Experiment No - 02

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Sem & Sec : 7th Sem - CSE [B]

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Aim : Demonstrate the Creation of Virtual Machine in the Public Cloud based on the given scenario.

Problem Statements:

You are tasked with creating a new EC2 instance on Public Cloud (AWS) to host a web application. The application requires a Linux/Windows-based environment with 1 vCPUs, 1GB of RAM, and 30GB of storage. You also need to ensure that the instance is launched in a public subnet and has a public IP address.

Task 1:

Demonstrate the Scalability and Flexibility of VM Resources by modifying the hardware resources from 1 vCPUs, 1GB of RAM, and 30GB to 2 vCPUs, 4GB of RAM, and 30GB.

Task 2:

Demonstrate that the created VM instance should be accessible via SSH/PUTTY for administration purposes.

Task 3:

Demonstrate the running of an Web application on the Public IP of the VM instance

(Ex: Apache Server)

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Task 1 (Scalability and Flexibility of VM Resources)

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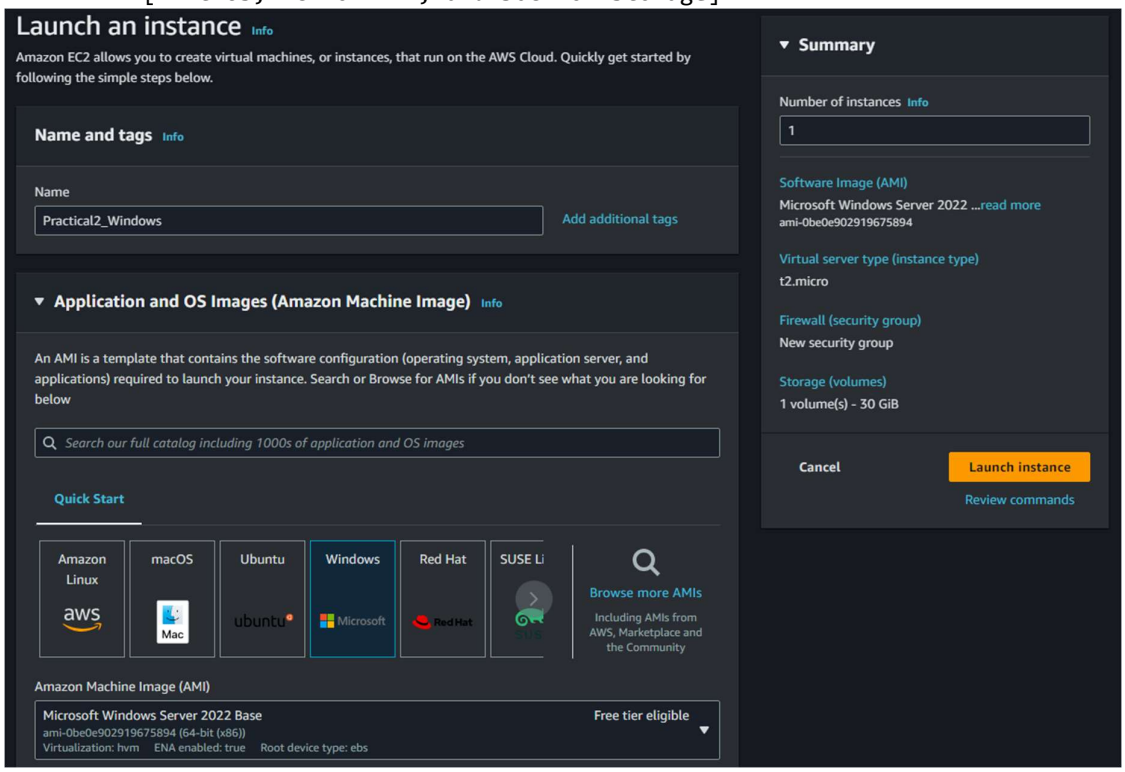
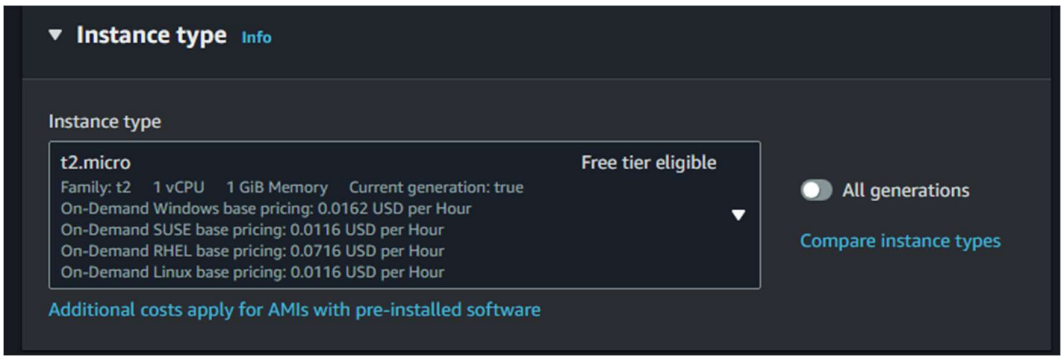
Step 1 -: Launch the AWS Learners Lab and open EC2 -> Instances -> Launch Instance

