SVKM'S NMIMS Nilkamal School of Mathematics, Applied Statistics & Analytics
Master of Science (Statistics & Data Science)

Practical-1 Infrastructure as a service using AWS

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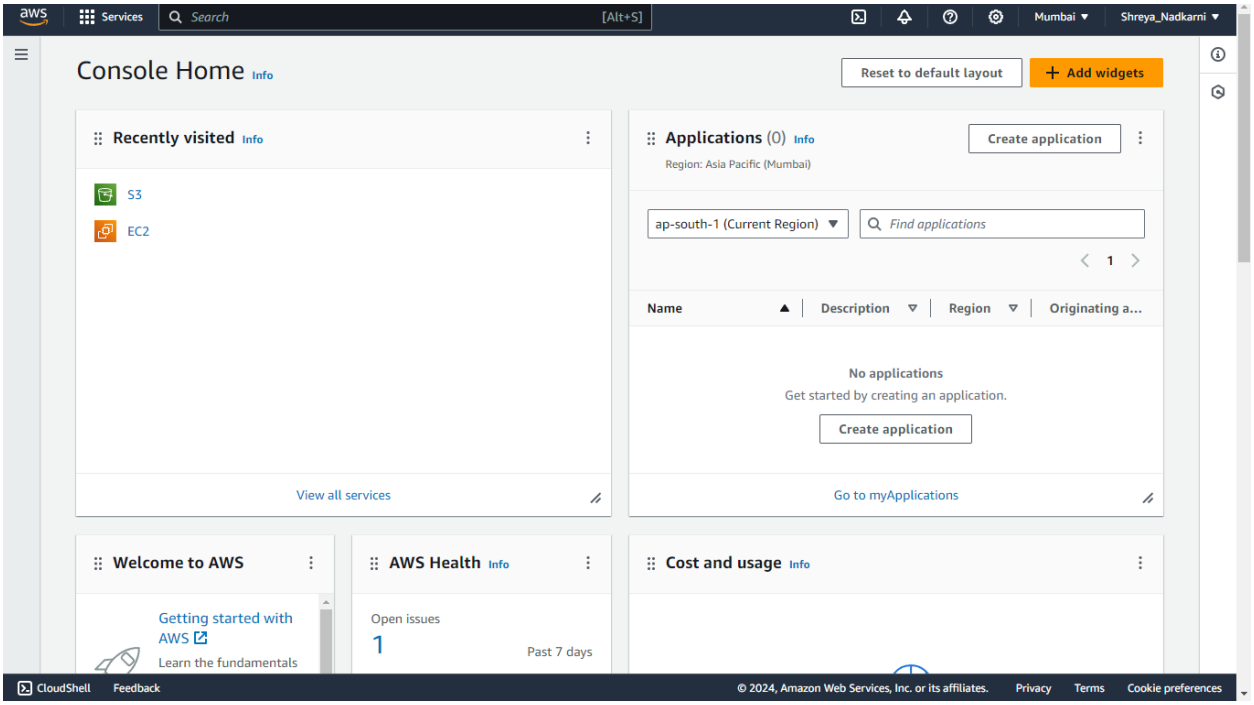
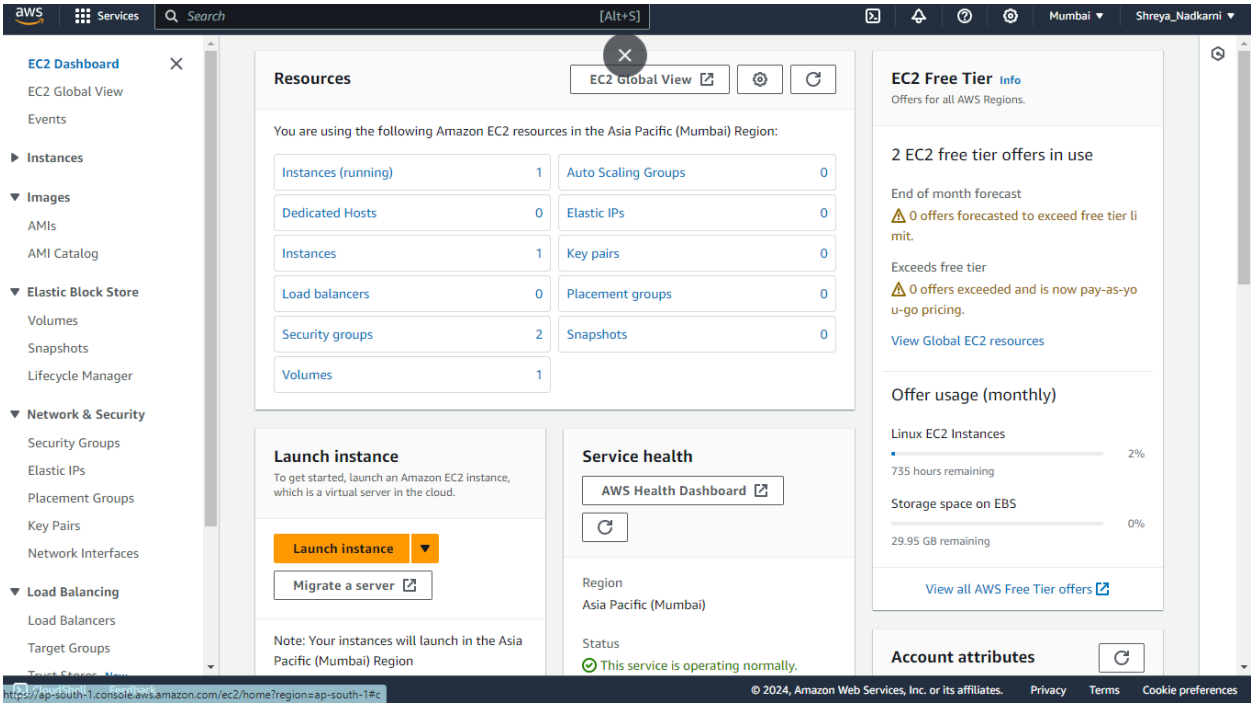
Roll No: A042

Ques 1

1. Launch an EC2 Instance:

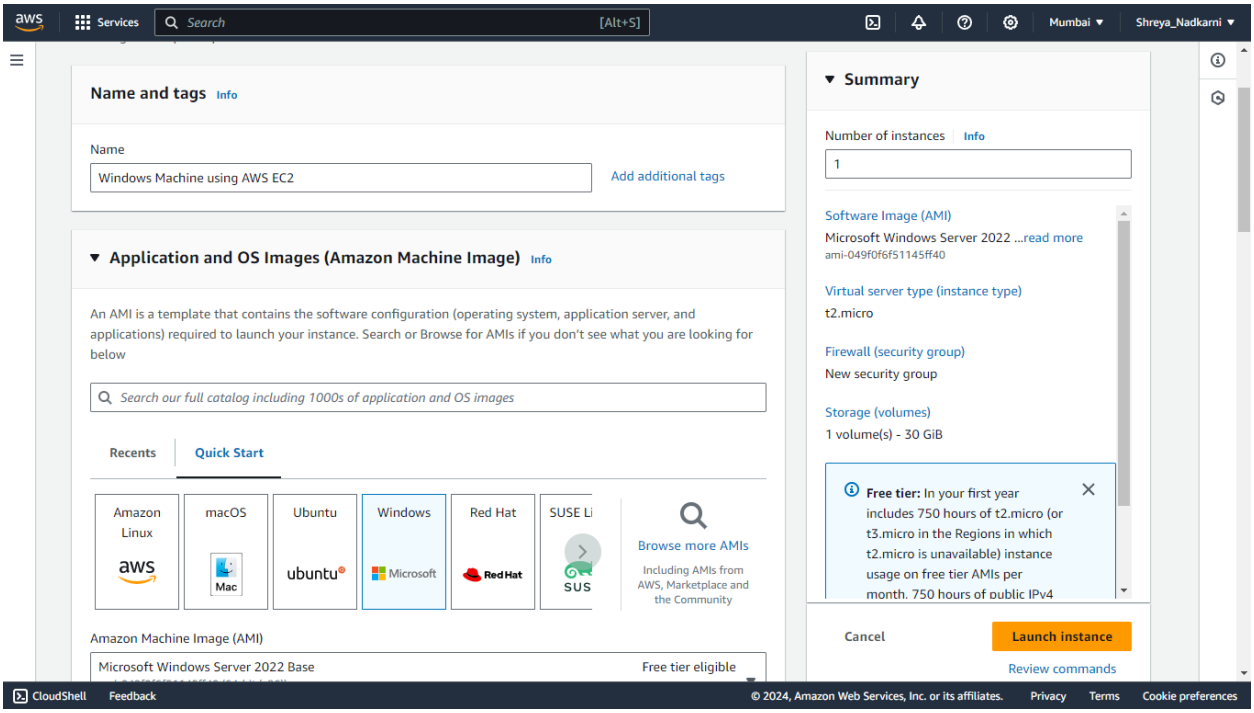
- Navigate to the EC2 Dashboard.
- Click on "Launch Instance".





