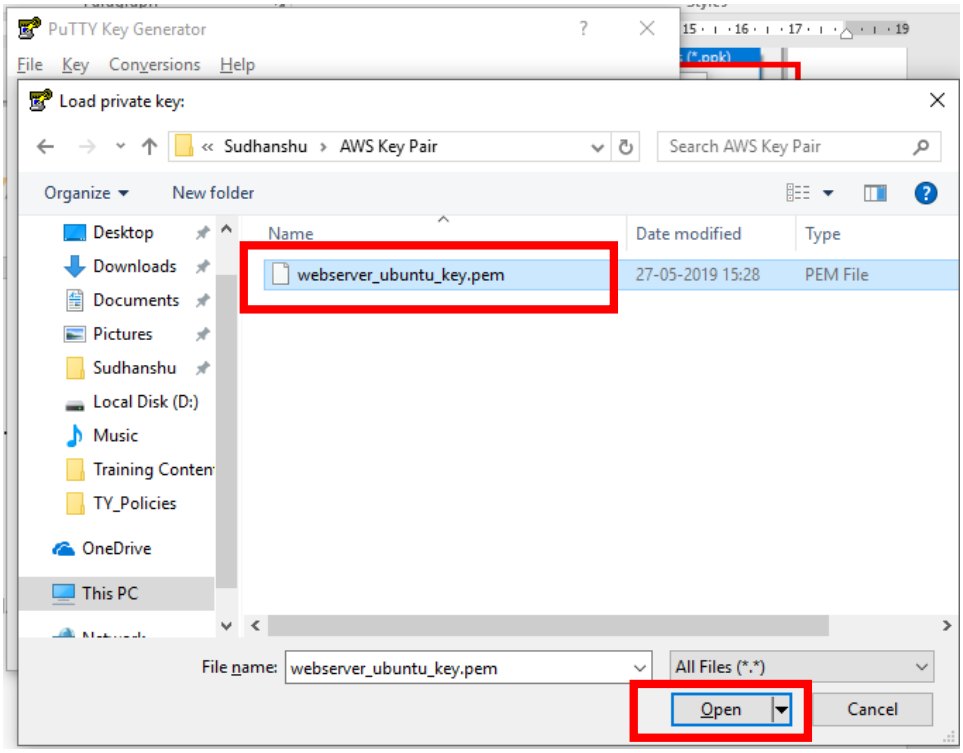
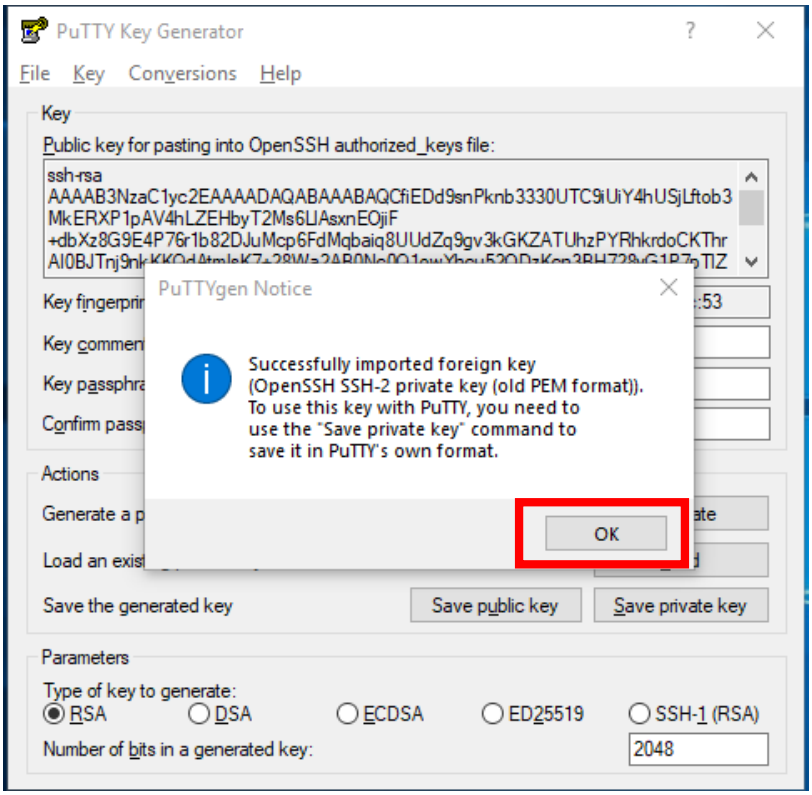
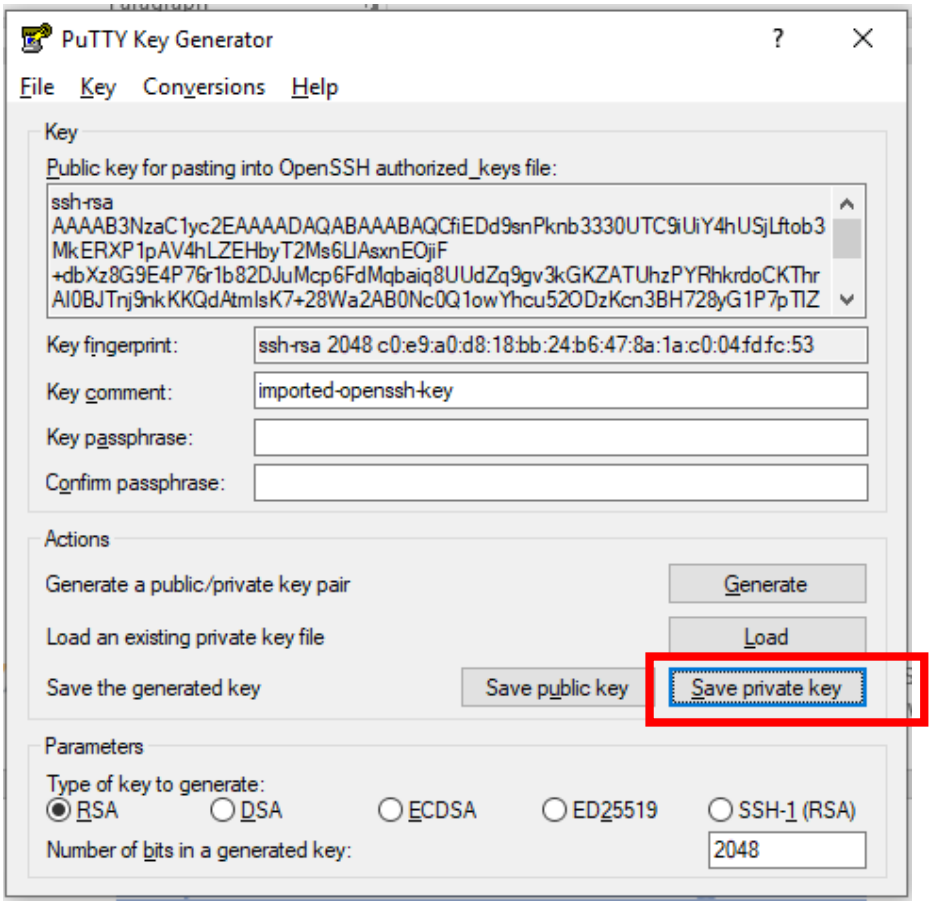
c. Browse for "**webserver_ubuntu_key.pem**" file *(downloaded in STEP- **18**)*, select it and click on "**Open**" –



