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Practical No: 2

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Aim: To understand and demonstrate the creation, connection, and basic usage of a Windows EC2 instance in AWS, followed by proper termination.

- 1. What is laaS?
- 2. What is MobaXterm? Is MobaXterm the same as PuTTY?
- 3. Launch one instance of AWS EC2. This instance should be Ubuntu [Free Tier Available]. Get connected to instances using MobaXterm Client software. Explain each step of EC2 creation and launching with the help of screenshots.

Check the IP address of your EC2 ubuntu server.

[Terminate the instances after performing the practical]

Ans 1:

laaS (Infrastructure as a Service) is a cloud computing model where a provider delivers virtualized computing resources over the internet. Instead of purchasing physical servers, businesses rent infrastructure components like virtual machines, storage, networks, and operating systems on a pay-as-you-go basis.

Key Features of IaaS:

- Scalability: Easily scale resources up or down based on demand.
- **Cost-Efficiency:** No need to invest in physical hardware.
- Self-Service: Users can provision and manage resources via a dashboard or API.
- Flexibility: Supports various operating systems and applications.

Examples of IaaS Providers:

- Amazon Web Services (AWS) EC2
- Microsoft Azure Virtual Machines
- Google Cloud Compute Engine
- IBM Cloud

Ans 2:

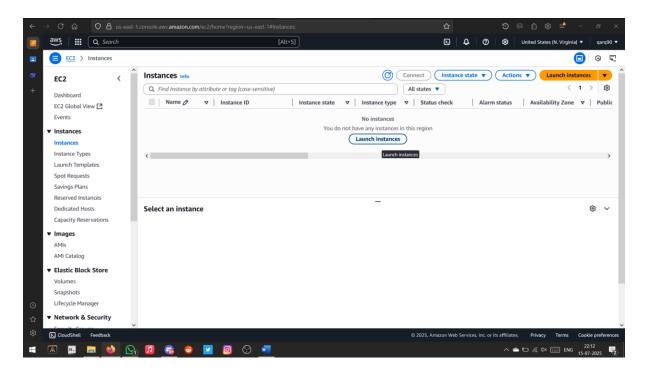
MobaXterm is an advanced terminal tool for Windows that provides remote access (SSH, RDP, VNC, etc.), X11 forwarding, and built-in Unix/Linux commands (via Cygwin).

It also includes features like:

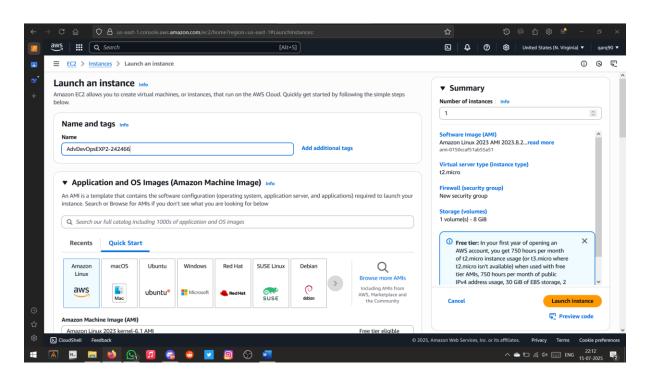
- Multiple tabs & split-screen
- Built-in SFTP file transfer
- Network tools (ping, traceroute, etc.)
- Scripting support

Feature	MobaXterm	PuTTY
SSH Client	Yes	Yes
Multiple Tabs	Supports multi-tabbed sessions	No (Single session only)
X11 Forwarding	Built-in (No extra setup)	Requires Xming/third- party tool
SFTP/File Transfer	Built-in file browser (drag & drop)	Requires WinSCP/separate tool
RDP/VNC Support	Yes (Integrated)	No
Unix Commands (Bash)	Includes Cygwin-based tools	No
Portable Version	Yes (No installation needed)	Yes
Session Management	Saves sessions & credentials	Basic session saving
Network Tools	Ping, traceroute, etc. built- in	No
Scripting Support	Yes (Bash/Python/Perl)	Limited (Basic macro support)
User Interface	GUI-based with advanced options	Minimalist (Text-only)