2. Choose an Amazon Machine Image (AMI):

- Select a Windows AMI.



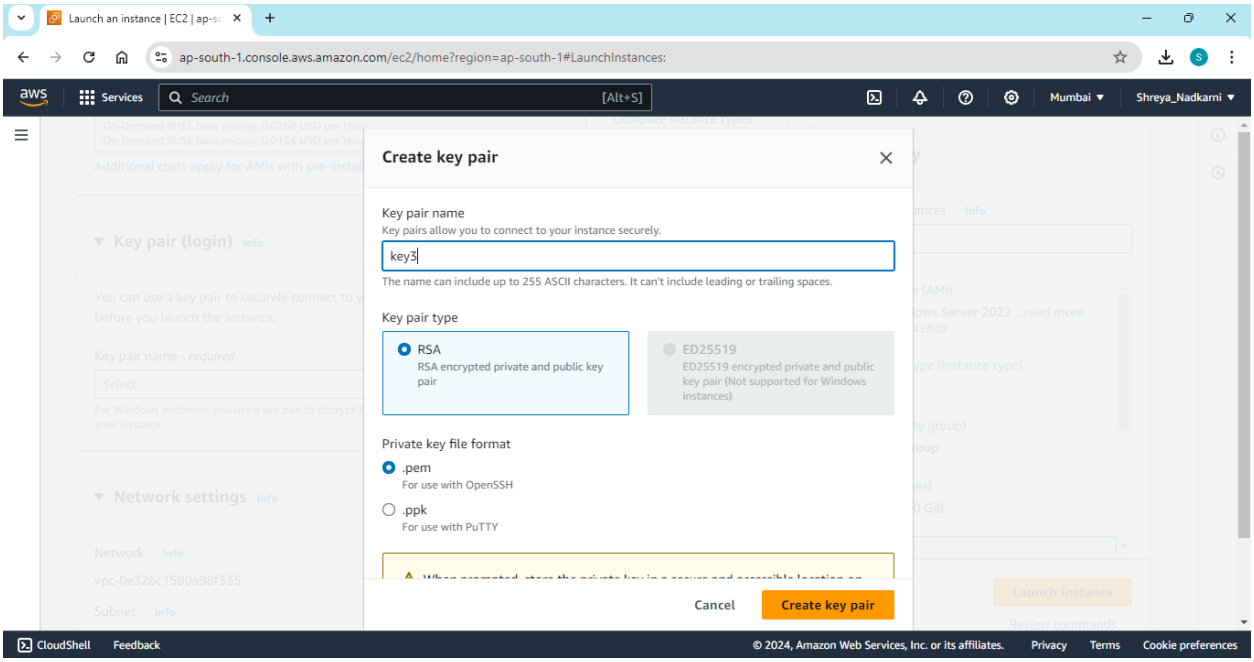
3. Configure Instance Details:

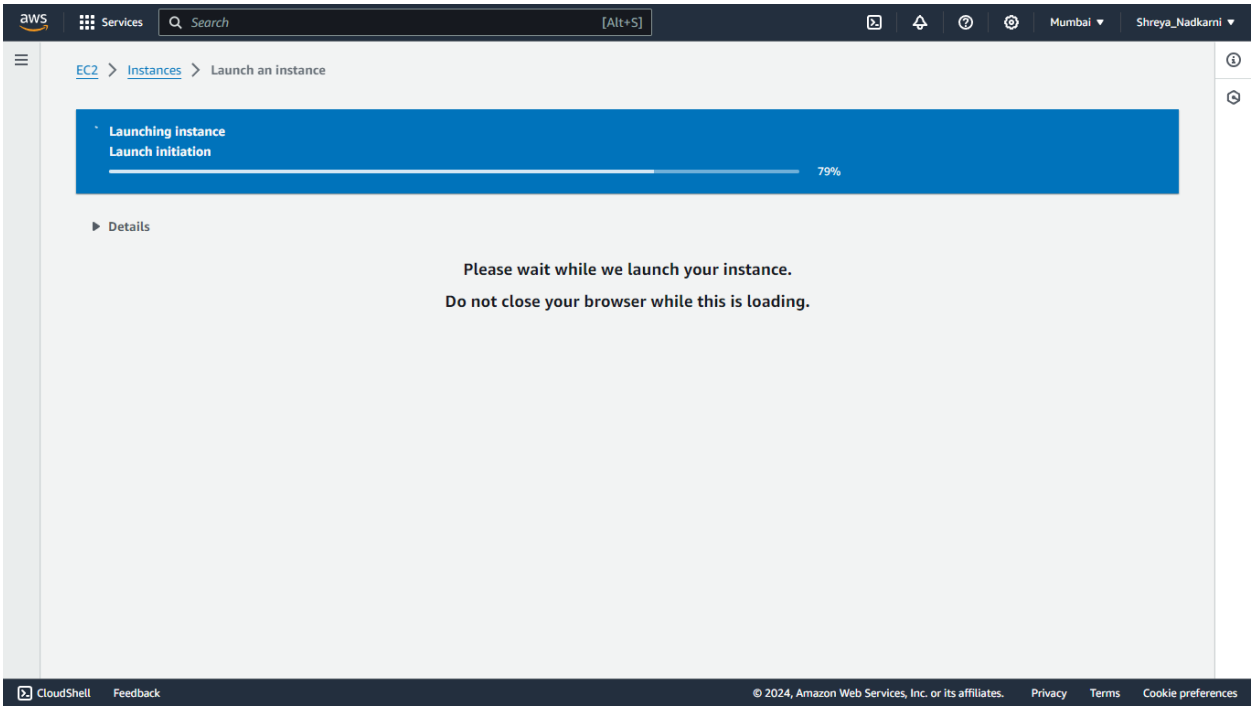
- Configure the instance details, such as the number of instances, network settings, and IAM role (if needed). Default settings are typically fine for a basic setup.

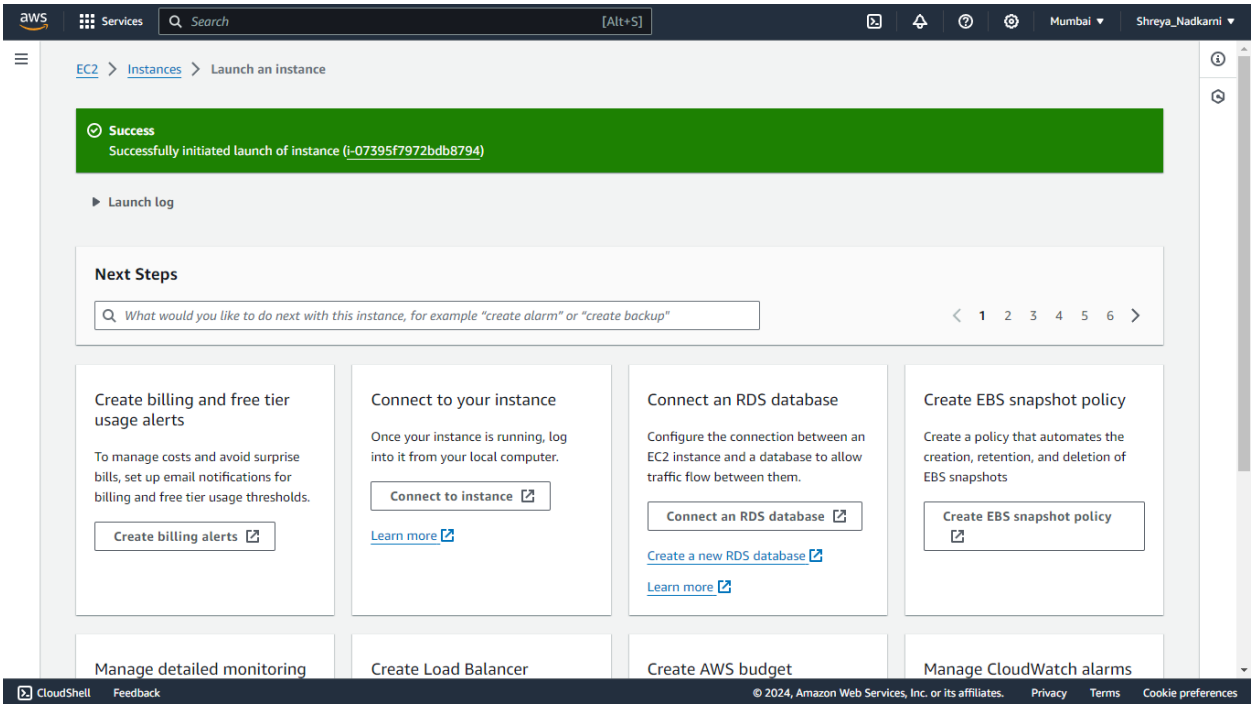
4. Review and Launch:

- Review your settings and click "Launch".