Step 2 -: Select the specified configurations

[1 vCPUs, 1GB of RAM, and 30GB of storage]





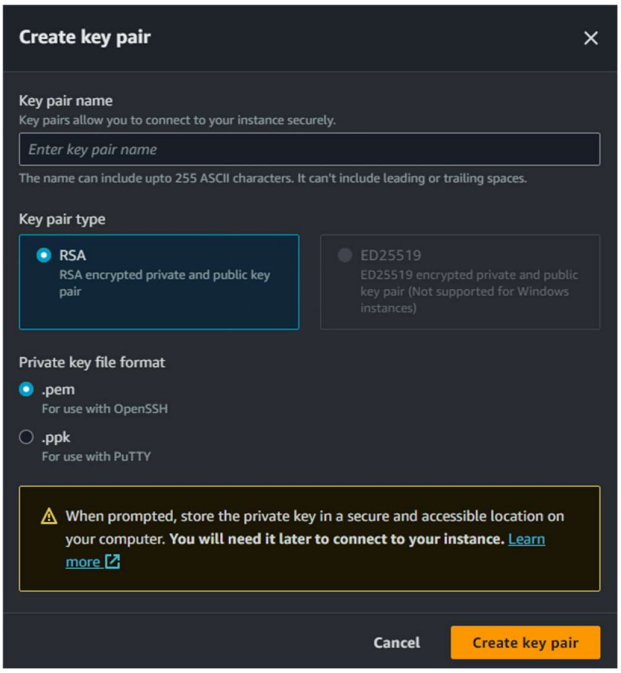
Step 3 -: Configuring Key-Pair for connection to instance.

Click Create new key-pair

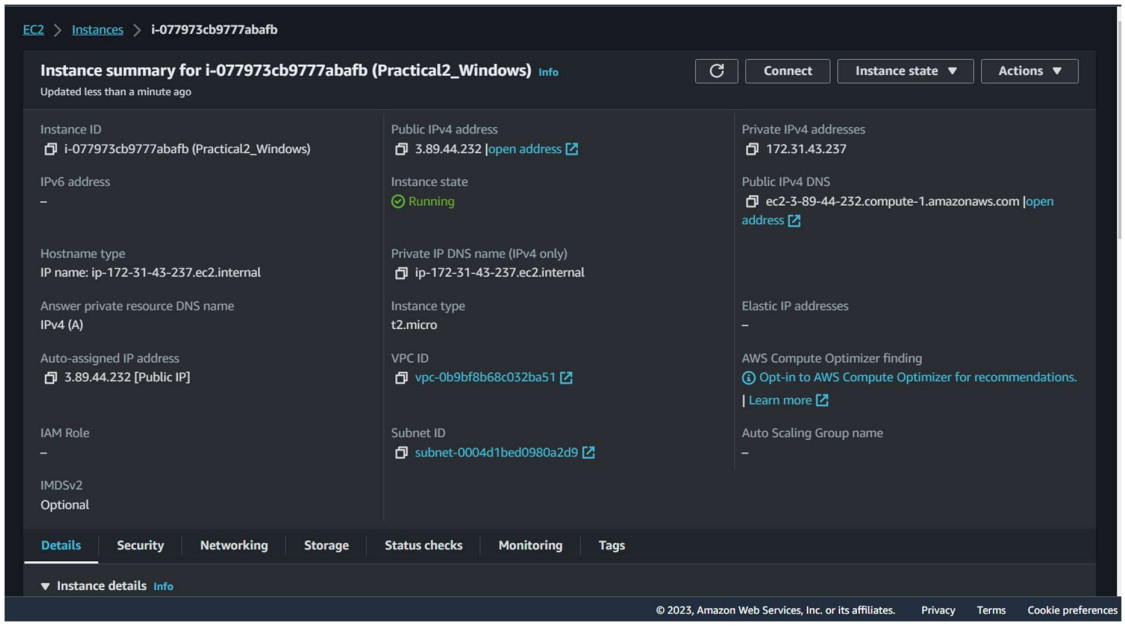
For Windows, we need to create key file format as .pem