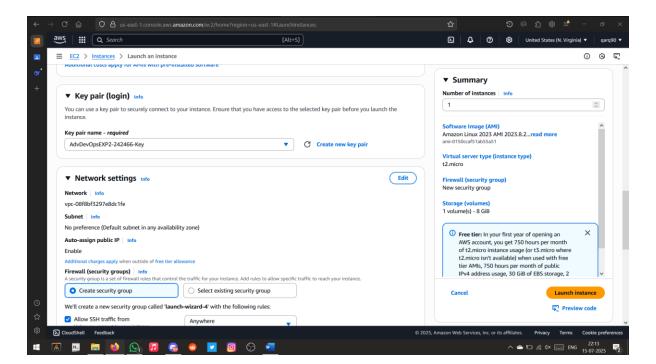
<u>Ans 3:</u>



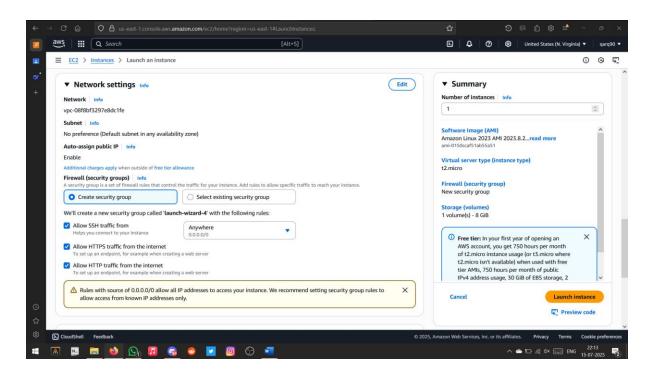
Launching/Creating and EC2 Instance



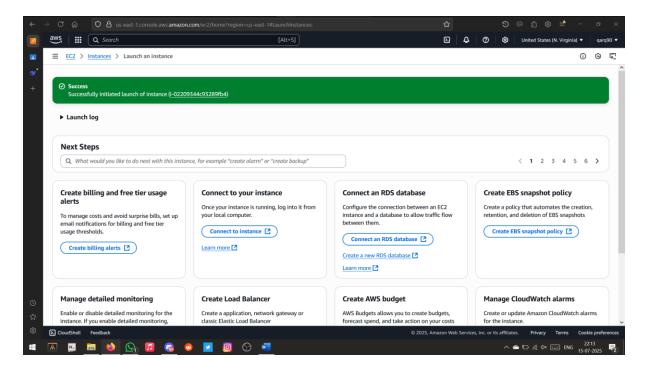
Setting the name and Operating System



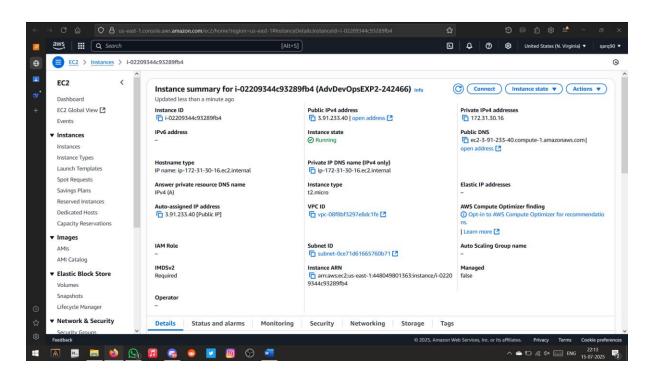
Creating Key Pair



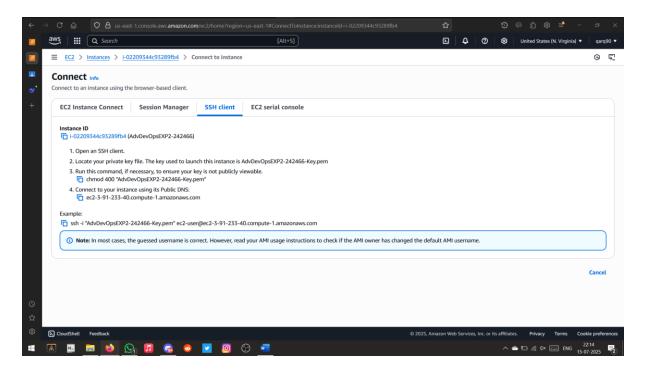
Setting up the network settings



Instance Created Successfully



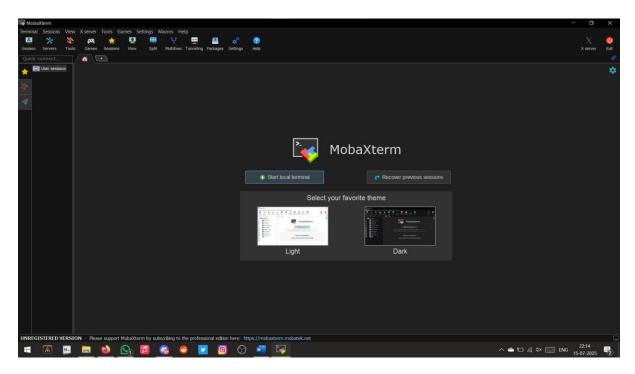