- Select an existing key pair or create a new key pair. Download the key pair file (`.pem`), as you will need it to access your instance.

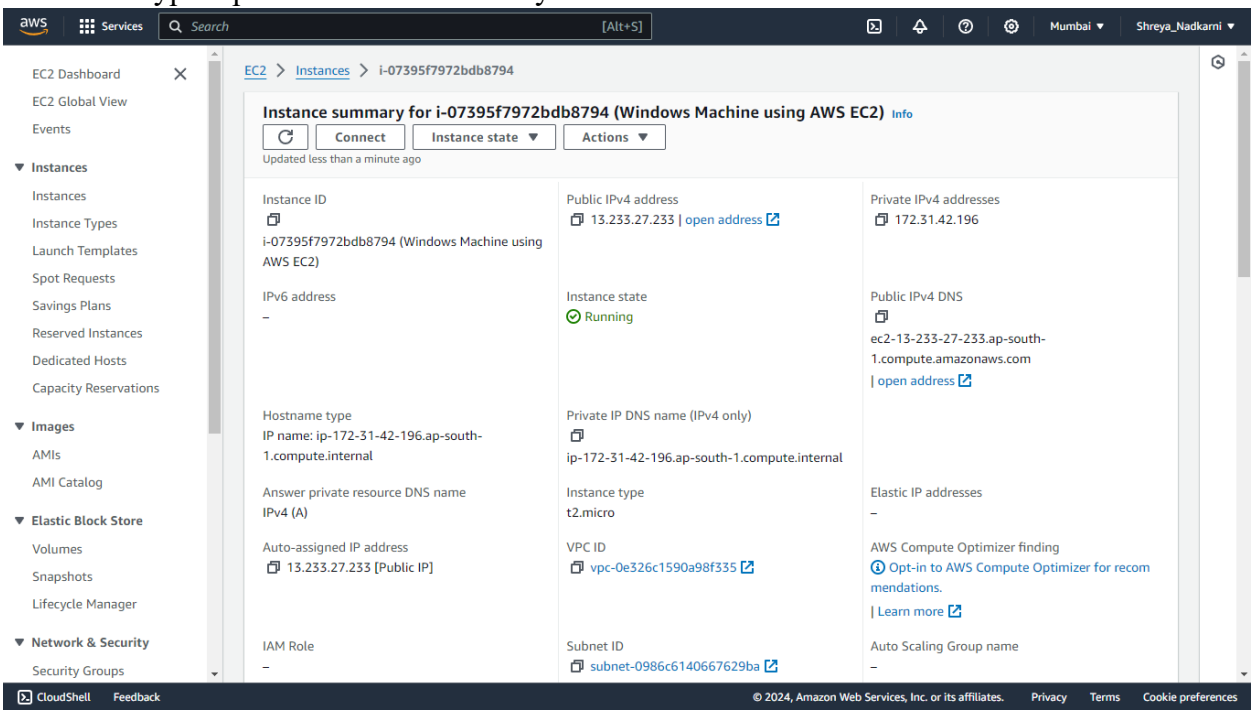


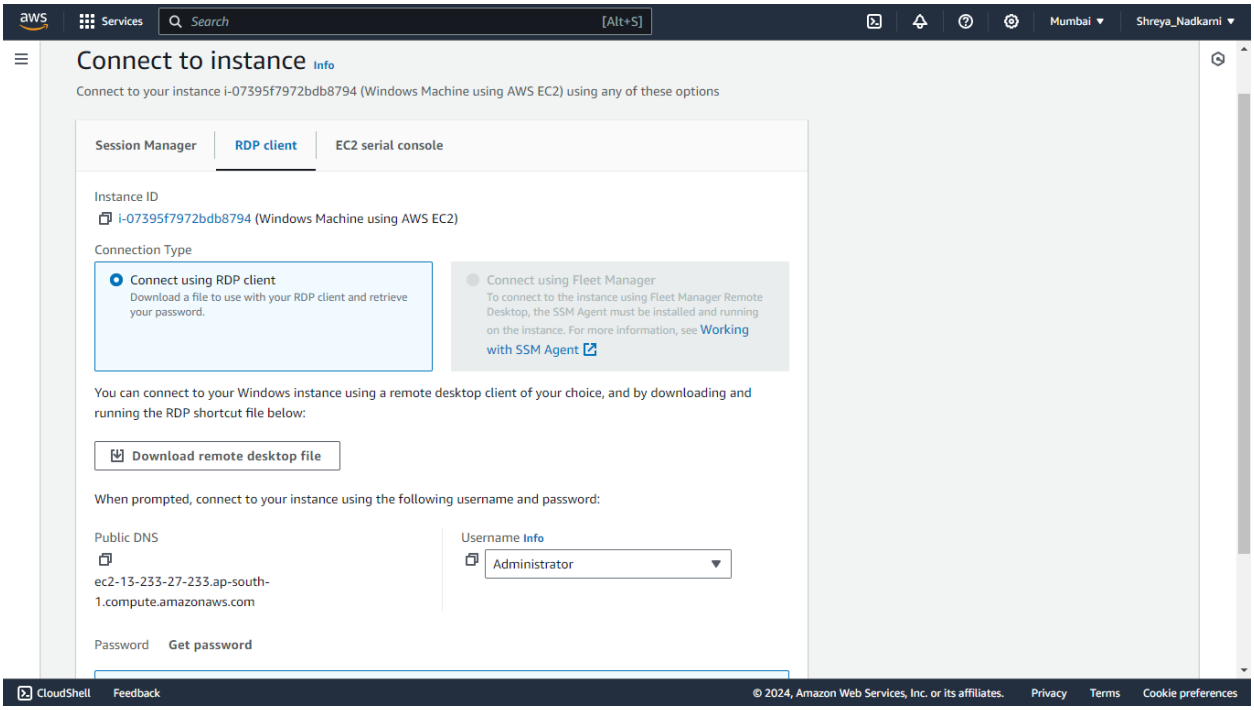




5. Connect to Your Instance:

- After the instance status changes to "running", select the instance.
- Click on "Connect", then "RDP client".
- Download the Remote Desktop File and get the default password by clicking "Get Password" (you'll need the key pair file for decryption).
- Open the downloaded Remote Desktop File and enter the administrator username and decrypted password to connect to your Windows instance.




