

Login to AWS console

The screenshot shows the AWS Console Home page. On the left, there's a sidebar with 'Recently visited' services: EC2, AWS Artifact, IAM, S3, AWS Application Migration Service, Billing and Cost Management, Trusted Advisor, and ElastiCache. Below this is a 'View all services' link. To the right, there's a 'Applications (0)' section with a 'Create application' button and a note that says 'No applications. Get started by creating an application.' At the bottom of the page, there are links for 'Welcome to AWS', 'AWS Health', 'Cost and usage', and 'CloudShell', 'Feedback', and 'Console Mobile App'.

Select EC2 and click on Launch Instance

The screenshot shows the EC2 Compute page. On the left, there's a sidebar with 'Instances' (Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager), 'Images' (AMIs, AMI Catalog), and 'Elastic Block Store' (Volumes). The main content area features a large banner for 'Amazon Elastic Compute Cloud (EC2)' with the subtext 'Create, manage, and monitor virtual servers in the cloud.' It also includes sections for 'Benefits and features' (listing EC2 offers ultimate scalability and control, fully resizable compute capacity, highest level of control, widest variety of server size options, widest availability of operating systems, and global scalability), 'Additional actions' (View running instances, Migrate a server), and 'Pricing (US)'. At the bottom, there are links for 'CloudShell', 'Feedback', and 'Console Mobile App'.

Give the name for your instance. Here we have named it as Chandan_Training

The screenshot shows the 'Launch an instance' wizard. Step 1 is 'Name and tags'. It has a text input field where 'chandan_training' is typed. There are buttons for 'Add additional tags' and 'Next Step'. To the right, there's a 'Summary' section showing 'Number of instances: 1' and 'Software Image (AMI): Amazon Linux 2023 AMI 2023.9.2...'. At the top of the wizard, there's a message: 'It seems like you may be new to launching instances in EC2. Take a walkthrough to learn about EC2, how to launch instances and about best practices' with 'Take a walkthrough' and 'Do not show me this message again' buttons.

Select an operating system. For e.g select Amazon Linux.

Function name: HelloWorld

Runtime: Node.js 18.x

Memory size: 128 MB

Handler: index.handler

AWS_LAMBDA_FUNCTION_NAME: HelloWorld

Code: Upload a file | Lambda@Edge

Advanced settings

- Timeout**: 3 seconds
- Memory limit**: 128 MB
- Environment**: None

Logs

Create Function

In instance type, Select t3.micro (Free tier eligible)

Instance type: t3.micro

Family: t3 2 vCPU 1 GiB Memory Current generation: true

On-Demand Ubuntu Pro base pricing: 0.0139 USD per Hour On-Demand SUSE base pricing: 0.0104 USD per Hour

On-Demand Linux base pricing: 0.0104 USD per Hour On-Demand RHEL base pricing: 0.0392 USD per Hour

On-Demand Windows base pricing: 0.0196 USD per Hour

Additional costs apply for AMIs with pre-installed software

Key pair (login)

Click on Create Key pair

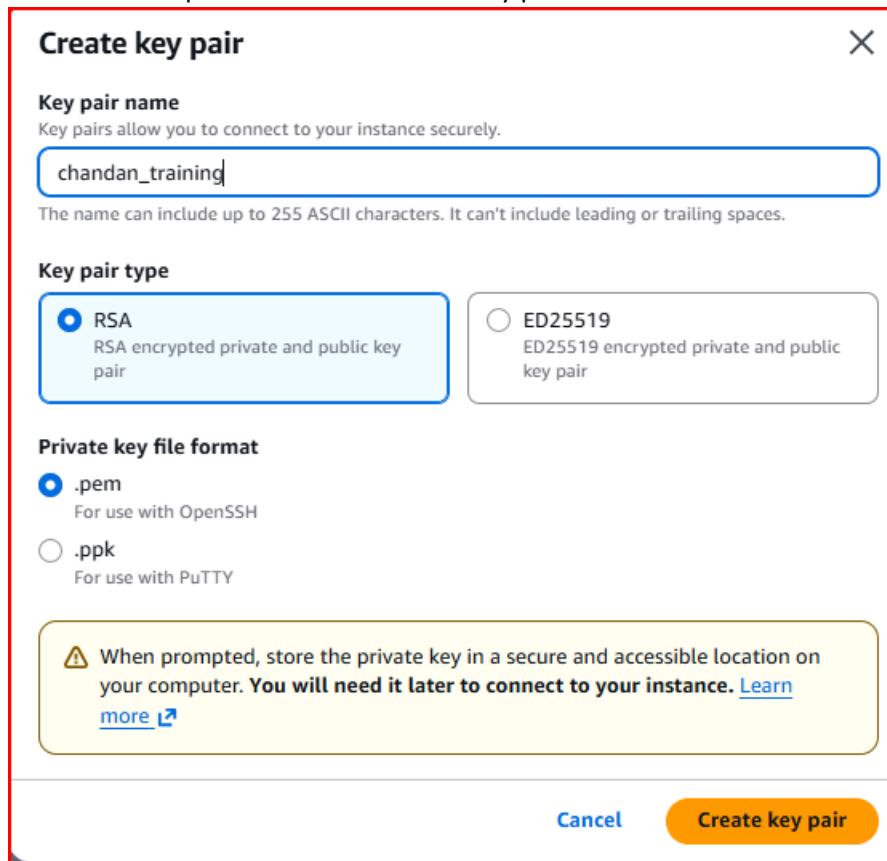
Key pair (login)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