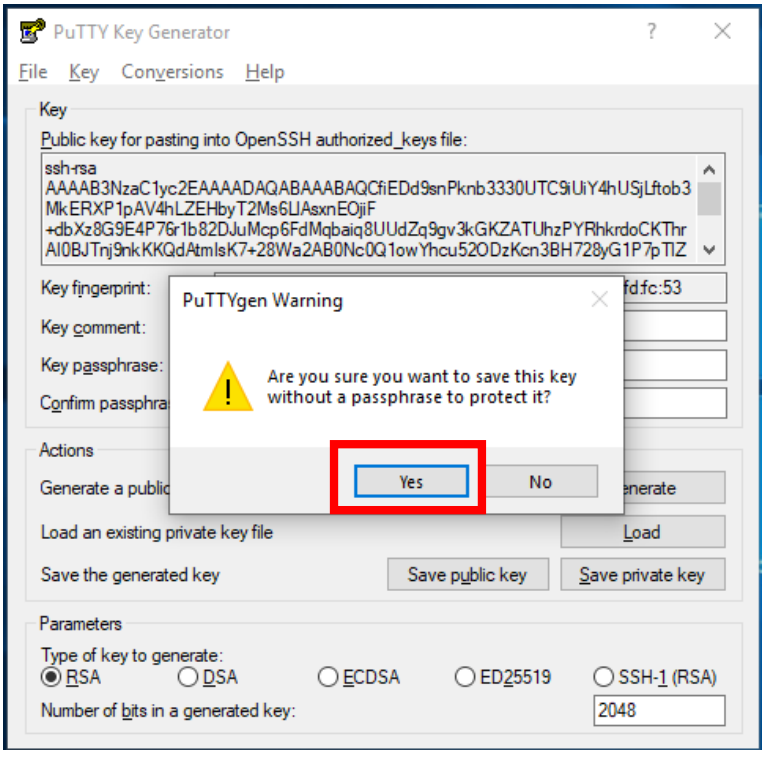
d. If "*PuTTYgen Notice*" popup pops up, click on "OK"



e. Click on "**Save private key**" button –



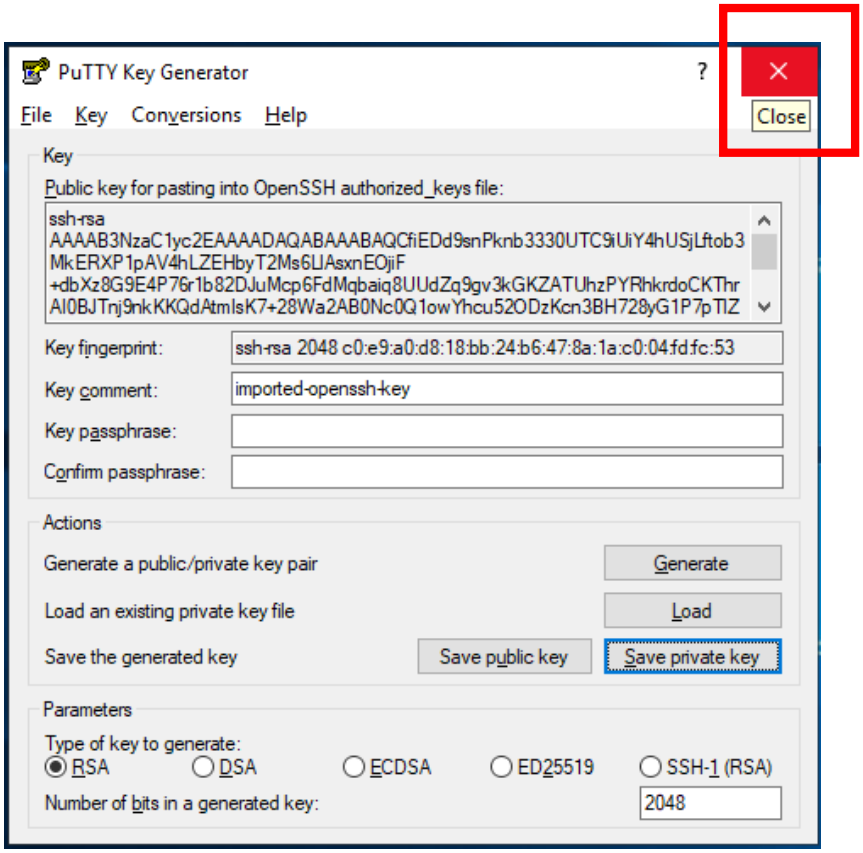
f. On '*PuTTYgen Warning*' popup, click on "**Yes**" –