For Linux, we need to create key file format as .ppk

Create key pair



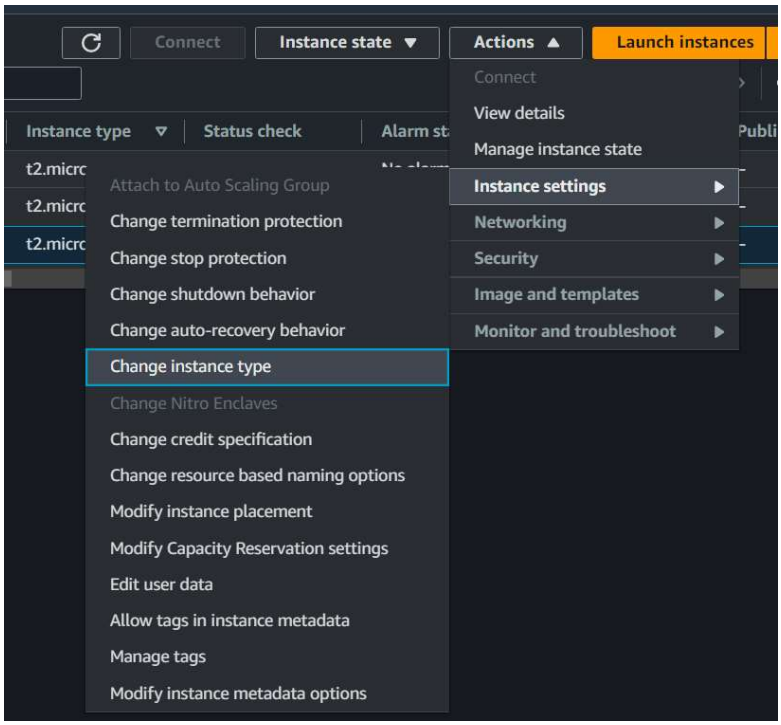
Then launch the instance.