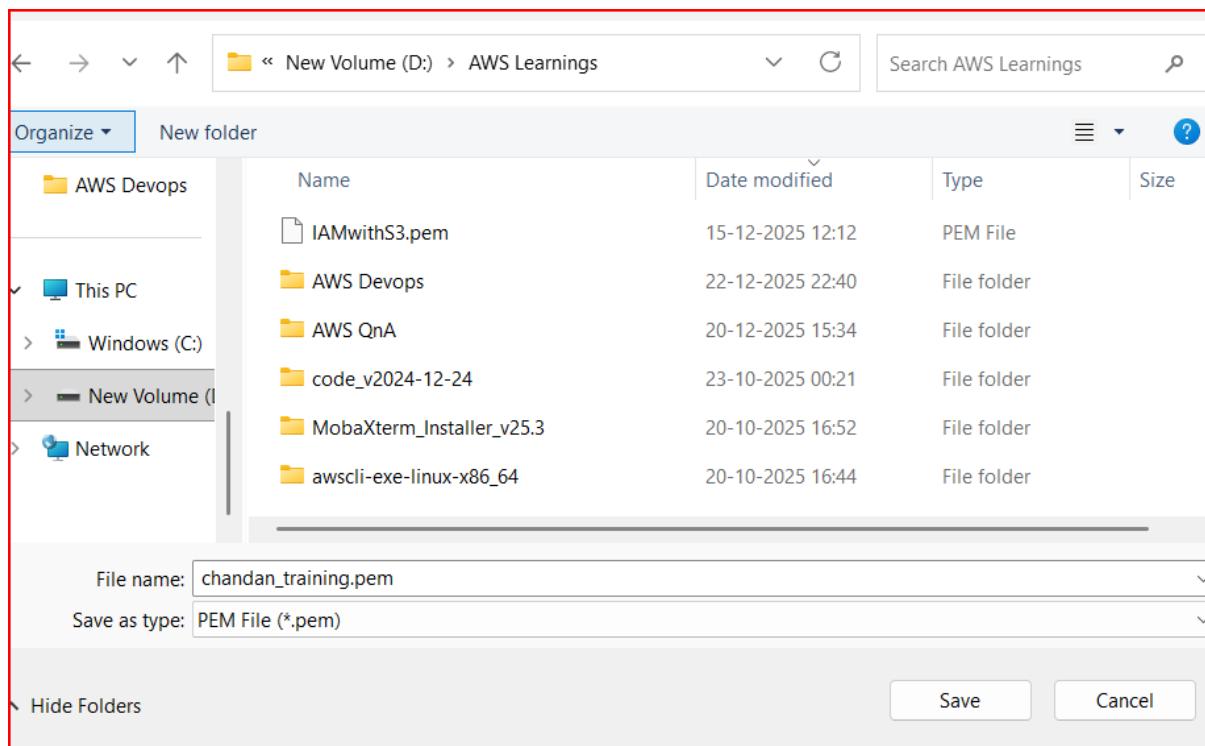
Key pair name - required

Select | **Create new key pair**

Enter keypair name which you can easily remember->key pair type- keypair file format. For this one I have selected .pem and click on create key pair



Key get generated and save it on your drive folder. Key pair get saved.



Network Setting

You can enable all ports for learning purpose where port allowed traffic

The screenshot shows the 'Network settings' configuration page for an EC2 instance. It includes sections for Network (vpc-0bafe695f6f748f16), Subnet (No preference), Auto-assign public IP (Enable), and Firewall (security groups). The Firewall section allows creating a new security group ('Create security group') or selecting an existing one ('Select existing security group'). It lists three default rules: Allow SSH traffic from Anywhere (0.0.0.0/0), Allow HTTPS traffic from the internet, and Allow HTTP traffic from the internet. A note at the bottom cautions against using 0.0.0.0/0 and recommends setting security group rules to allow access from known IP addresses only.

Note:- Security group either you can create new or select existing group if available.

[AWS [Security Groups](#) are virtual firewalls for EC2 instances, controlling inbound/outbound traffic via stateful rules (allow by default for responses) based on protocol, port, and source/destination]

Storage Configuration

Storage configuration in AWS EC2 involves choosing from several options to meet different requirements for persistence, performance, and scalability. The primary storage types are **Amazon Elastic Block Store (EBS)** and **Instance Store**, which can be complemented by other AWS storage services like Amazon S3, EFS, and FSx.

The screenshot shows the 'Configure storage' configuration page. It displays a root volume of 8 GiB (gp3 type) and an option to add new volumes. A note indicates that tags assigned to the instance will determine whether it is backed up by Data Lifecycle Manager policies. There is also a section for file systems.