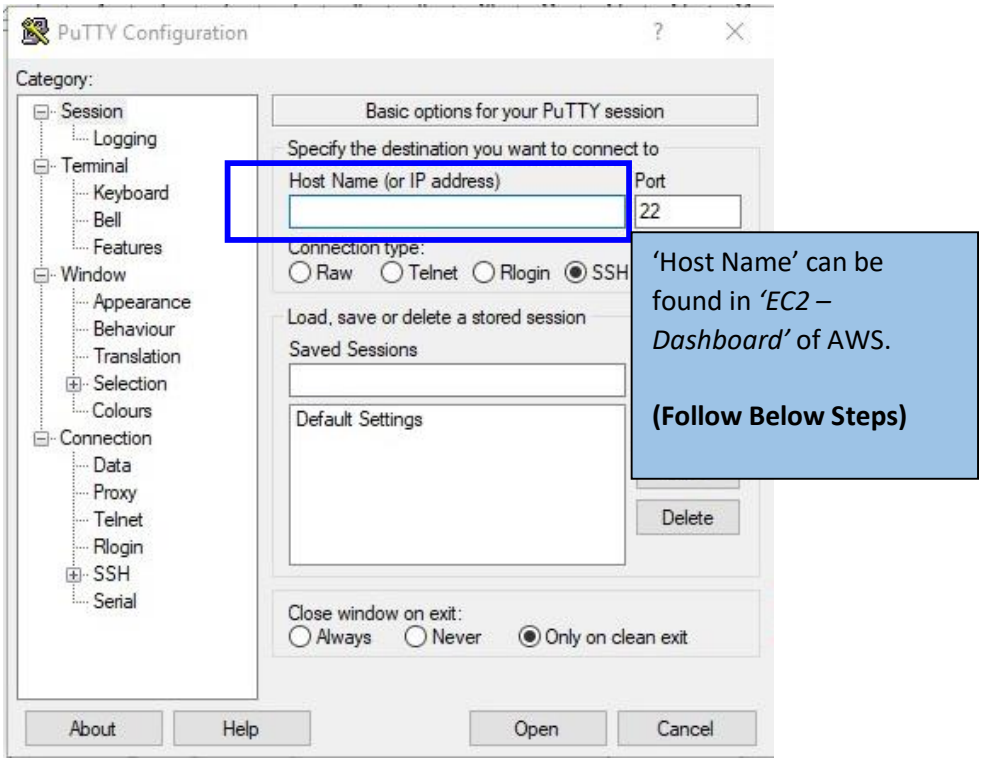
g. Save the file by name "**webserver_ubuntu_key**".
(file name with extension will be "**webserver_ubuntu_key.ppk**")

[NOTE: - This ".ppk" file is an important file. It is *required to connect to your server (instance)* using PuTTY. So, save this file in a place u can easily remember and also in the drive *other than* your OS installed drive.]

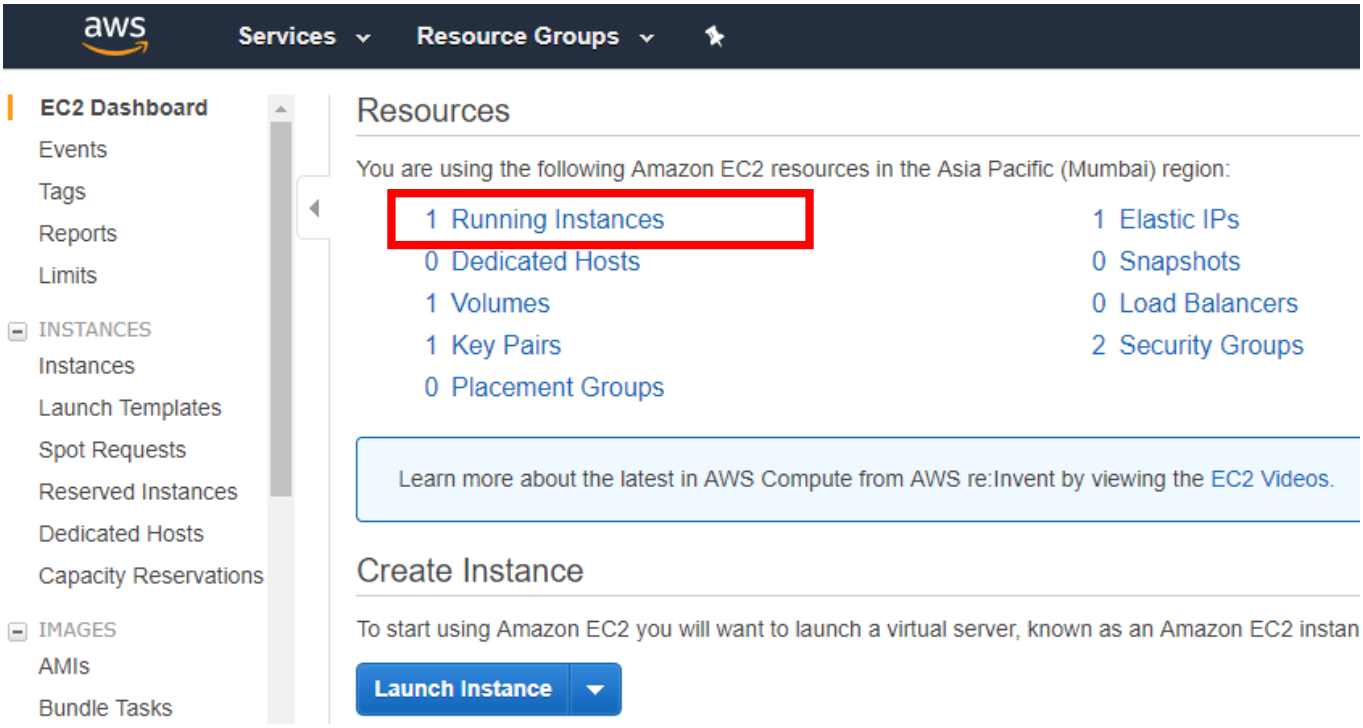
h. **Close** PuTTYgen.



