SET UP A VIRTUAL MACINE IN CLOUD

What is a Virtual machine?

A Virtual Machine (VM) is a self-contained, software-defined computer environment that emulates the functionality of a physical system, enabling multiple independent operating systems to coexist on a shared hardware infrastructure through virtualization. It abstracts computing resources, allowing dynamic allocation of CPU, memory, and storage while maintaining isolation and flexibility for testing, deployment, and cloud computing.

PREREQUSITES:

- AWS Management Console
- PowerShell

Overview of EC2 instance:

An EC2 instance is a **virtual computer** in the cloud, provided by Amazon Web Services (AWS). It lets you run applications without needing physical hardware. You can start, stop, and scale it as needed, paying only for what you use.

Step 1: Creating an EC2 instance

- Login into AWS console.
- Navigate into the EC2 service.
- Select launch instance and specify the name, instance type, OS and create a Key-Pair value.
- Allow the SSH, HTTPS, HTTP traffic from the internet.
- Finally review and launch the instance.
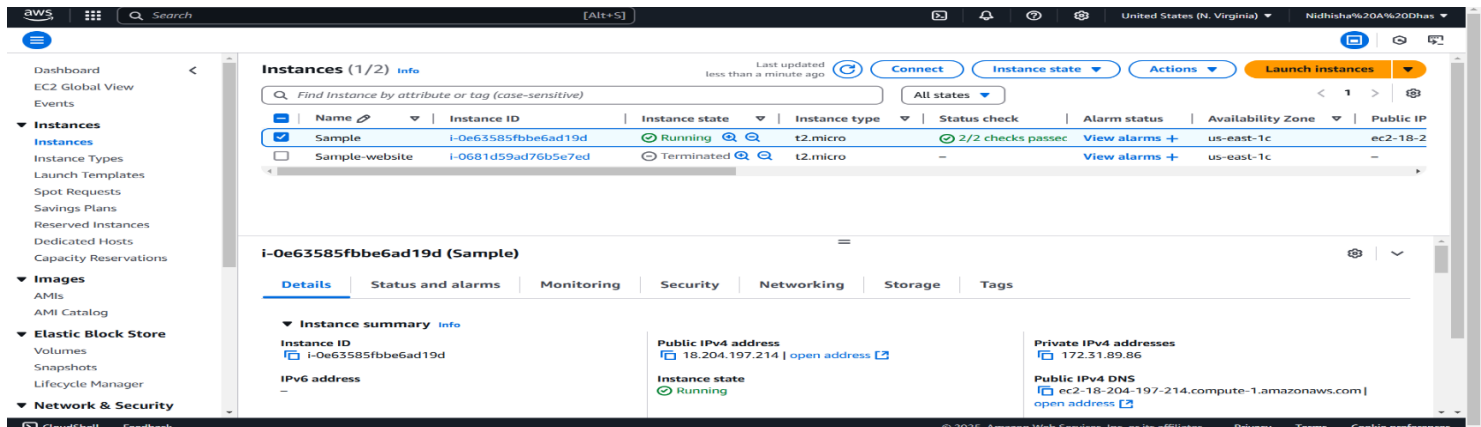
Step 2:

After successfully launching an EC2 instance, select the instance id and copy the SSH ID to connect using SSH as shown below.
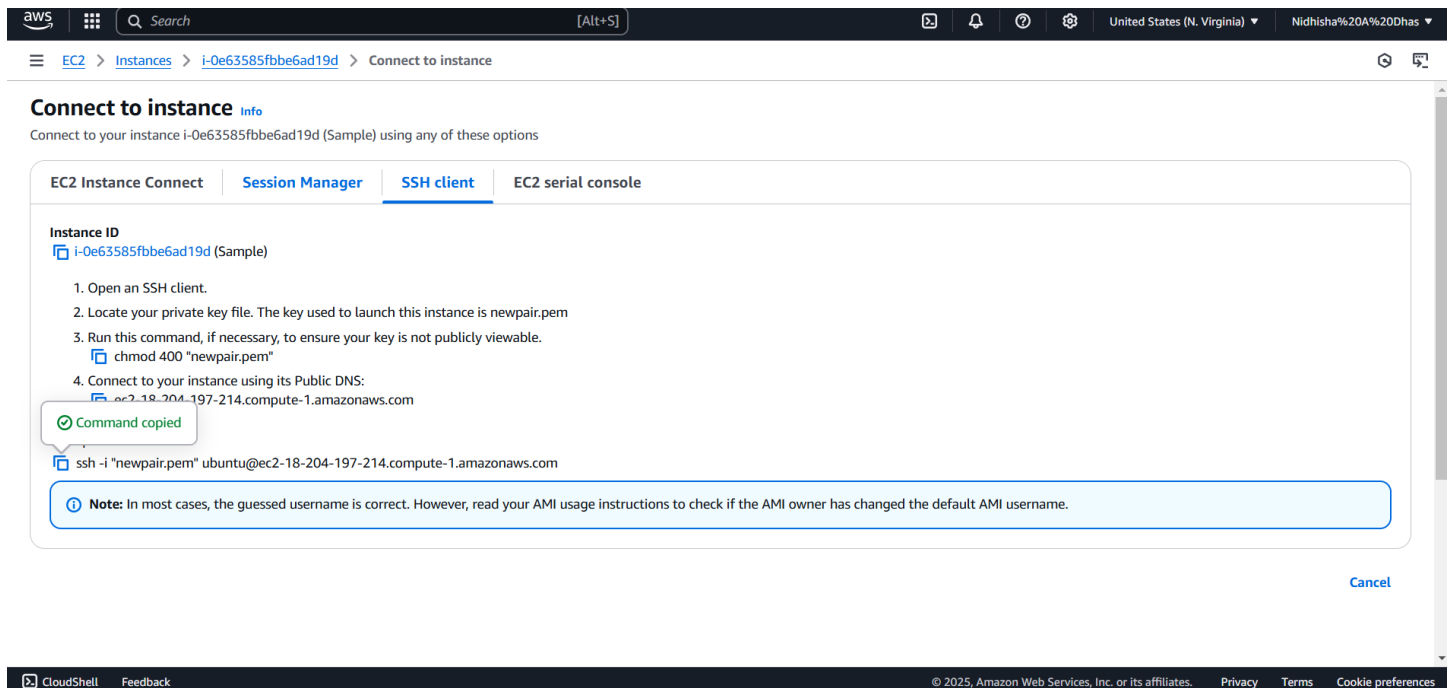
Step 3: Change the key-pair directory.

Open the Windows PowerShell and give the appropriate commands as mentioned below to change the directory. Copy the SSH command and paste it in the terminal to change the directory from downloads.

CONCLUSION:

Thus, by completing this **POC**, we have learnt how to launch a Virtual Machine (EC2) in the AWS management console and connect it with SSH using the Windows PowerShell.