Services
Search
[Alt+S]
Mumbai
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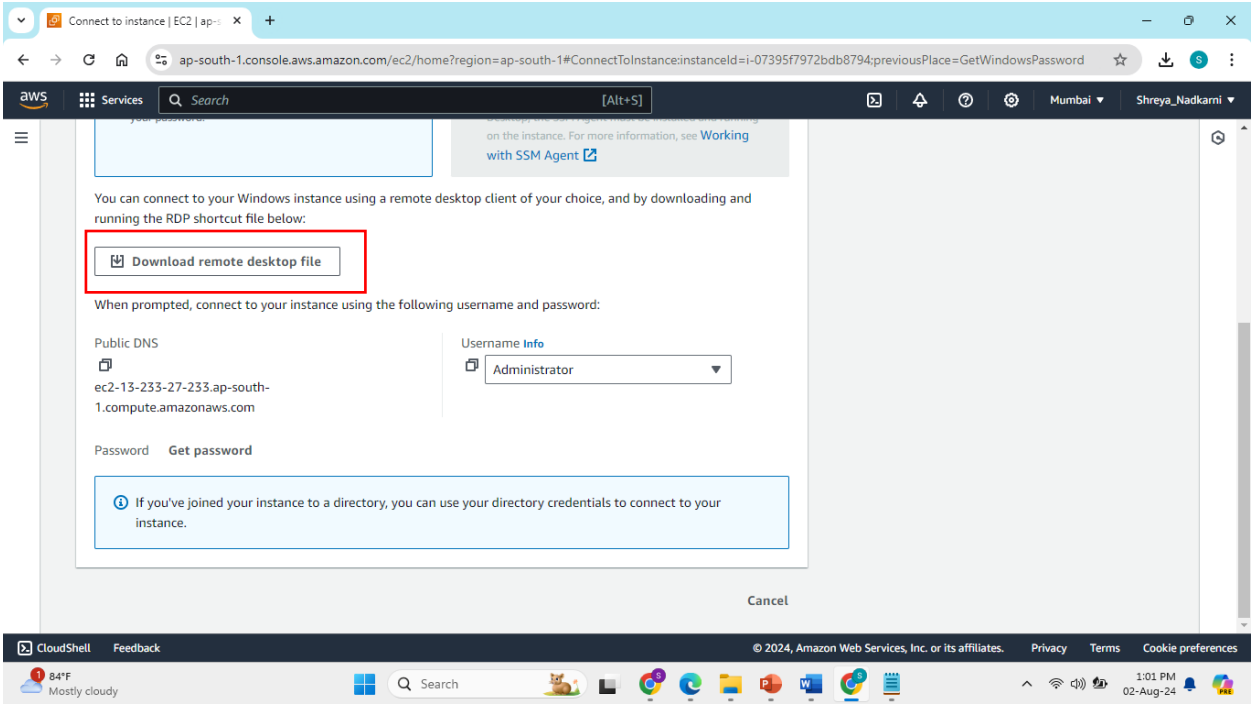
Connect to instance Info
Connect to your instance i-07395f7972bdb8794 (Windows Machine using AWS EC2) using any of these options
Session Manager
RDP client
EC2 serial console
Instance ID
i-07395f7972bdb8794 (Windows Machine using AWS EC2)
Connection Type
Connect using RDP client
Download a file to use with your RDP client and retrieve your password.
Connect using Fleet Manager
To connect to the instance using Fleet Manager Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see Working with SSM Agent
You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:
Download remote desktop file
When prompted, connect to your instance using the following username and password:
Public DNS
ec2-13-233-27-233.ap-south-1.compute.amazonaws.com
Username Info
Administrator
Password
Get password
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


Connect to instance | EC2 | ap-s
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#ConnectToInstance:instanceId=i-07395f7972bdb8794;previousPlace=GetWindowsPassword
Services
Search
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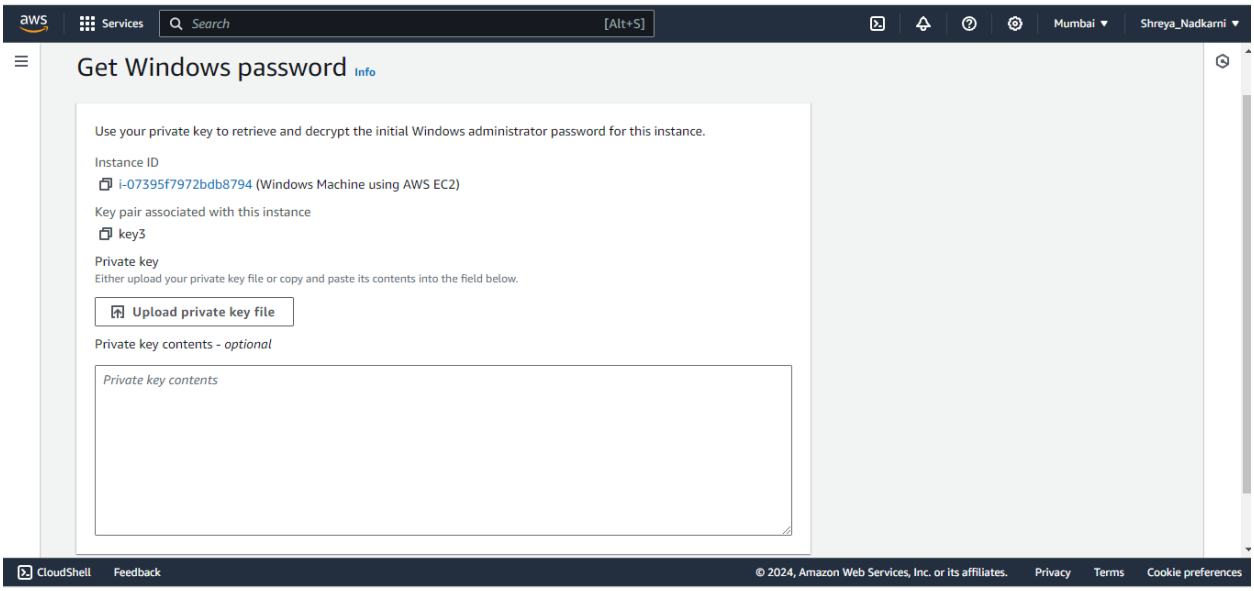
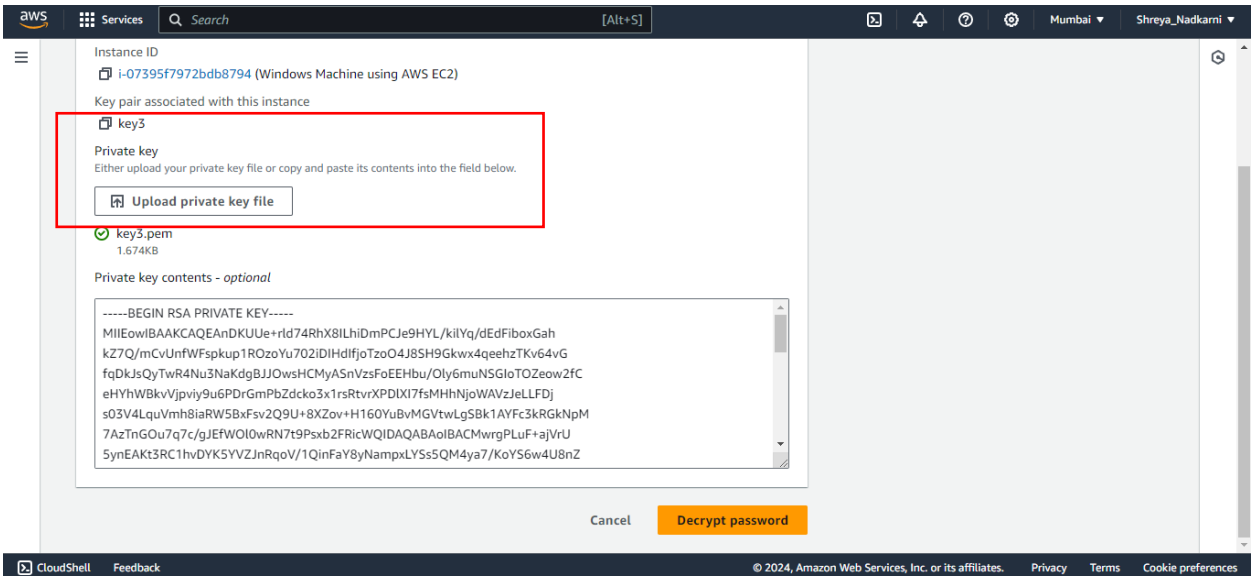
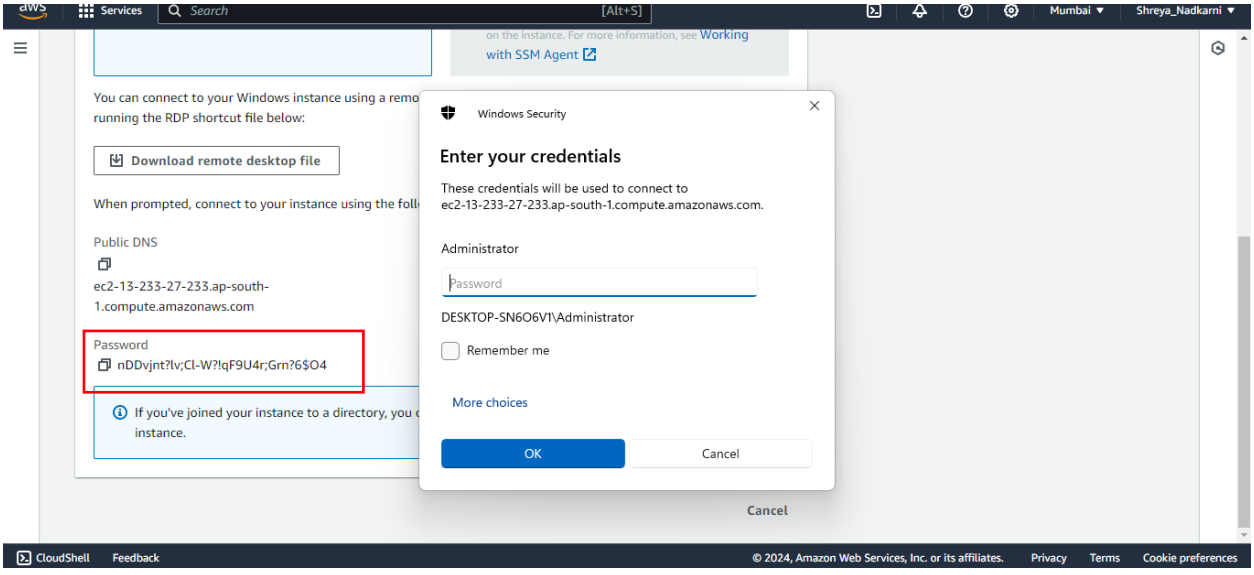
with SSM Agent
You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:
Download remote desktop file
When prompted, connect to your instance using the following username and password:
Public DNS
ec2-13-233-27-233.ap-south-1.compute.amazonaws.com
Username Info
Administrator
Password
Get password
If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.
Cancel
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
84°F
Mostly cloudy
Search
1:01 PM
02-Aug-24