26. Open "**PuTTY**" software.



a. Here you need to Enter the **Host Name**. *To find host name, proceed as follows* –
   - Login to you AWS Management Console, and go to your **EC2 Dashboard**. (Follow STEP - **1** - **3**)
   - Click on "**Running Instances**"



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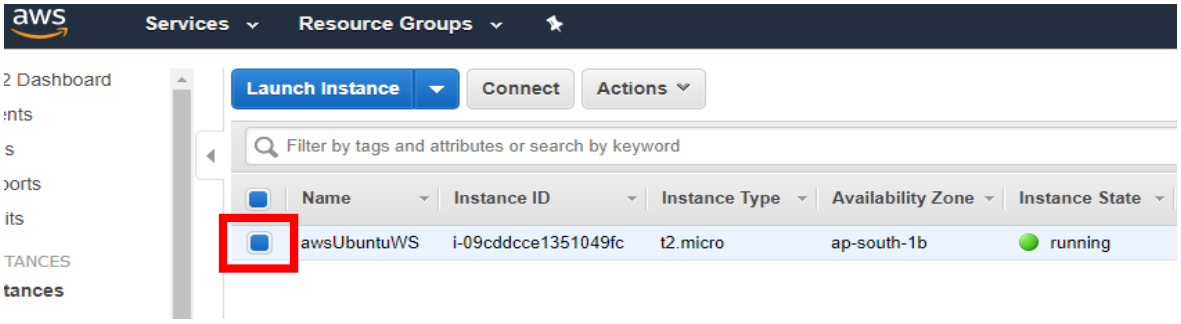
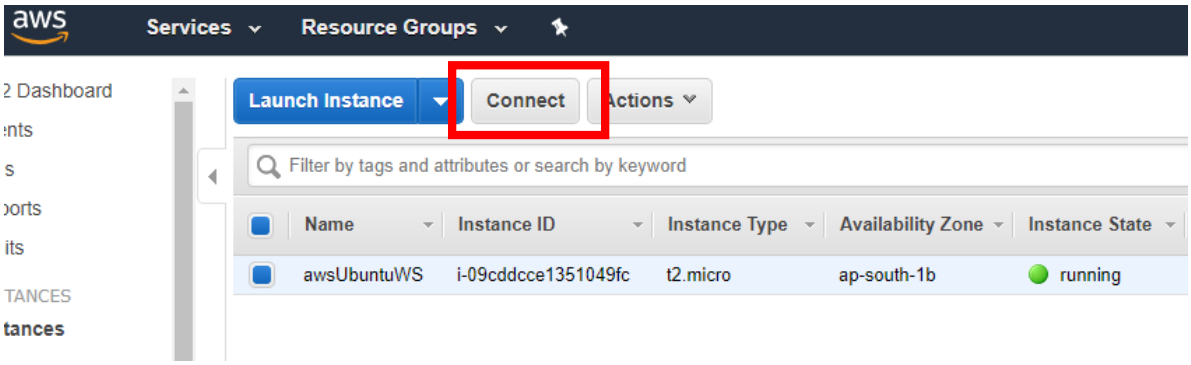
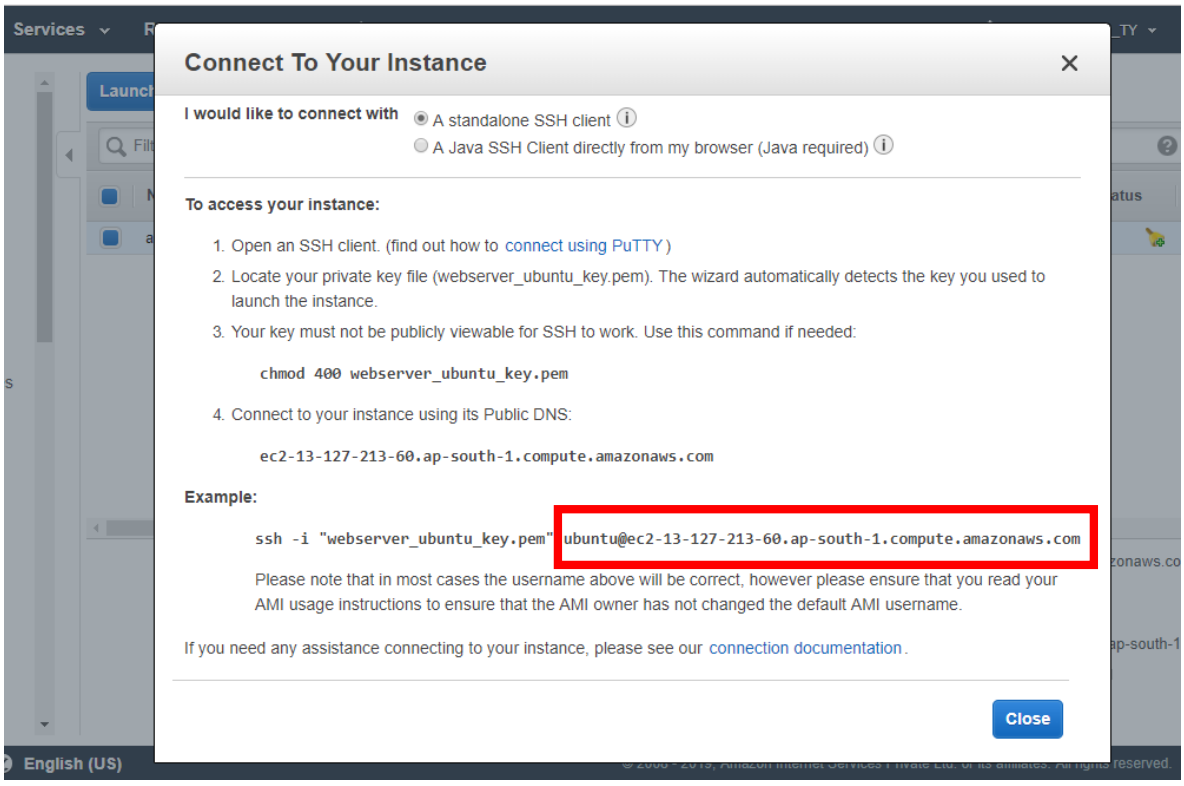
- **Select** Your '***EC2 Instance***' with which you want to connect –