Click on Launch Instance

Enable

Firewall (security groups) [Info](#)
 A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

We'll create a new security group called 'launch-wizard-1' with the following rules:

- Allow SSH traffic from the internet
To set up an endpoint, for example when creating a web server
- Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server
- Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

Anywhere
0.0.0.0/0

Rules of source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Configure storage [Info](#) Advanced

1x 8 GiB gp3 Root volume, 3000 IOPS, Not encrypted

[Add new volume](#)

Click refresh to view backup information
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems [Edit](#)

Advanced details [Info](#)

Summary

Number of instances [Info](#)
1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.9.2... [read more](#)
ami-068c0051b15cd8b16

Virtual server type (instance type)
t3.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

[Launch instance](#) [Preview code](#)

To verify instance status go EC2-> View All Instances -> You will be able to see your new instance.

The screenshot shows the AWS EC2 Instances page. The left sidebar includes links for Dashboard, EC2 Global View, Events, Instances (selected), Images, Elastic Block Store, Network & Security, and CloudShell. The main content area displays a table titled 'Instances (2) Info' with the following data:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4	Elastic IP	IPv6 IPs
IAMwithS3	i-09b5947f9fd21c10	Stopped	t3.micro	-	View alarms +	us-east-1f				
chandan_training	i-036adff7742ad8cf22	Running	t3.micro	Initializing	View alarms +	us-east-1f	ec2-35-175-201-57.co...	35.175.201.57		

A red box highlights the 'chandan_training' instance row. Below the table, a dropdown menu says 'Select an instance'.

Select the instance and details will show where you can get the Public and Private IP address and other details related to your instance.

The screenshot shows the AWS EC2 Instances page. At the top, there's a search bar and filters for 'Status' (Stopped, Running, Initializing), 'Region' (us-east-1f), and 'Public IP' (35.175.201.37). Below the header, a table lists instances. One instance is selected: 'chandan_training' (Instance ID i-036a6f7742ad8cf22, Status: Running, Type: t3.micro). The 'Details' tab is selected in the navigation bar. The 'Instance summary' section contains the following information:

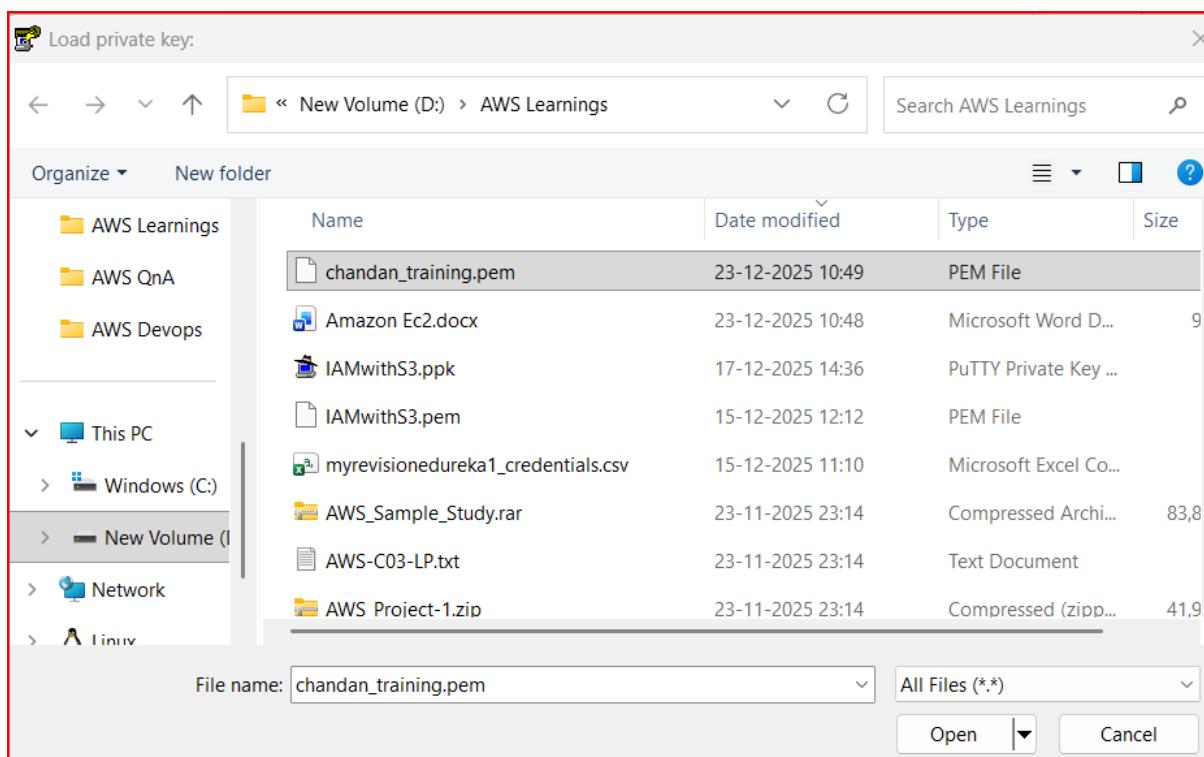
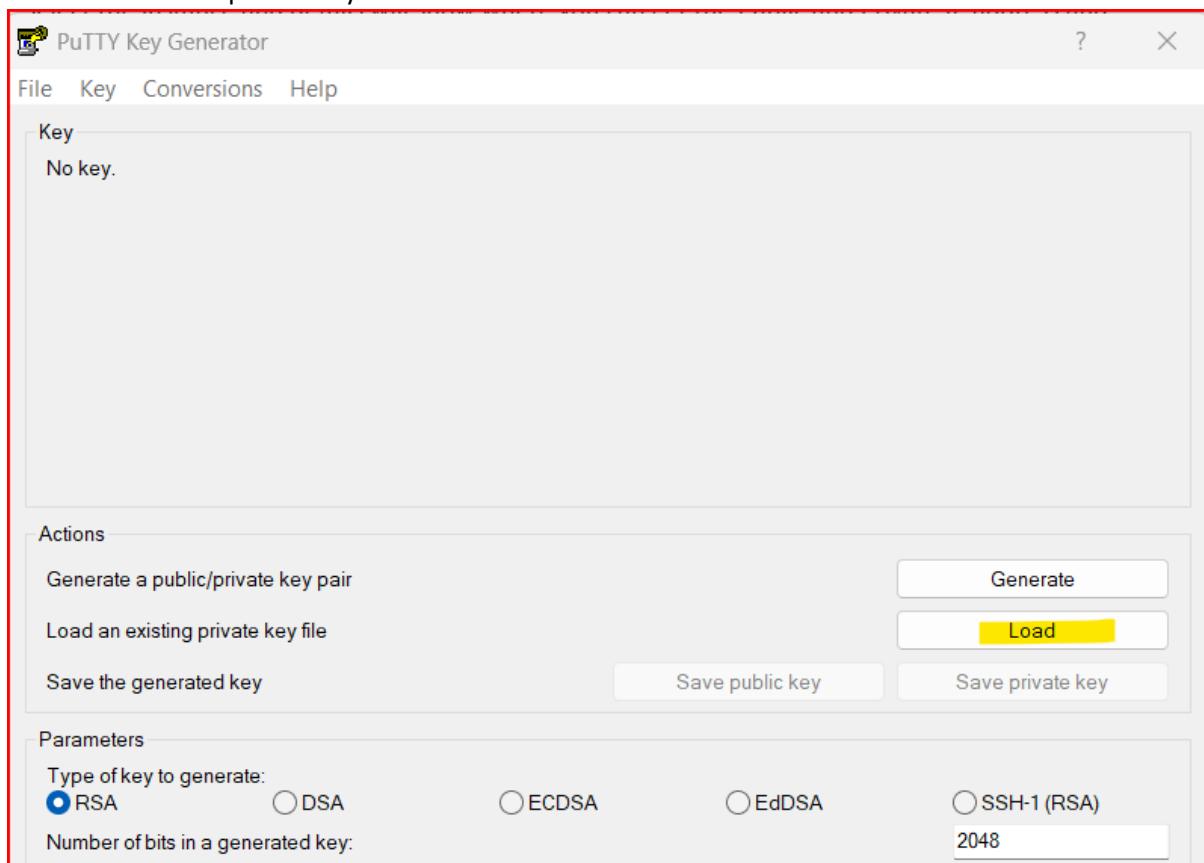
Attribute	Value
Instance ID	i-036a6f7742ad8cf22
IPv6 address	-
Hostname type	IP name: ip-172-31-71-130.ec2.internal
Associate route 53 DNS name	-