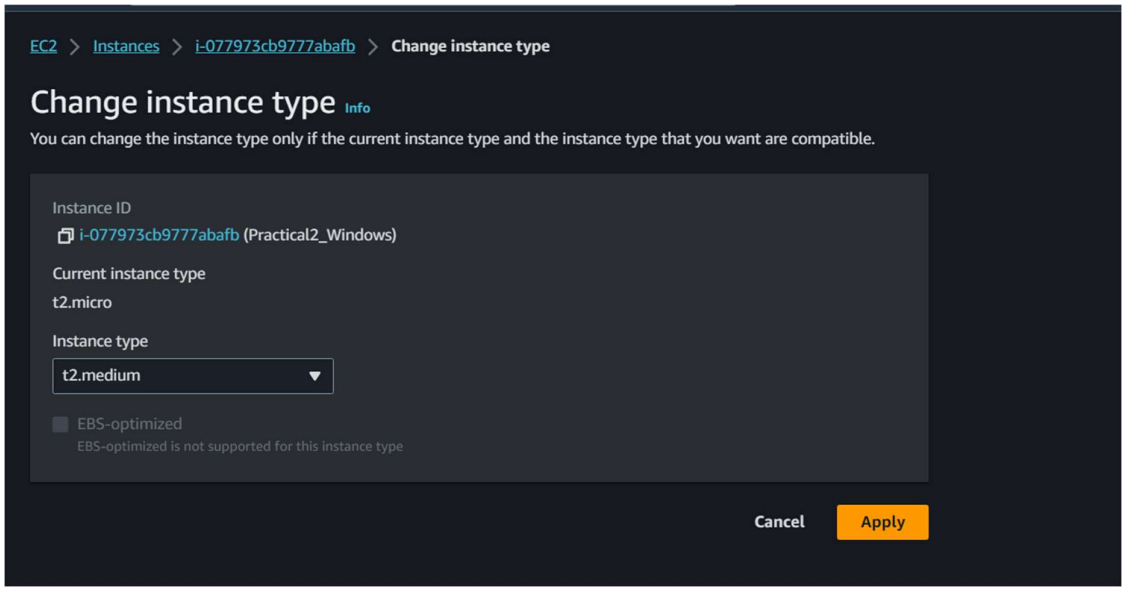


Scaling and Flexible VM Resources

i.Stop the running instance.
ii.Change the instance type to t2.medium for specified configuration.

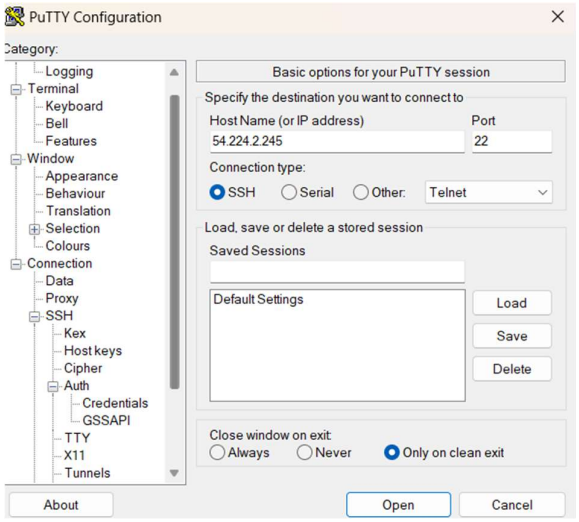
[2 vCPUs, 4GB of RAM, and 30GB]

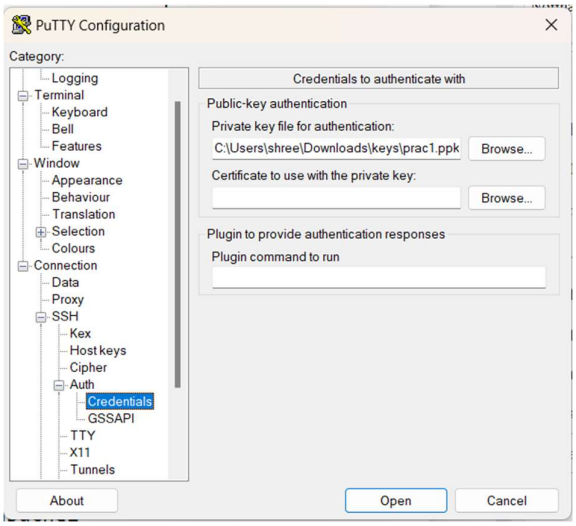




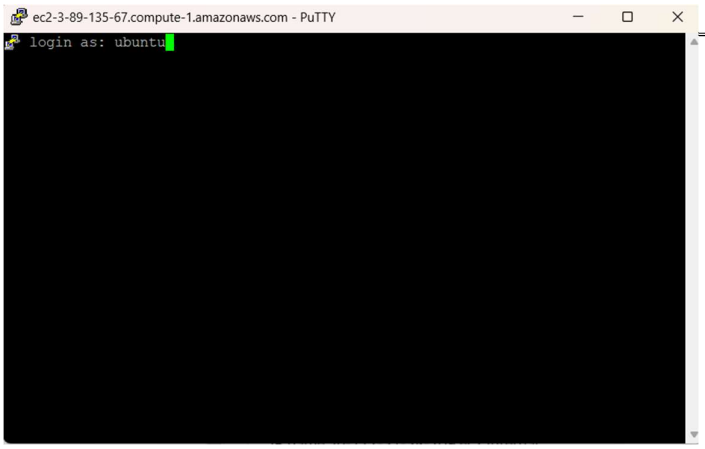
Connecting to Linux Instance:

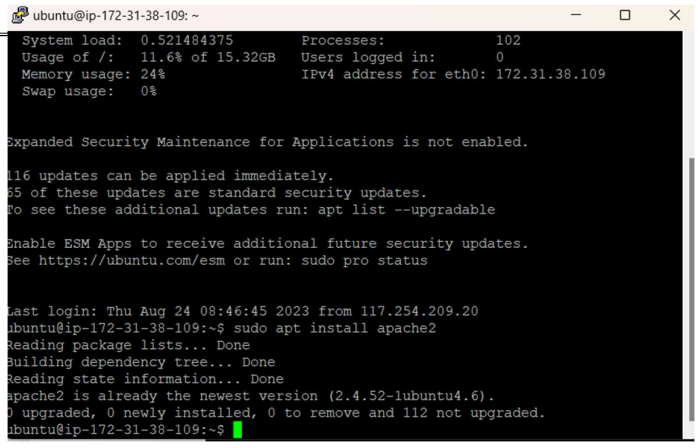
i. For connecting to the system you have to install the putty software After installing the software enter the public host ip in hostip section and in connection tab->SSH->Auth->credentials enter the key and click on open





ii. Enter the hostname in command line as ubuntu(the name that has been specified) and connect to the vm





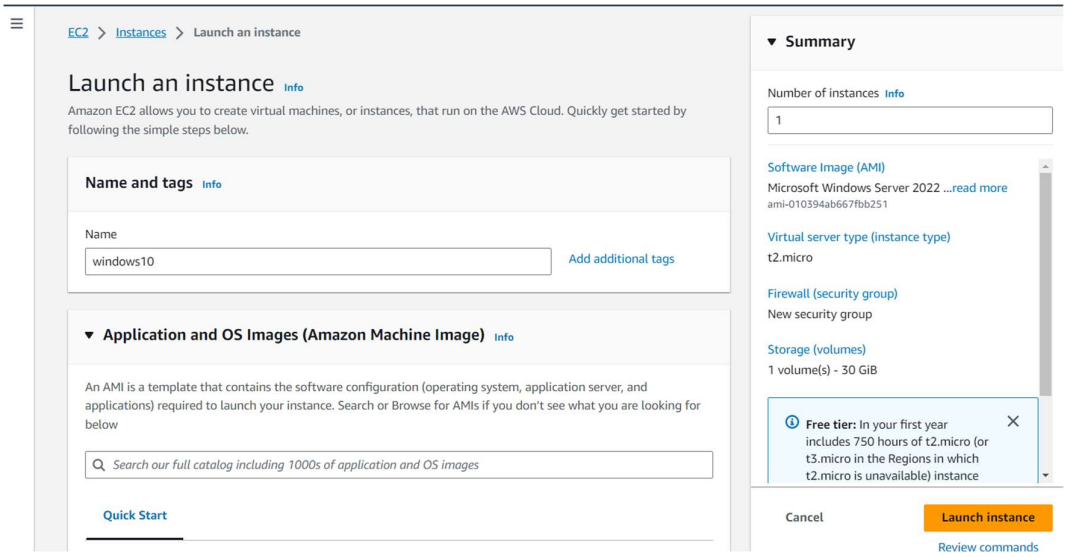
Part B