- Click on "**Connect**" button –

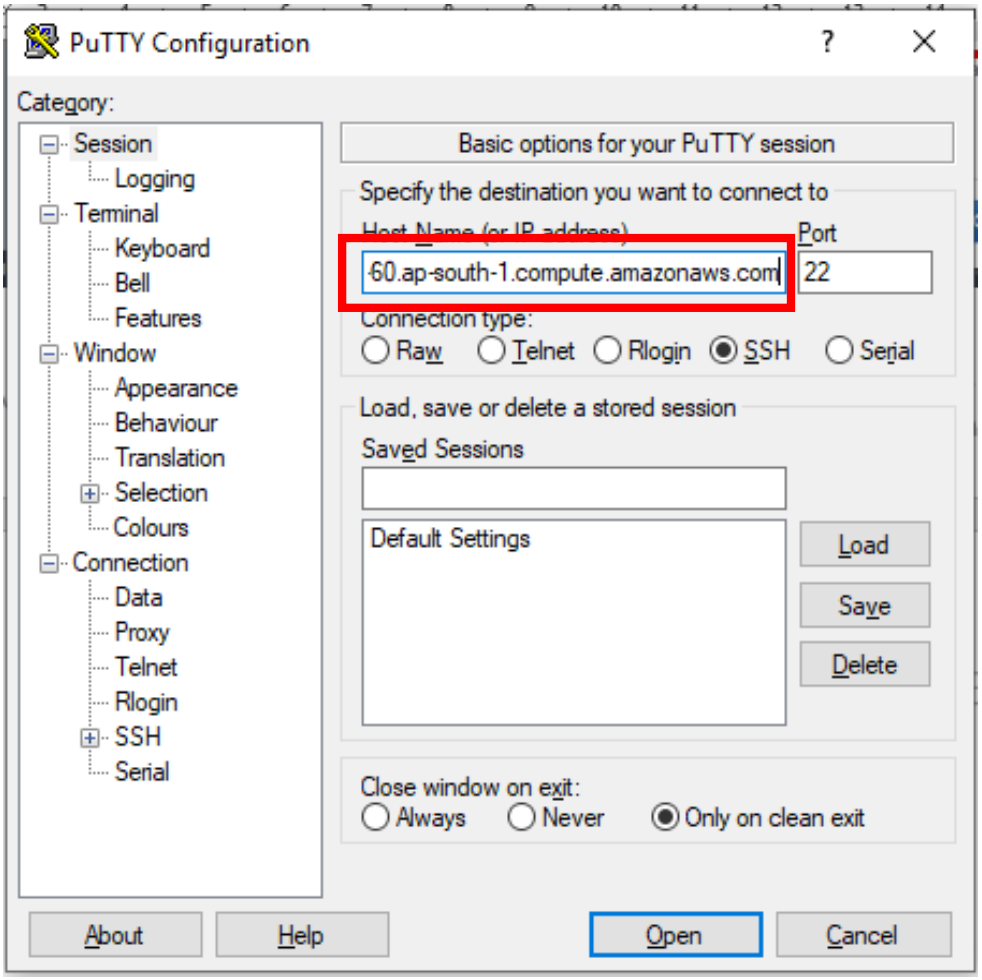


- Copy the **URL** *(this will be the host name in PuTTY)* –

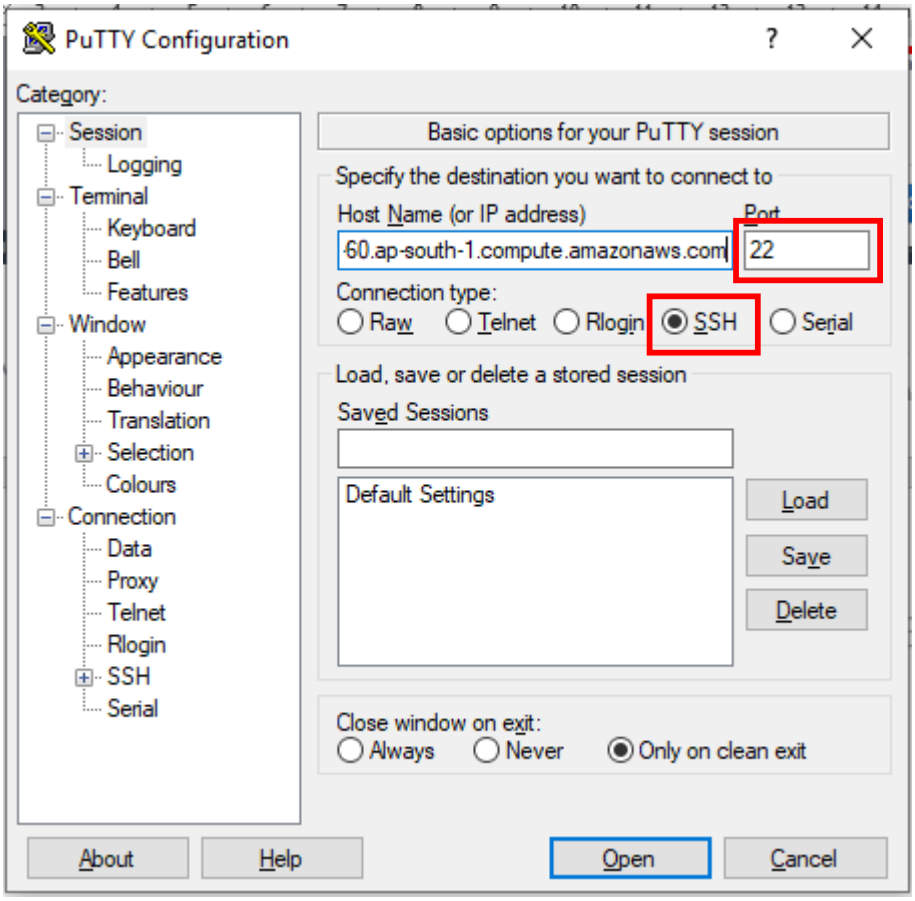


- Go back to PuTTY.