Get Windows password Info
Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.
Instance ID
i-07395f7972bdb8794 (Windows Machine using AWS EC2)
Key pair associated with this instance
key3
Private key
Either upload your private key file or copy and paste its contents into the field below.
Upload private key file
Private key contents - optional
Private key contents

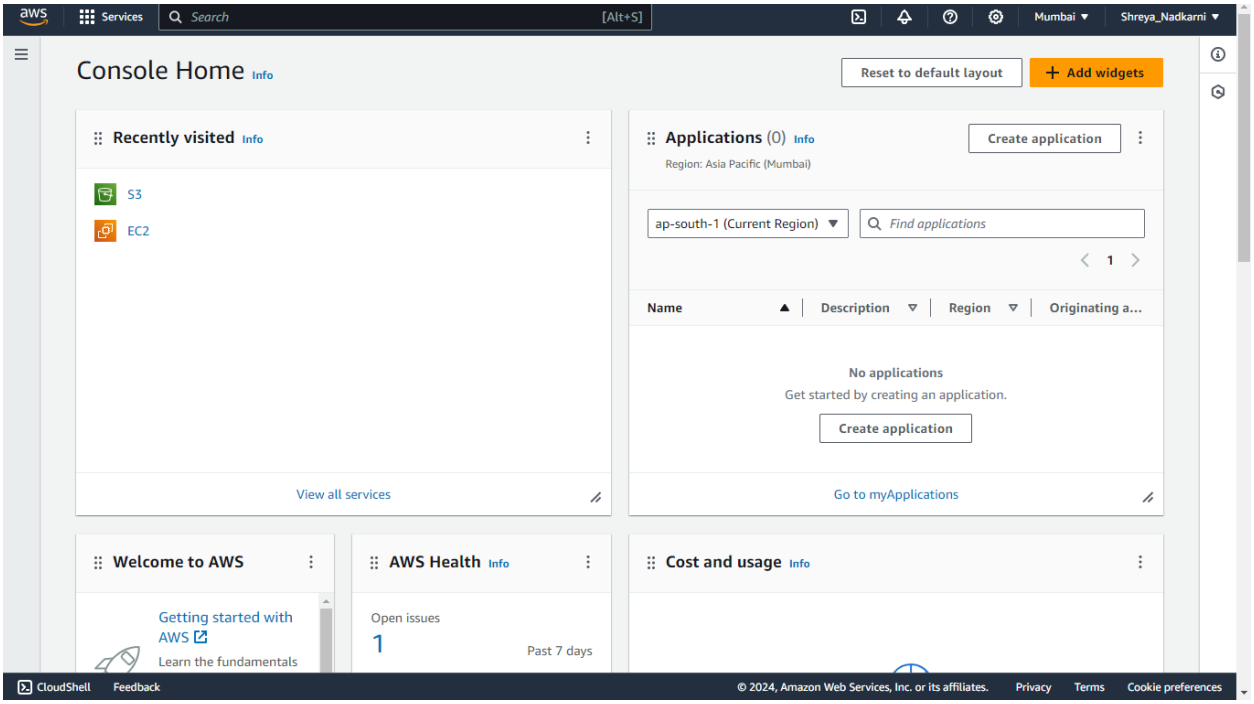

Instance ID
i-07395f7972bdb8794 (Windows Machine using AWS EC2)
Key pair associated with this instance
key3
Private key
Either upload your private key file or copy and paste its contents into the field below.
Upload private key file
key3.pem
1.674KB
Private key contents - optional
-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEAnDKUUe+rld74RhX8ILhiDmPCJe9HYL/kilYq/dEdFiboxGah
kZ7Q/mCvUnfWFspkup1ROzoYu702iDIHdIfjoTzoO4J8SH9Gkwx4qeehzTKv64vG
fqDkJsQyTwR4Nu3NaKdgBJJOwsHCMyASnVzsFoEEHbu/Oly6muNSGloTOZeow2fC
eHYhWBkvVjpviy9u6PDrGmPbZdcko3x1rsRtvrXPDlXI7fsMHhNjoWAVzJeLLFDj
s03V4LquVmh8iaRW5BxFsv2Q9U+8XZov+H160YuBvMGVtwLgSBk1AYFc3kRGkNpM
7AzTnGOu7q7c/gJEfWOl0wRN7t9Psxb2FRicWQIDAQABAoIBACMwrgPLuF+ajVrU
5ynEAKt3RC1hvDYK5YVZJnRqoV/1QinFaY8yNampxLYSs5QM4ya7/KoYS6w4U8nZ
Cancel
Decrypt password

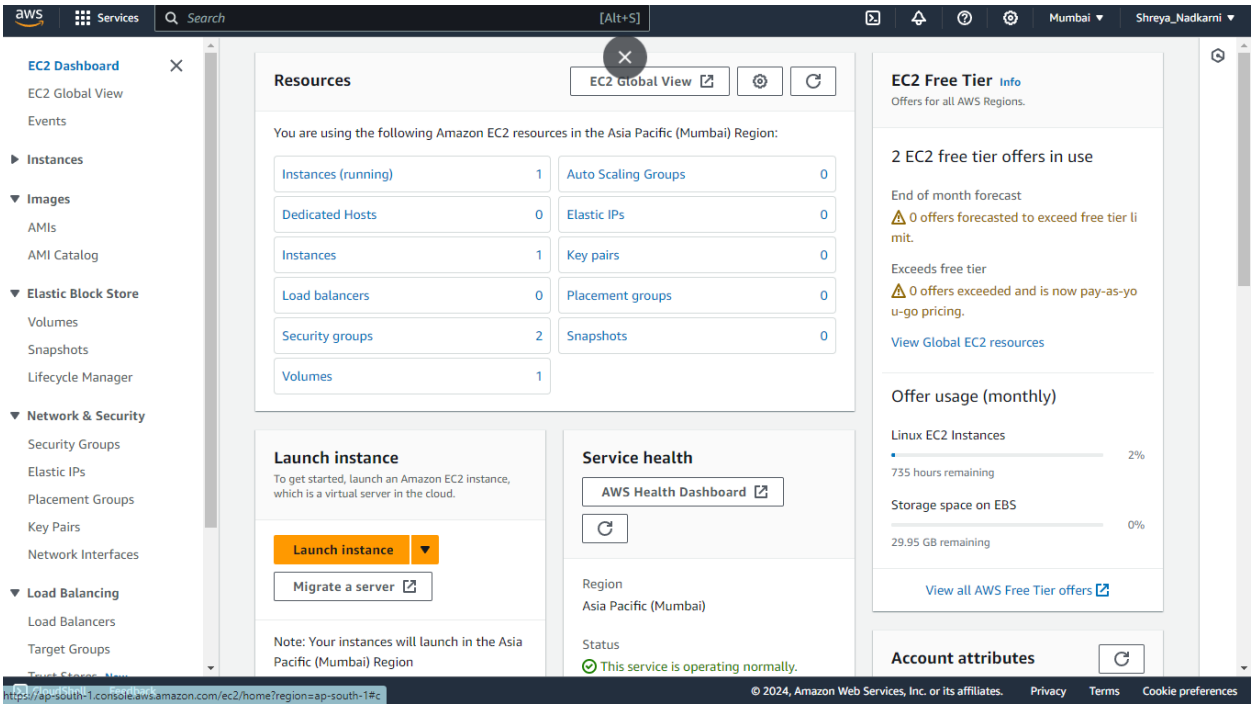

Windows Security
Enter your credentials
These credentials will be used to connect to ec2-13-233-27-233.ap-south-1.compute.amazonaws.com.
Administrator
Password
DESKTOP-SN6O6V1\Administrator
Remember me
More choices
OK
Cancel
Download remote desktop file
Public DNS
ec2-13-233-27-233.ap-south-1.compute.amazonaws.com
Password
nDDvjnt?lv;Cl-W?!qF9U4r;Grn?6$O4
Working with SSM Agent
Cancel