Step1:login in your AWS academy learners lab and click on ec2 instance

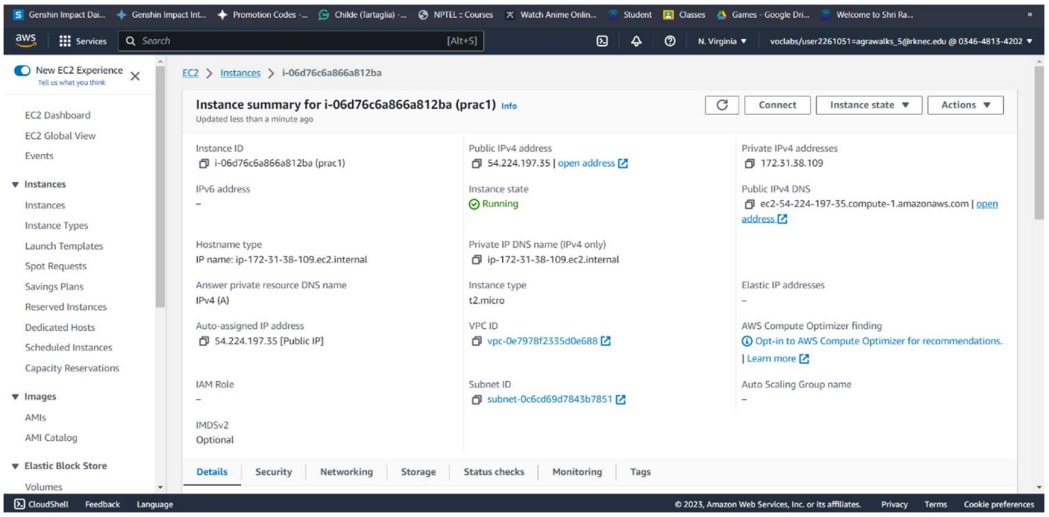
Step2:click on launch instance

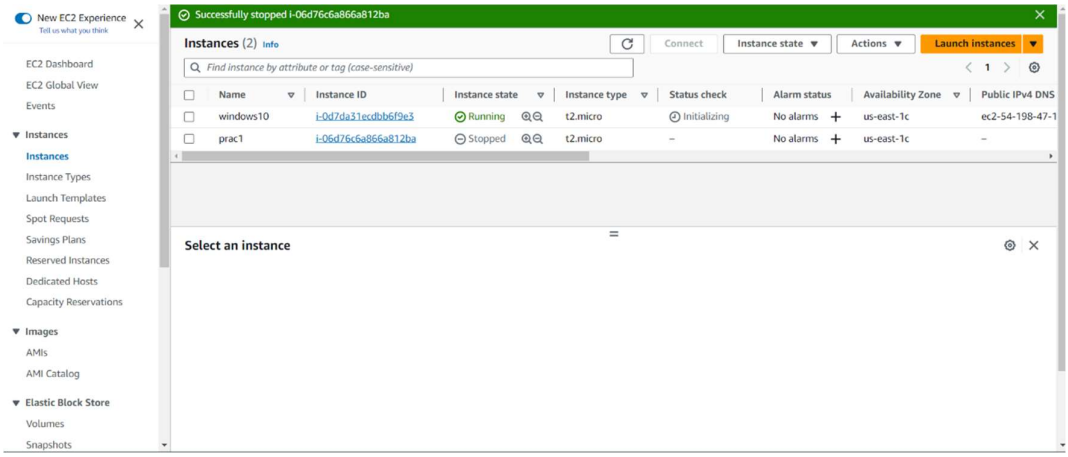
Step3: configure your instance according to your need here for example we have taken windows 7 OS with 2 GB ram 16 GB storage and 1 core then click on launch button

Note: create a access key for connecting to ec2 instance for windows make it in .pem