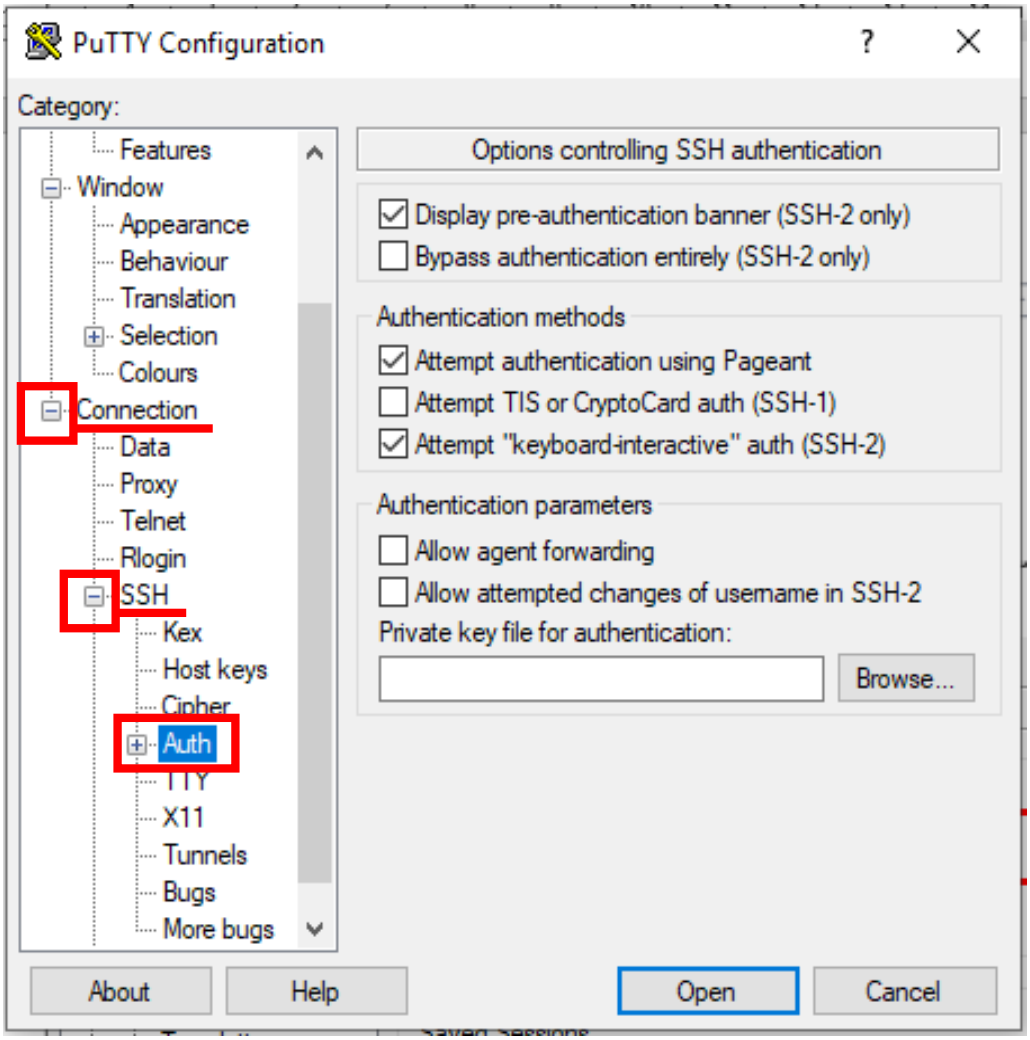
b. Paste the copied URL in **Host Name** input box –



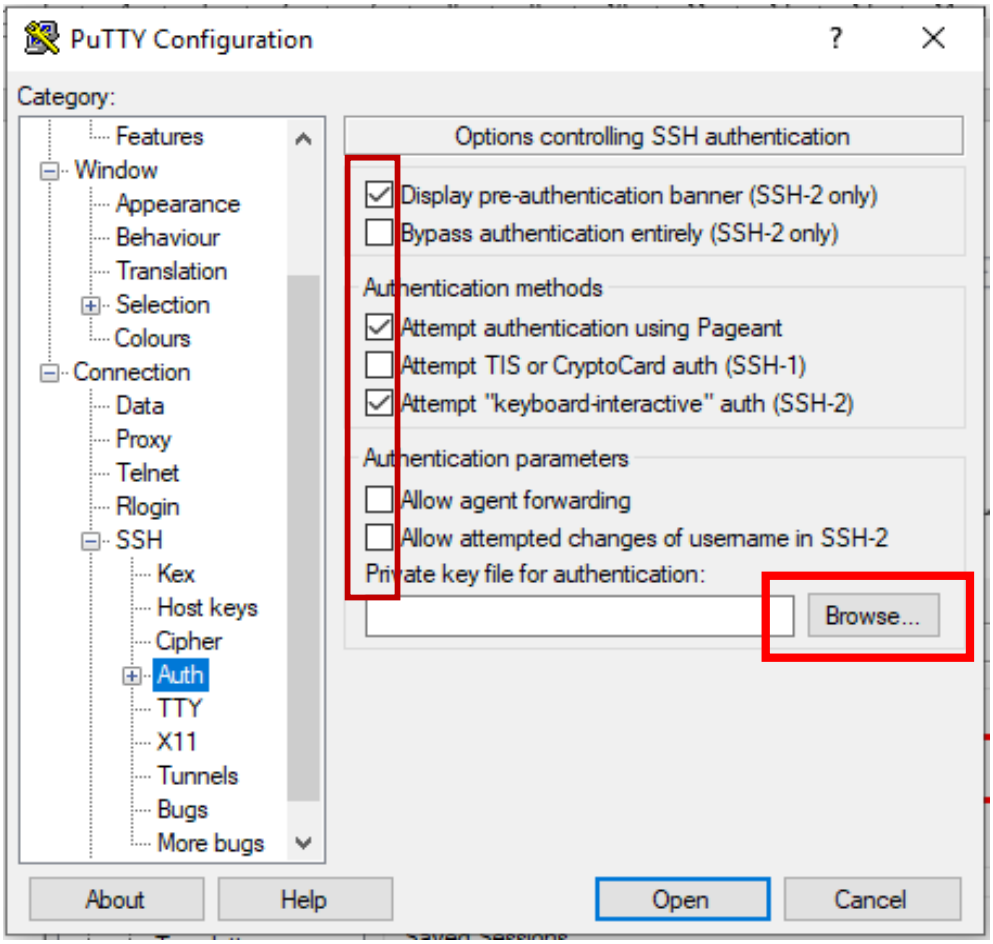
c. Enter *"Port no"* **22** and select *'Connection Type'* "**SSH**"