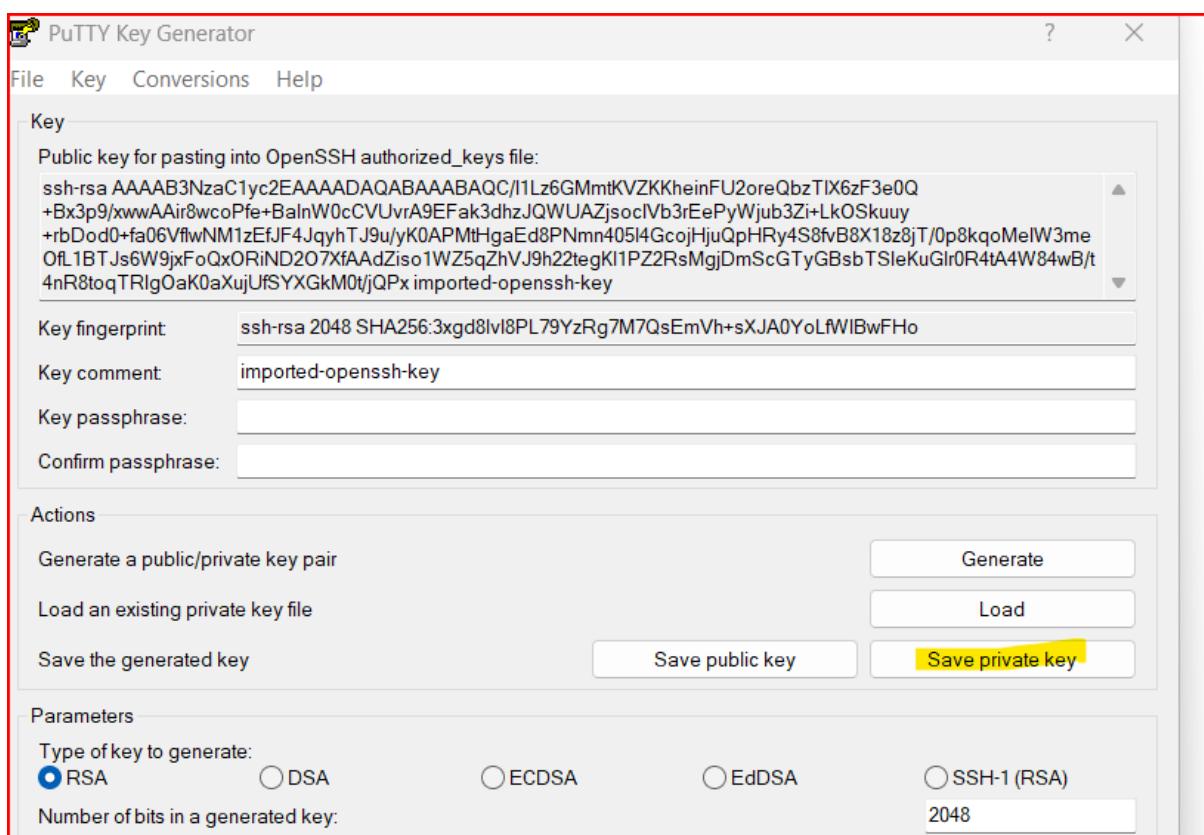
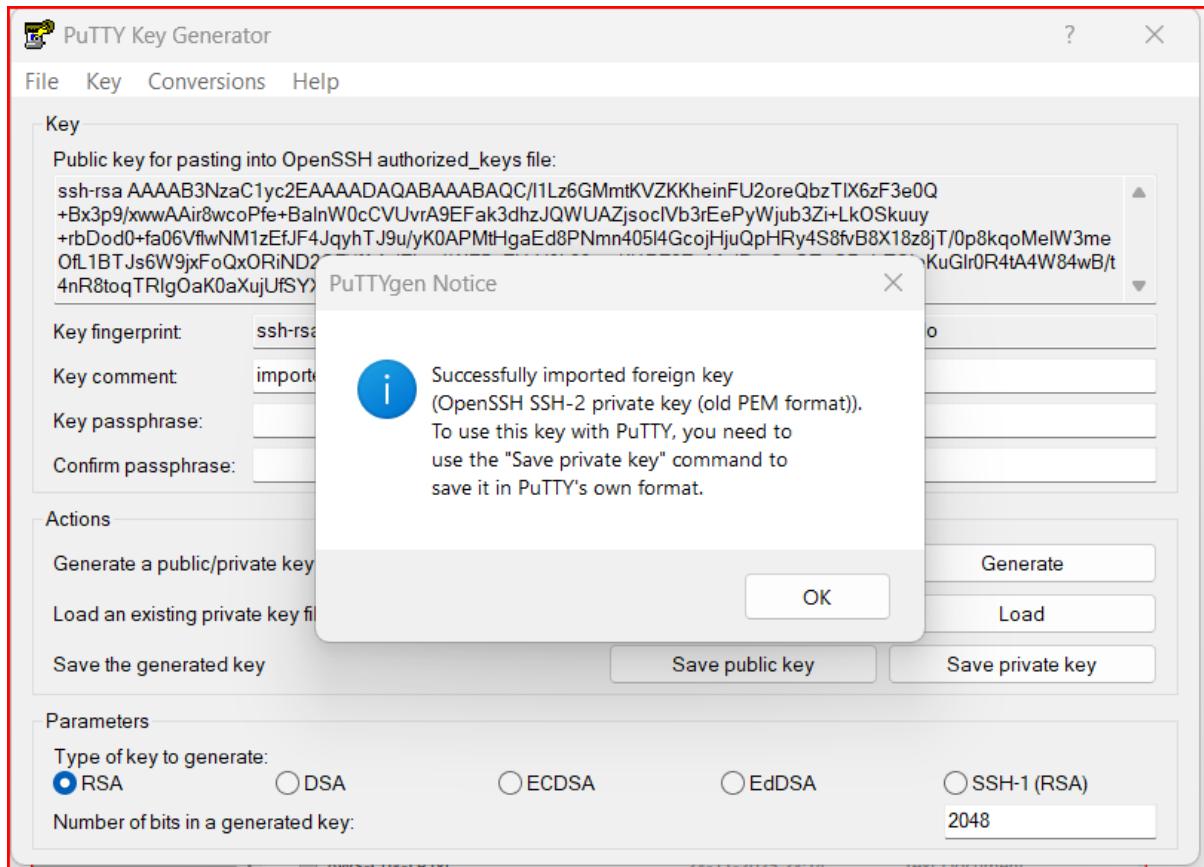
Below this, there are sections for 'Public IPv4 address' (35.175.201.37), 'Private IP DNS name (IPv4 only)' (ip-172-31-71-130.ec2.internal), 'Private IPv4 addresses' (172.51.71.130), and 'Public DNS' (ec2-55-175-201-37.compute-1.amazonaws.com). At the bottom of the page, there are links for 'Mobile App', 'AWS Lambda', 'AWS CloudWatch Metrics', 'AWS CloudWatch Logs', and 'AWS CloudWatch Metrics Insights'.