Instance Details



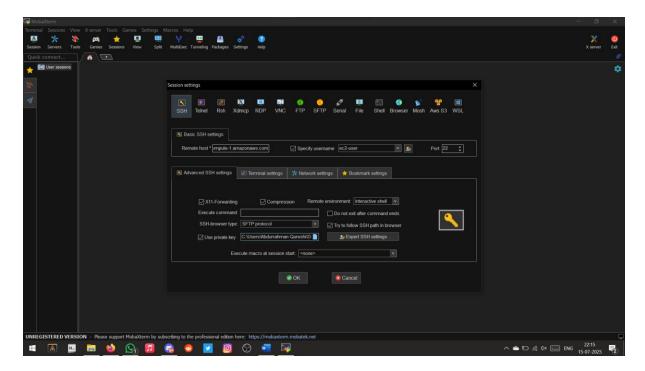
Connecting to the Instance via SSH Client

User: ec2-user

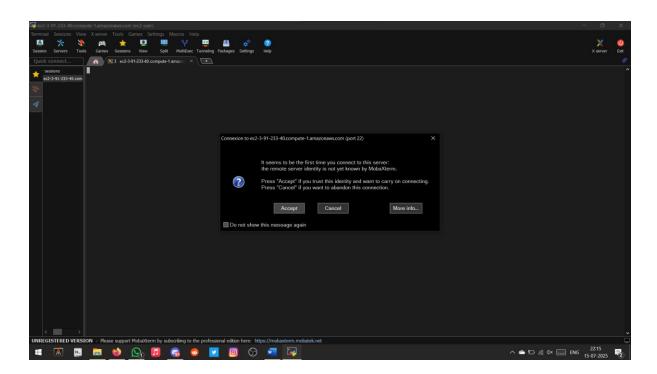
Public DNS: ec2-3-91-233-40.compute-1.amazonaws.com



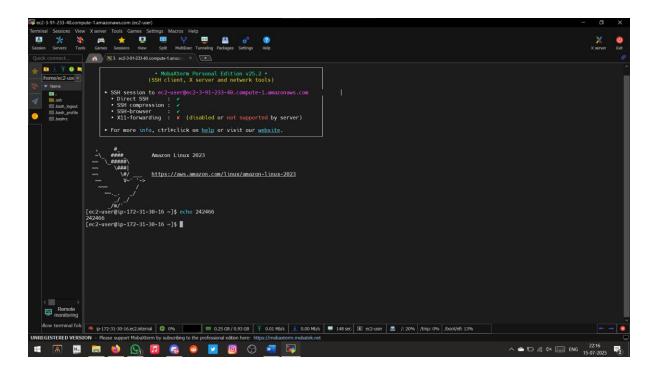
Launching MobaXTerm



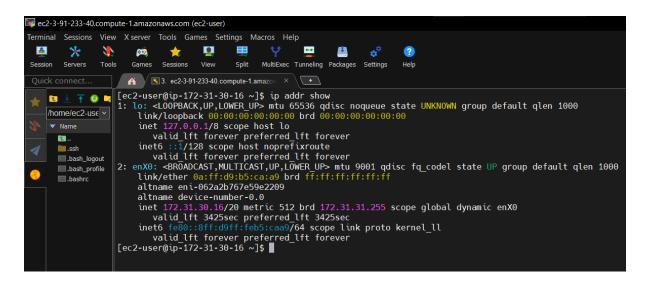
Configuring and Connecting to EC2 Instance



Connection Successful



Running Test Commands



Checking IP address