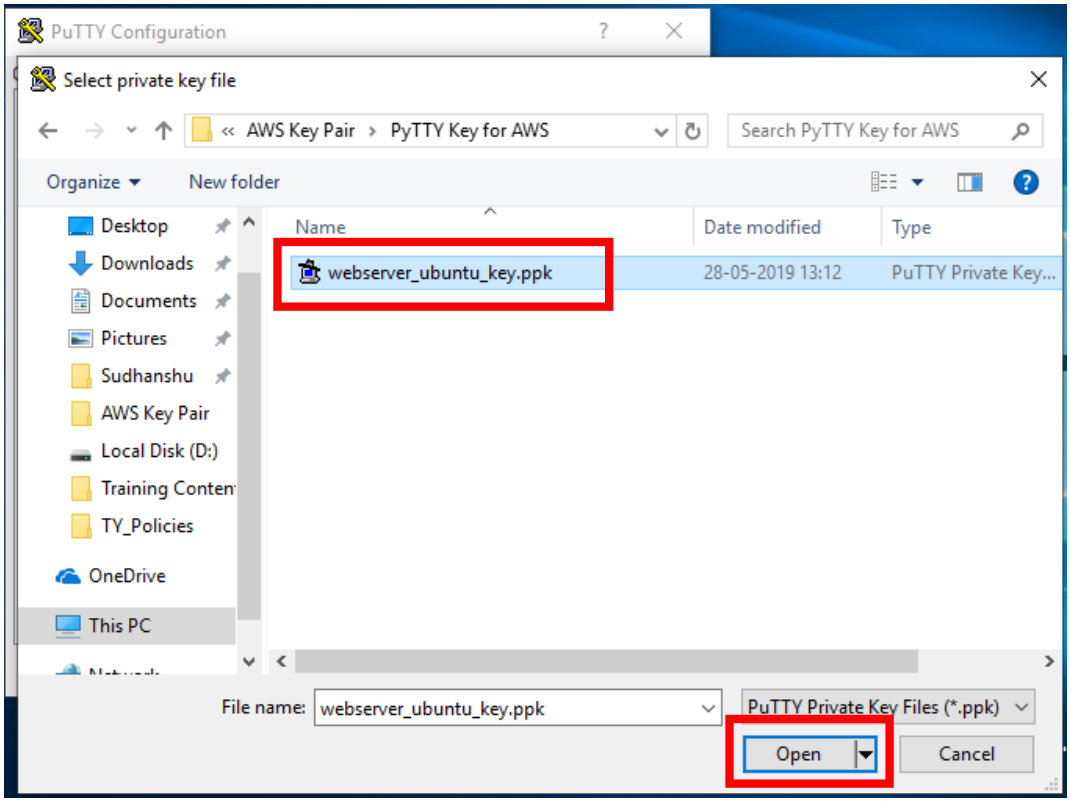
d. Under "**Category:**" Navigation Pane, Expand **Connection** → **SSH** → select "**Auth"**



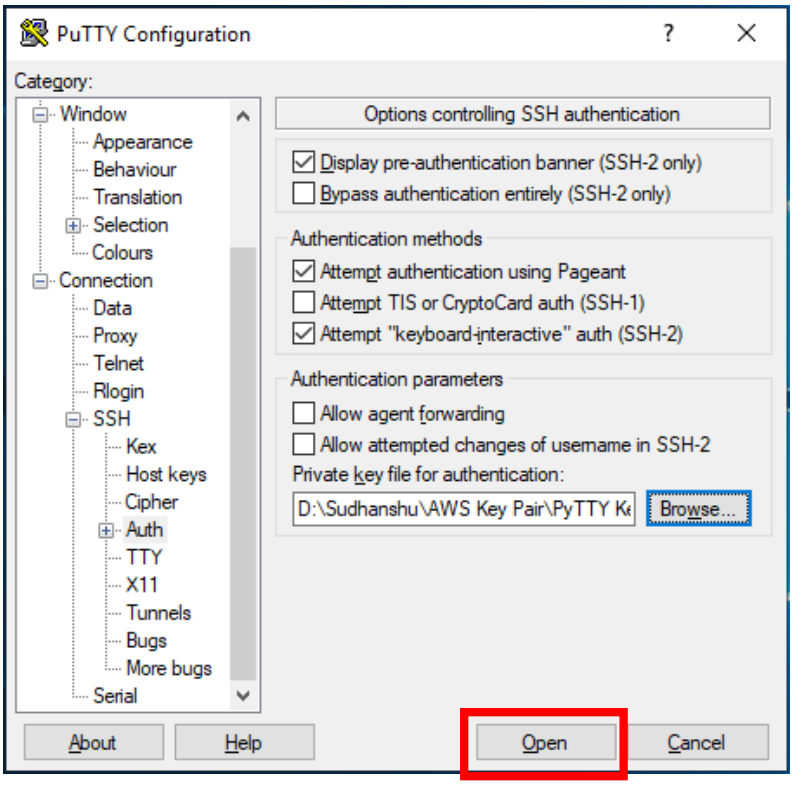
e. **Ensure** the checkboxes checked as in below image and click on "**Browse**" button –