Get Public IP or DNS name to connect it through internet. Also note the Instance Id to connect through CLI.

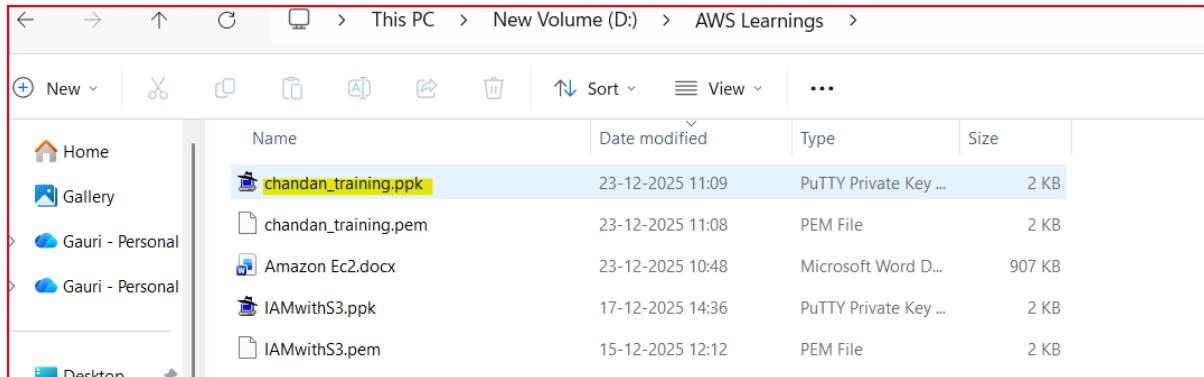
Download PuTTy through <https://www.putty.org> and install it. In your task bar of your local system, search for PuTTygen and select it. PuTTygen dialogue box appears, then select Load option. Search for the key pair file which would be in the .pem format and open it.

Click on “Load”, make file type as “All Files”, select the downloaded .pem file to convert it to .ppk file, and click on “Save private key”.



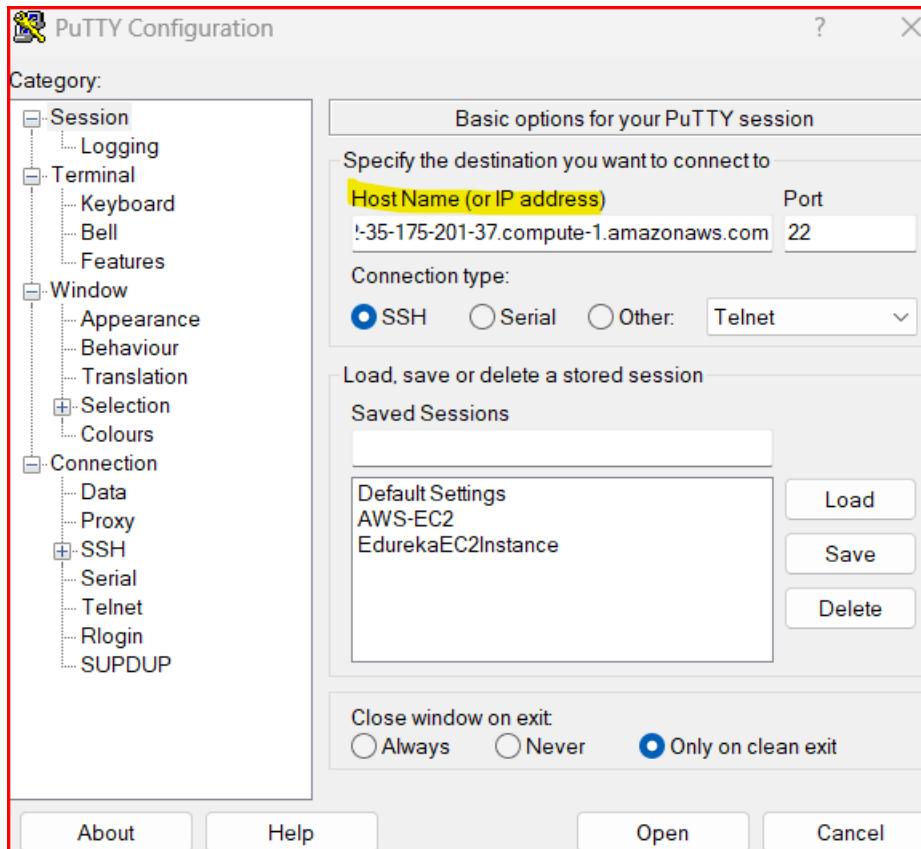


While saving the key change the file extension name from .pem to .ppk and key will be saved in .ppk format