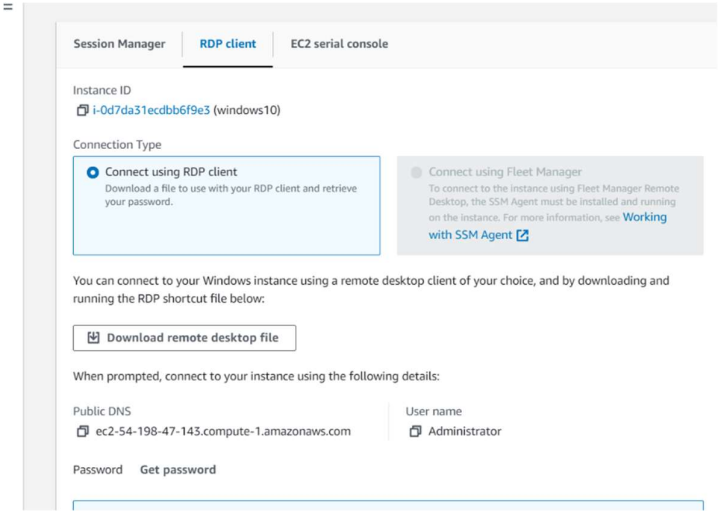


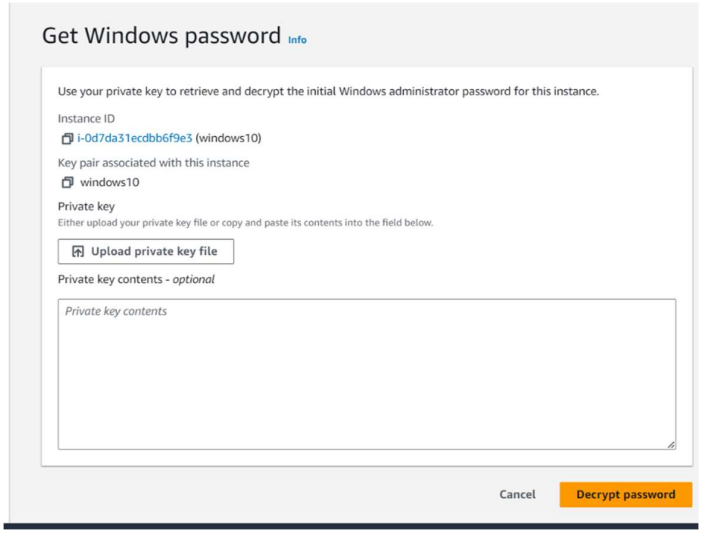
Note : after some time you can change the configuration according to your need

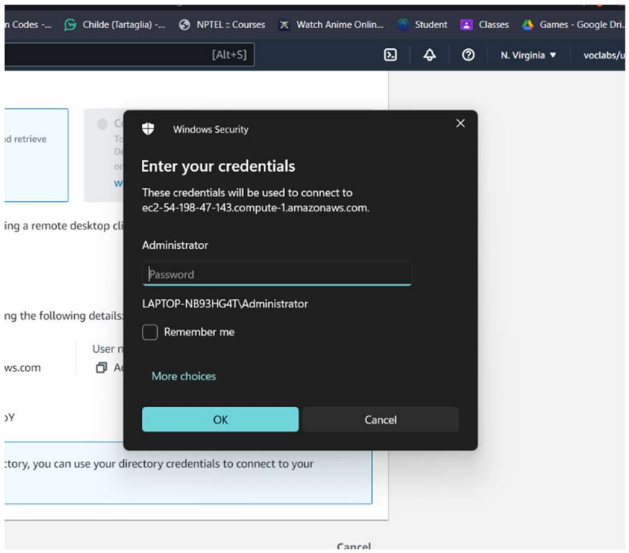




Step4: for connecting to the system click on connect button then decrypt the key that you download and click on connect and enter the key to connect






Windows Security
Enter your credentials
These credentials will be used to connect to
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Administrator
Password
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Remember me
More choices
OK
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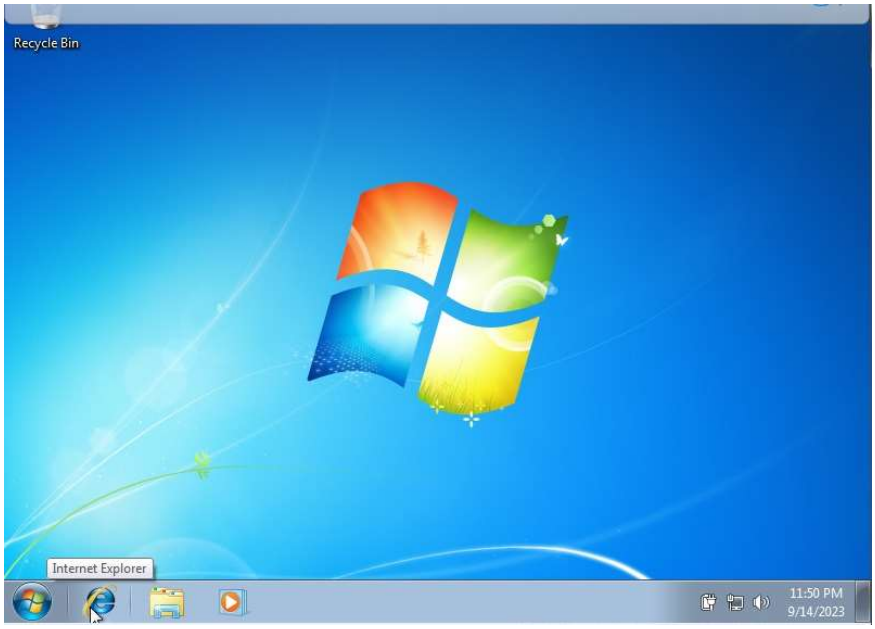
Recycle Bin
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