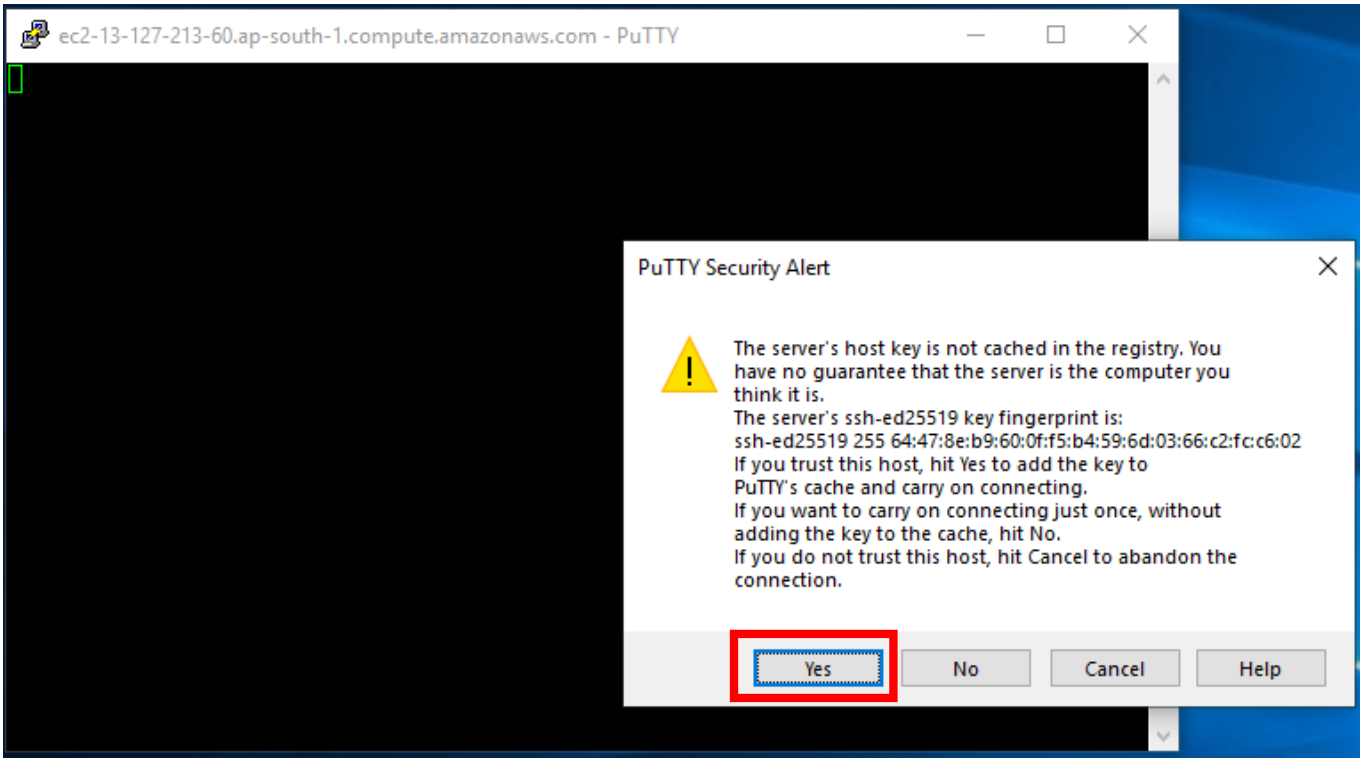
f. Browse for "**webserver_ubuntu_key.ppk**" file *(generated and saved in STEP- **25.g**)*, select it and click on "**Open**" –



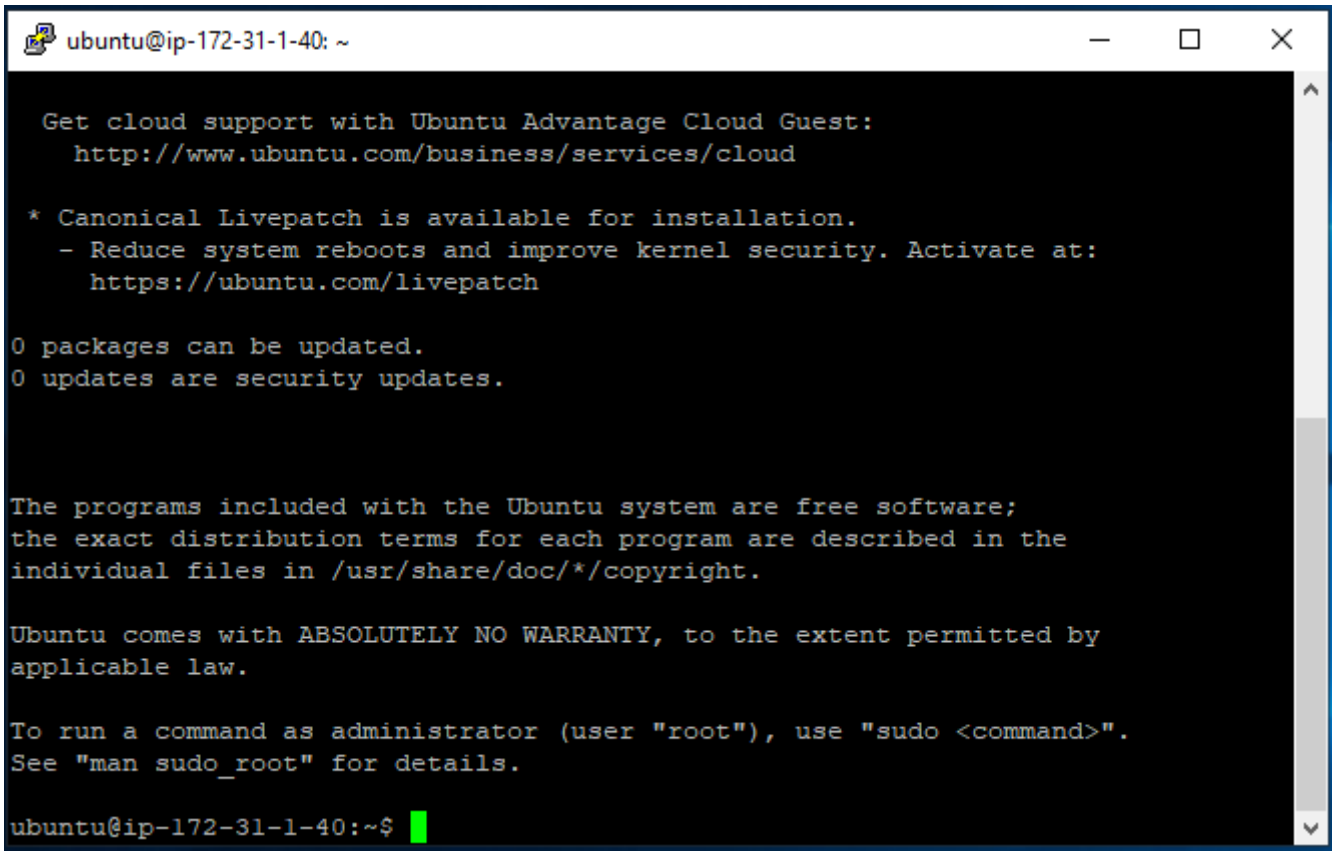
g. Click on "**Open**" –



h. In the "*PuTTY Security Alert*" dialogue box, click on "**Yes**" button –



i. That's it. You are now in your Server (EC2 - Instance).



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