Ques 2

1. Launch an EC2 Instance:

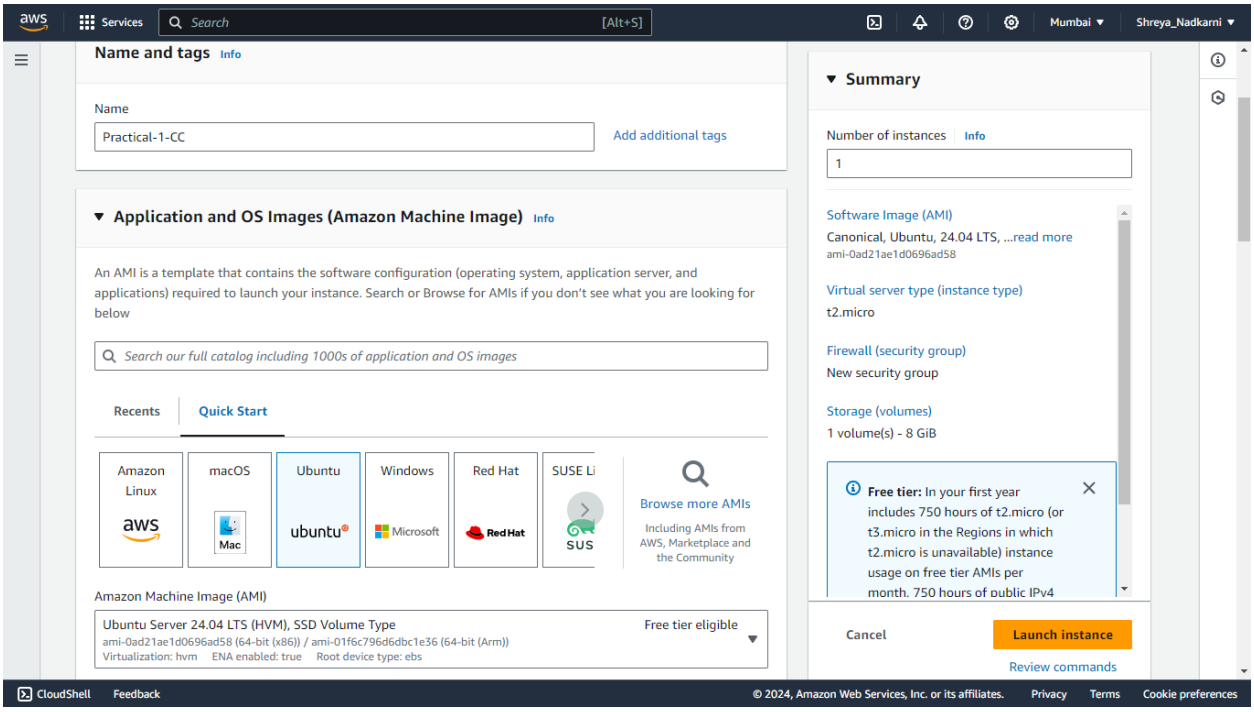
- Navigate to the EC2 Dashboard.
- Click on "Launch Instance".





2. Choose an Amazon Machine Image (AMI):

- Select an Ubuntu AMI. Common choices include "Ubuntu Server 20.04 LTS" or "Ubuntu Server 18.04 LTS".



3. **Configure Instance Details**:

- Configure the instance details, such as the number of instances, network settings, and IAM role (if needed). Default settings are typically fine for a basic setup.

4. **Add Storage**:

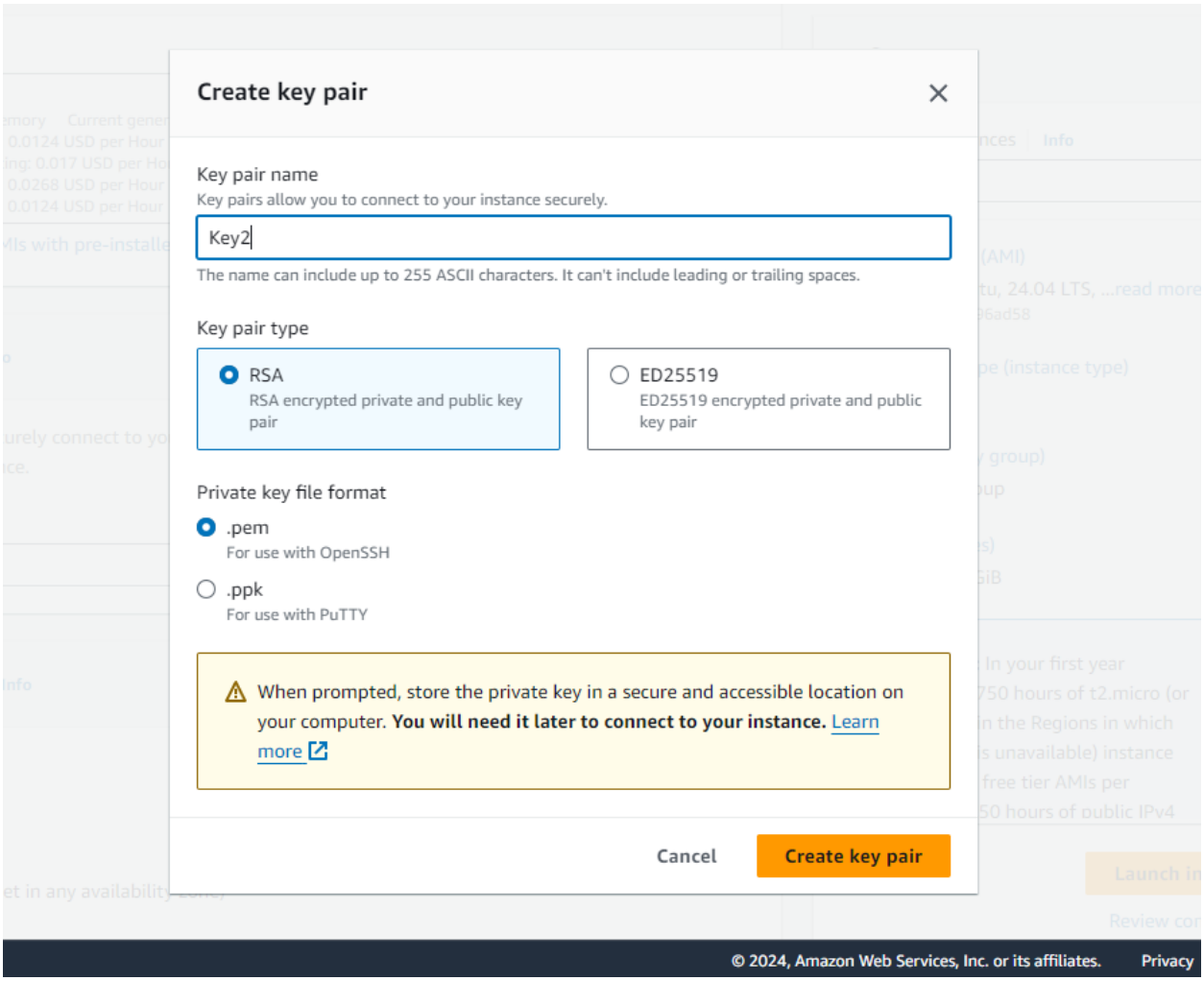
- Adjust the storage settings if necessary. The default size for Ubuntu instances is usually sufficient, but you can increase it based on your needs.

5. **Add Tags**:

- (Optional) Add tags to help identify your instance. For example, Key: Name, Value: Ubuntu-Server.

6. Review and Launch:

- Review your settings and click "Launch".
- Select an existing key pair or create a new key pair. Download the key pair file (.pem), as you will need it to access your instance.