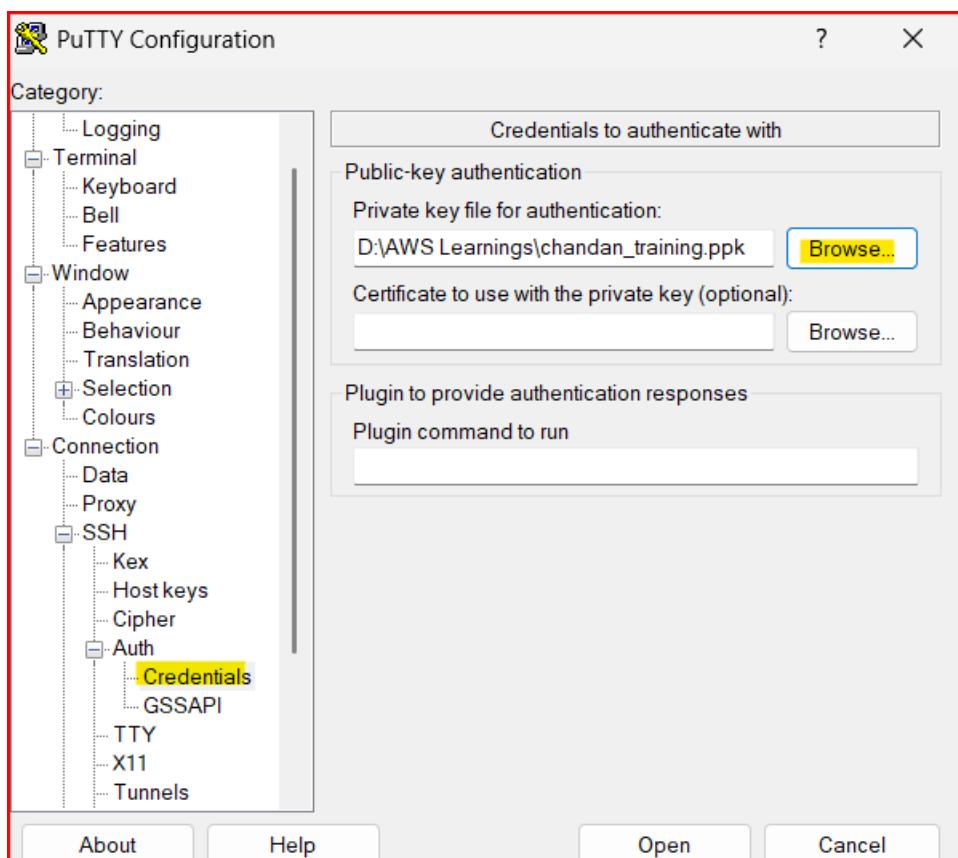
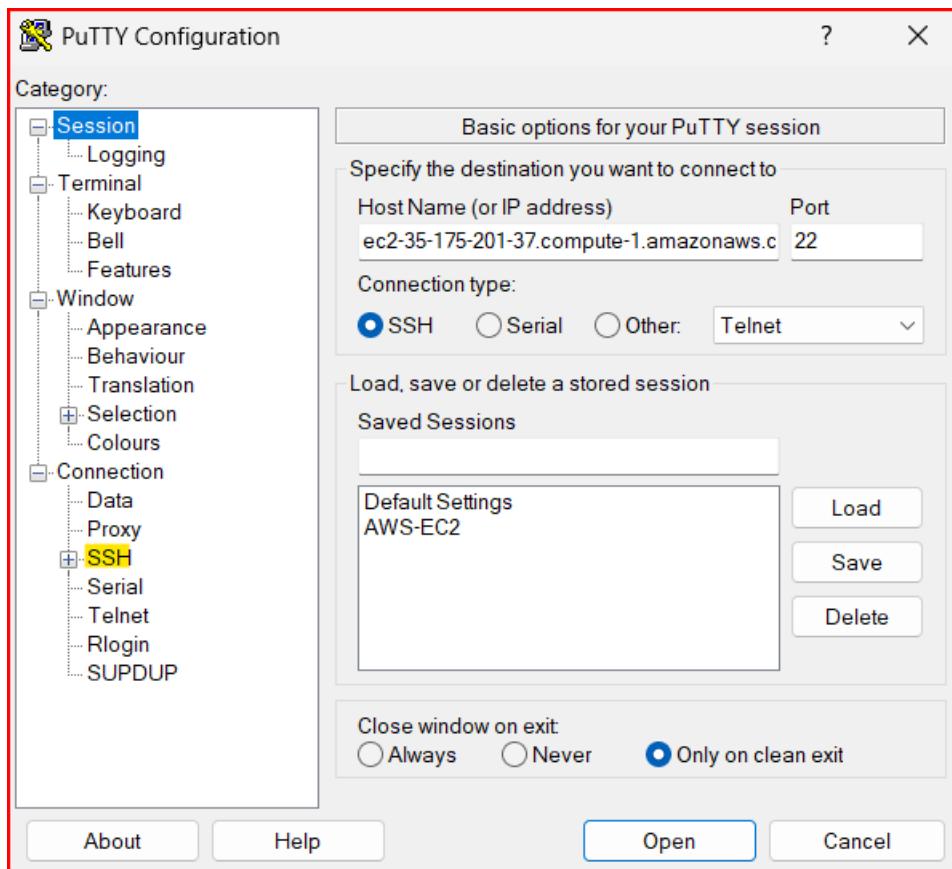


Now we are going to connect the EC2 instance through SSH. For this first copy the DNS name or Public IP.

Open he Putty app and paste the copied Instance DNS/ IP address in Host name.



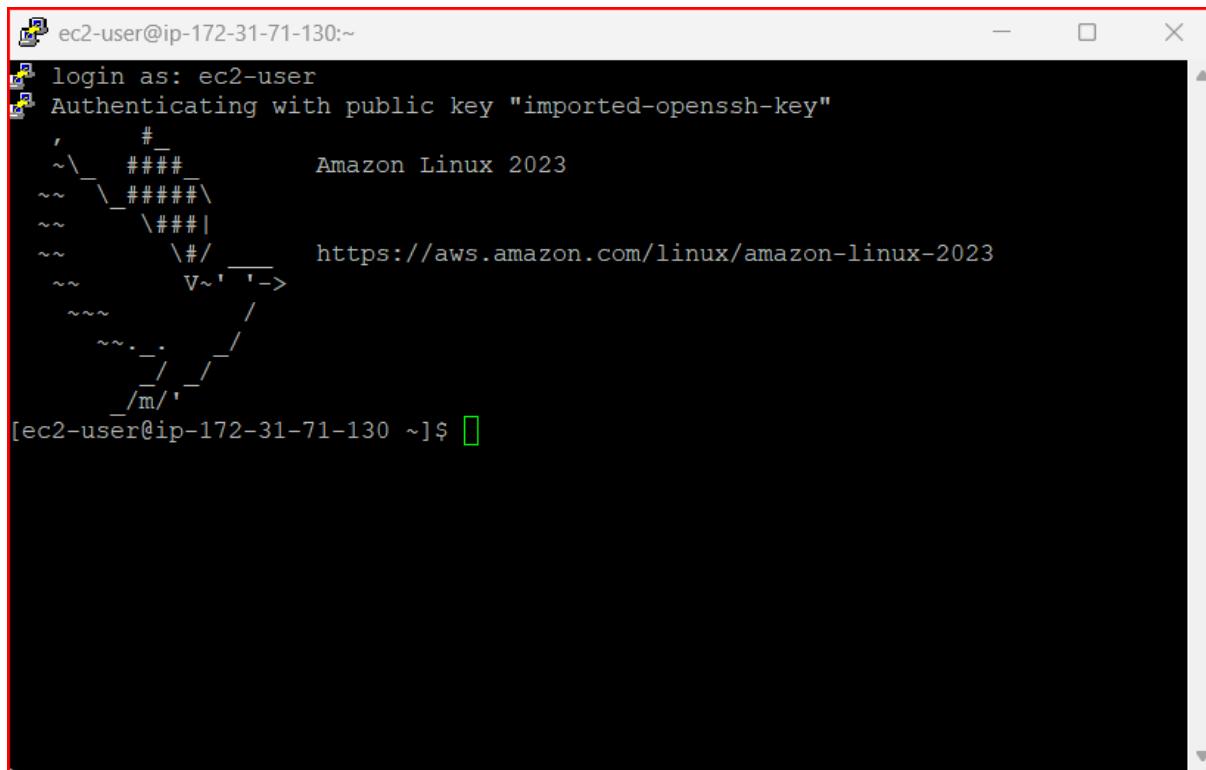
Click on highlighted SSH-> AUTH-> Credential-> Browse private key-> Click to Open



Below terminal will open



To login and start working with your instance type the User Name of instance. For Amazon Linux user will be ec2-user and for ubuntu user name will be ubuntu



To get your user name you can click on connect

The screenshot shows the AWS EC2 Instances page. A red box highlights the table where two instances are listed. The first instance is 'IAMwithS3' (i-09b5947f9fcdf21c10) and the second is 'chandan_training' (i-036a6f7742ad8cf22). The 'chandan_training' instance is selected, indicated by a blue border around its row. Below the table, the instance details for 'chandan_training' are displayed:

i-036a6f7742ad8cf22 (chandan_training)

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

Connect Info

Connect to an instance using the browser-based client.

EC2 Instance Connect **Session Manager** **SSH client** **EC2 serial console**

Instance ID
i-036a6f7742ad8cf22 (chandan_training)

Connection type

Connect using a Public IP
Connect using a public IPv4 or IPv6 address

Connect using a Private IP
Connect using a private IP address and a VPC endpoint

Public IPv4 address
35.175.201.37

IPv6 address
—

Username
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

ec2-user

Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel **Connect**

We have successfully connected to our Amazon Linux Instance using SSH