Create key pair
Key pair name
Key pairs allow you to connect to your instance securely.
Key2
The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.
Key pair type
RSA
RSA encrypted private and public key pair
ED25519
ED25519 encrypted private and public key pair
Private key file format
.pem
For use with OpenSSH
.ppk
For use with PuTTY
When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. Learn more
Cancel
Create key pair
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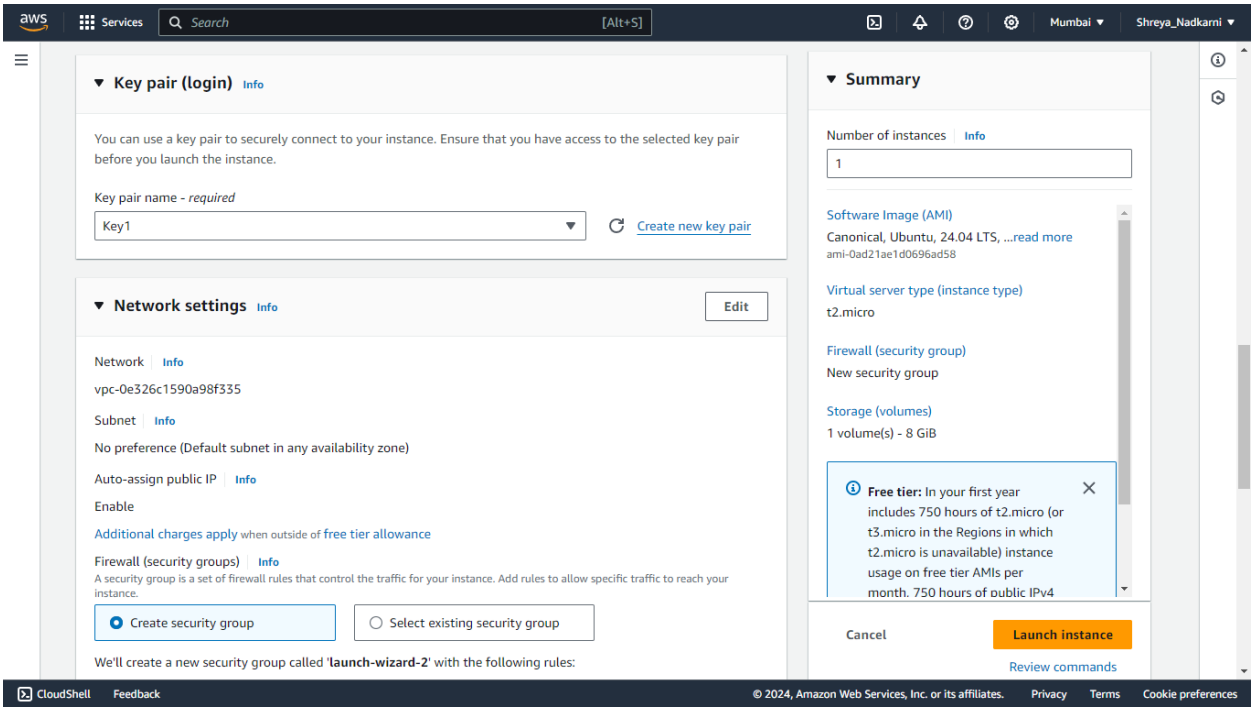
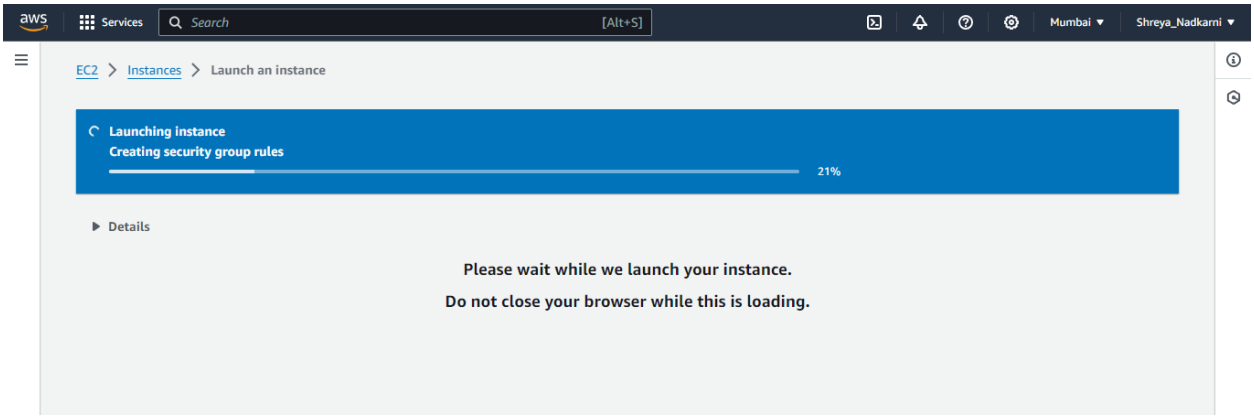
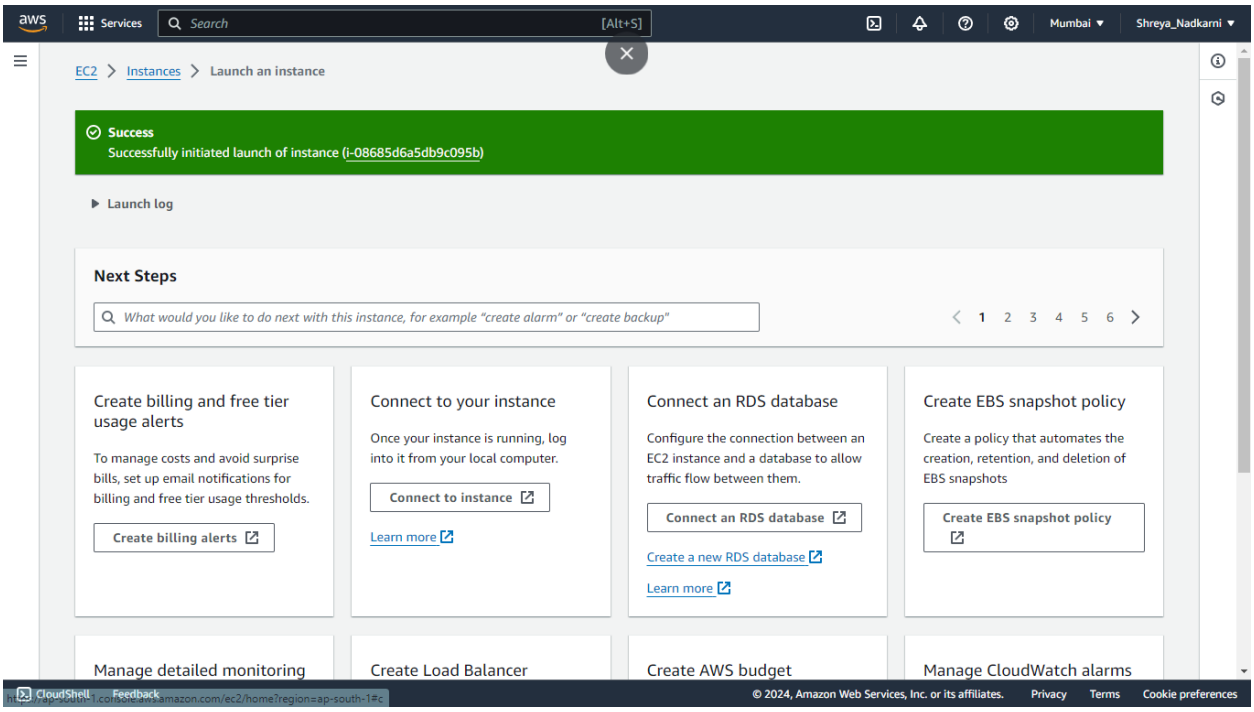
Privacy

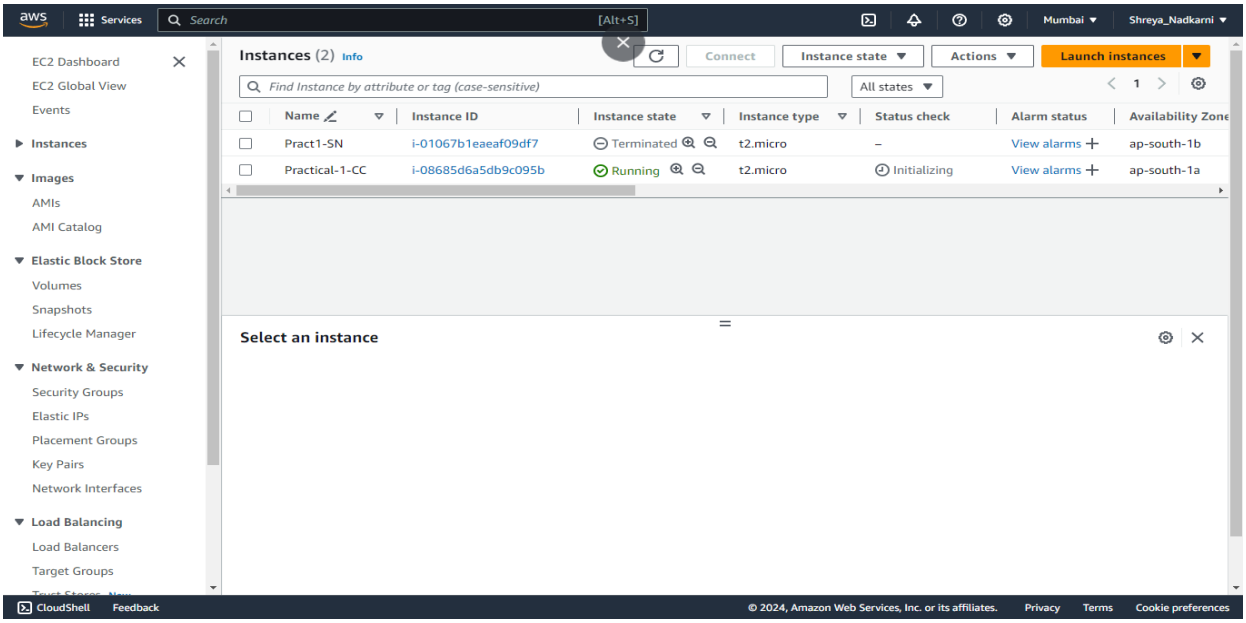

aws
Services
Search
[Alt+S]
Mumbai
Shreya_Nadkarni
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name - required
Key1
Create new key pair
Network settings Info
Edit
Network Info
vpc-0e326c1590a98f335
Subnet Info
No preference (Default subnet in any availability zone)
Auto-assign public IP Info
Enable
Additional charges apply when outside of free tier allowance
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-2' with the following rules:
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 24.04 LTS, ...read more
ami-0ad21ae1d0696ad58
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month. 750 hours of public IPv4
Cancel
Launch instance
Review commands
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences



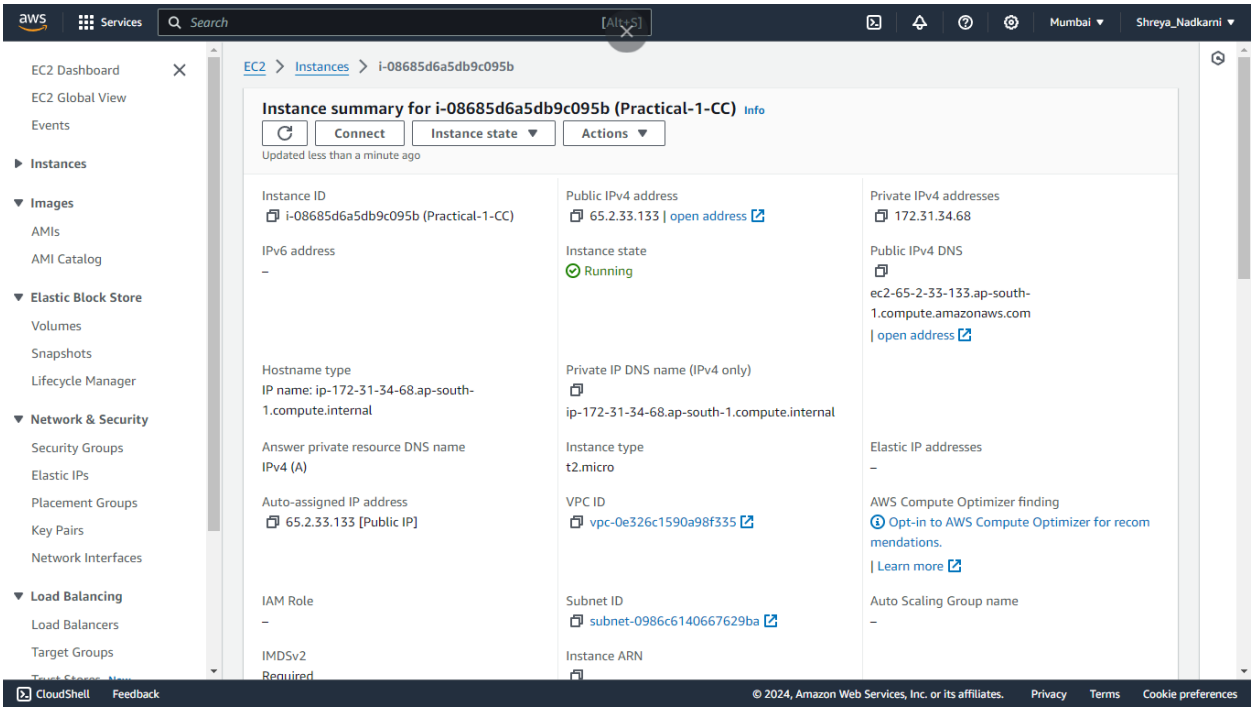


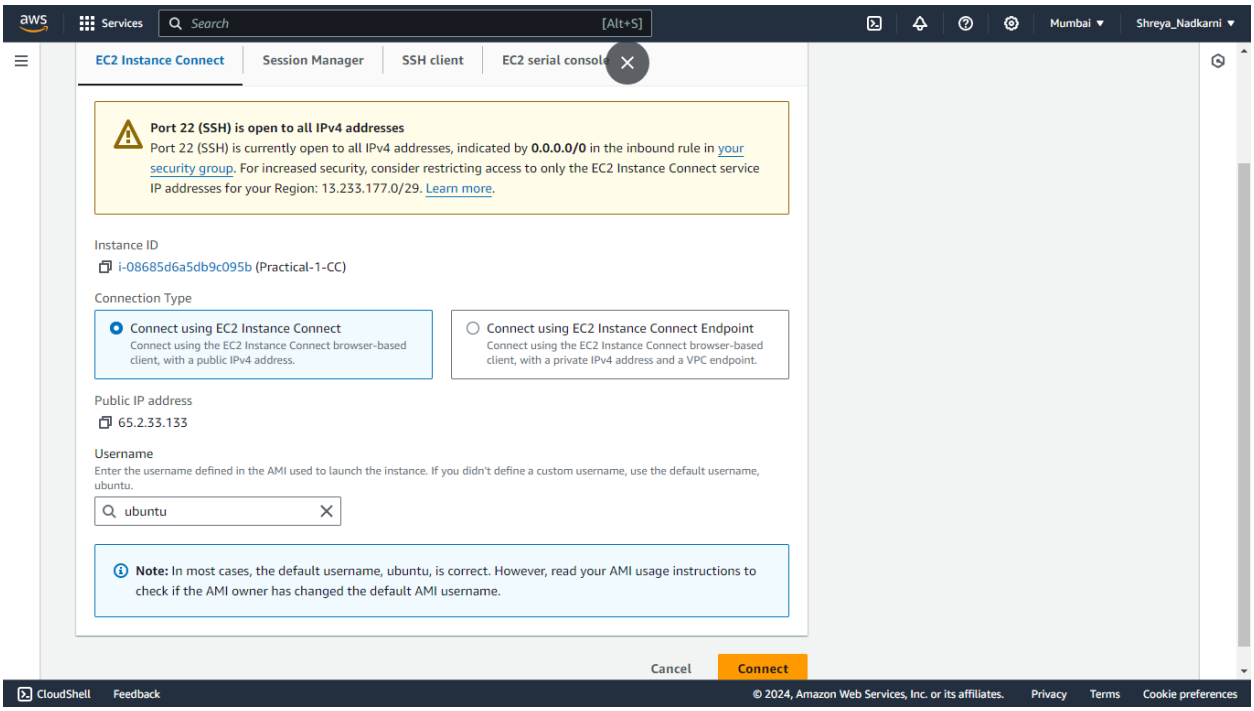
7. Connect to Your Instance:

- After the instance status changes to "running", select the instance.



- Click on "Connect",





8. Open a terminal.

Run the following command to set the permissions of your key pair file:

- **Check the disk usage:** This command checks current disk usage
- **Check the current directory**: This command prints the current working directory.
- **Create a new directory:** This command creates a new directory named my_new_directory.
- **Create a new file and write text to it:** This command creates a file named hello.txt and writes "Hello, World!" into it.
- **Display the contents of a file**: This command displays the contents of hello.txt.