EX.NO: 3 **Perform application migration using AWS**

Date:

READING MATERIALS:

Amazon Web Services (AWS) is a platform that allows the development of flexible applications by providing solutions for elastic infrastructure scalability, messaging, and data storage. The platform is accessible through SOAP or RESTful Web service interfaces and provides a Web-based console where users can handle administration and monitoring of the resources required, as well as their expenses computed on a pay-as-you-go basis.

AWS Application Migration Service (MGN) is a highly automated lift-and-shift (rehost) solution that simplifies, expedites, and reduces the cost of migrating applications to AWS. It enables companies to lift-and-shift a large number of physical, virtual, or cloud servers without compatibility issues, performance disruption, or long cutover windows. MGN replicates source servers into your AWS account. When you're ready, it automatically converts and launches your servers on AWS so you can quickly benefit from the cost savings, productivity, resilience, and agility of the Cloud. Once your applications are running on AWS, you can leverage AWS services and capabilities to quickly and easily replatform or refactor those applications – which makes lift-and-shift a fast route to modernization.

AWS Application Migration Service minimizes time-intensive, error-prone manual processes by automatically converting your source servers to run natively on AWS. It also simplifies application modernization with built-in, post-launch optimization options. Migrate your on-premises workload walkthrough In this walkthrough, the example WordPress blog is currently running as a two-tier stack in a simulated on-premises data center. The frontend uses Apache Server running on layout with a predefined operating system installed. These are specified by the Amazon Ramdisk Image (ARI, id: ari-yyyyyy) and the Amazon Kernel Image (AKI, id: aki-zzzzzz), which are part of the configuration of the template.

AMIs are either created from scratch or “bundled” from existing EC2 instances. A common practice is to prepare new AMIs to create an instance from a preexisting AMI, log into it once it is booted and running, and install all the software needed. Using the tools provided by Amazon, we can convert the instance into a new image. Once an AMI is created, it is stored in an S3 bucket and the user can decide whether to make it available to other users or keep it for personal use. Finally, it is also possible to associate a product code with a given AMI, thus allowing the owner of the AMI to get revenue every time this AMI is used to create EC2 instances .

Communication services

Amazon provides facilities to structure and facilitate the communication among existing applications and services residing within the AWS infrastructure. These facilities can be organized into two major categories: virtual networking and messaging

Virtual networking

Virtual networking comprises a collection of services that allow AWS users to control the connectivity to and between compute and storage services. Amazon Virtual Private Cloud (VPC) and Amazon Direct Connect provide connectivity solutions in terms of infrastructure; Route 53 facilitates connectivity in terms of naming. Amazon VPC provides a great degree of flexibility in creating virtual private networks within the Amazon infrastructure and beyond. The service providers prepare either templates covering most of the usual scenarios or a fully customizable network service for advanced configurations. Prepared templates include public subnets, isolated networks, private networks accessing Internet through network address translation (NAT), and hybrid networks including AWS resources and private resources. Also, it is possible to control connectivity between different services (EC2 instances and S3 buckets) by using the Identity Access Management (IAM) service. During 2011, the cost of Amazon VPC was $0.50 per connection hour.

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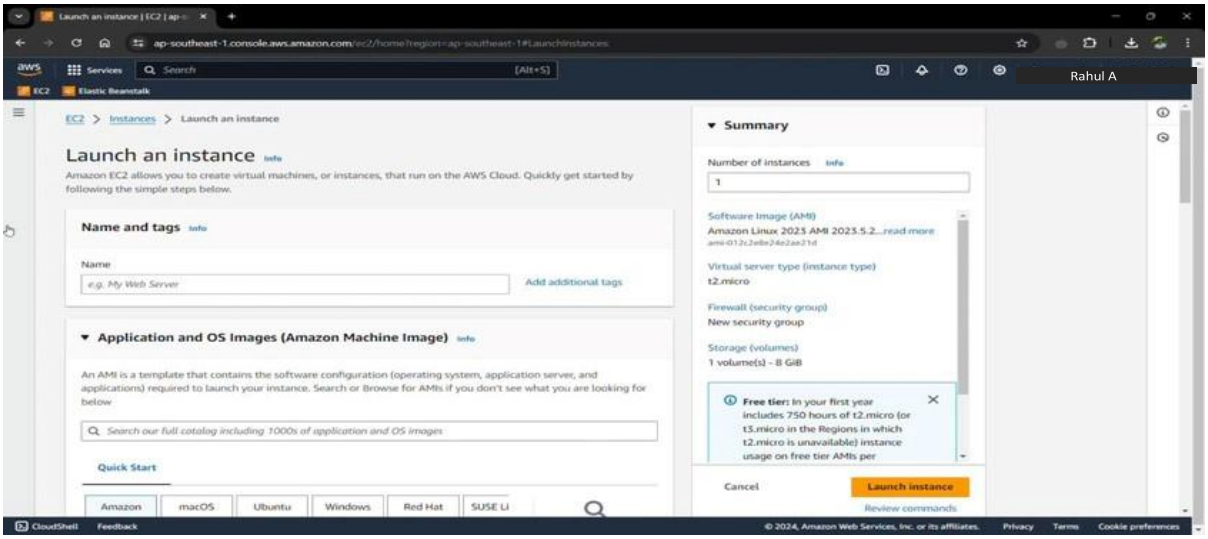
Date:

AIM:

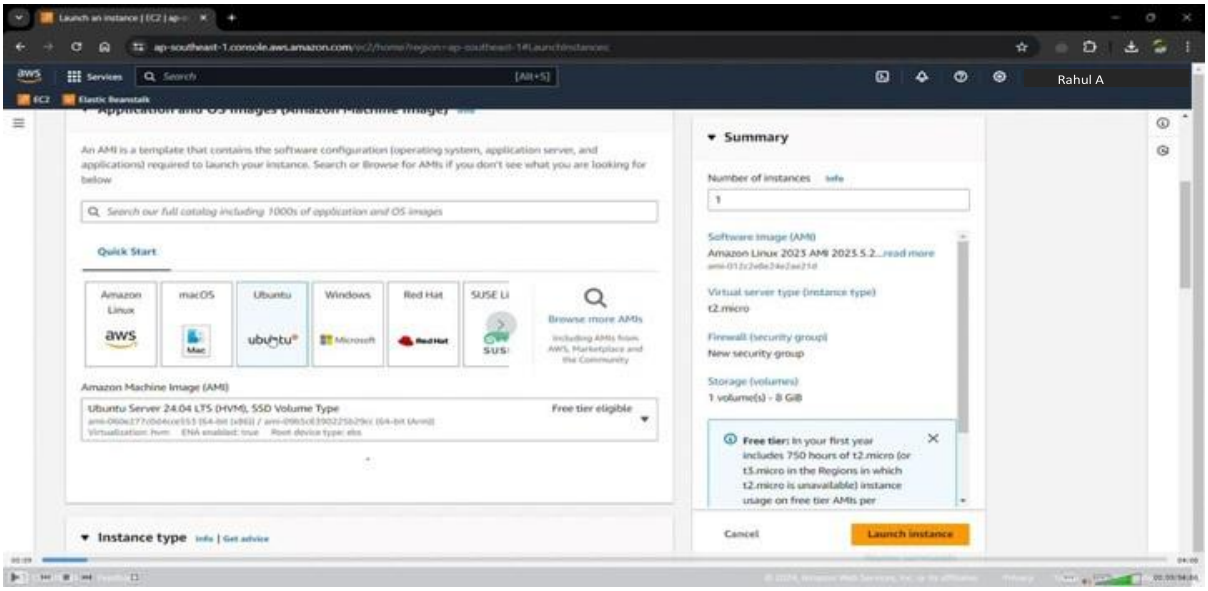
To Perform application migration using AWS.

PROCEDURE with SCREENSHOTS:

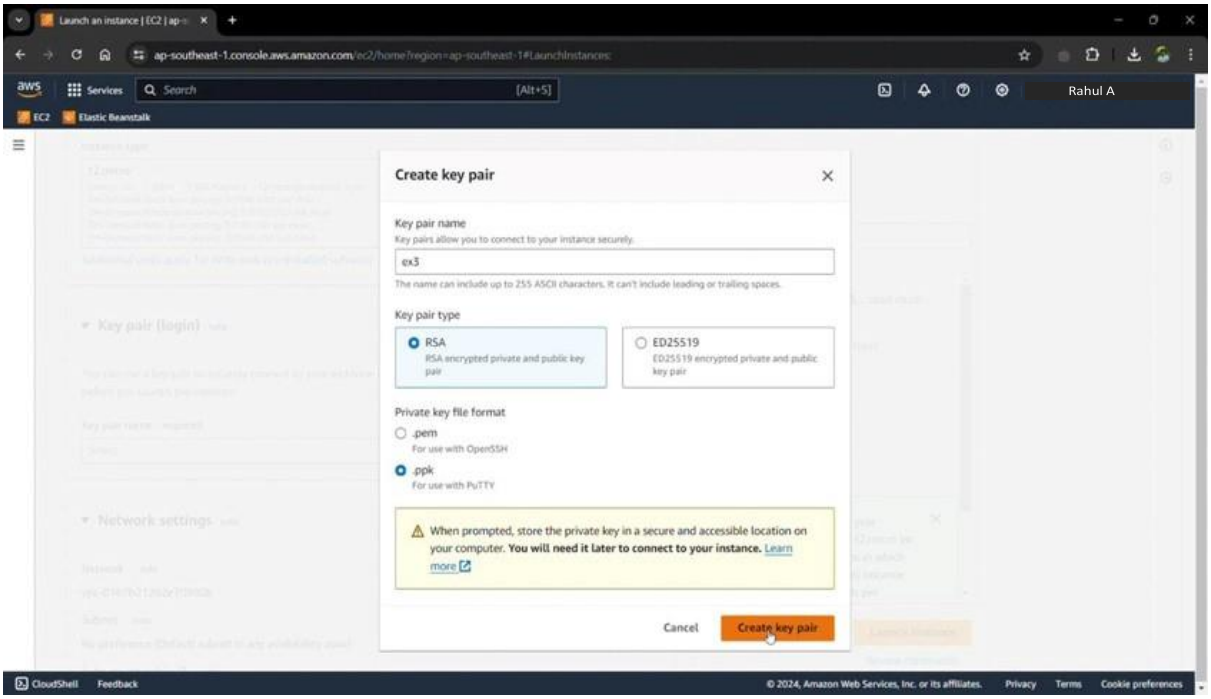
Step 1: Login to AWS Console and open EC2 service.



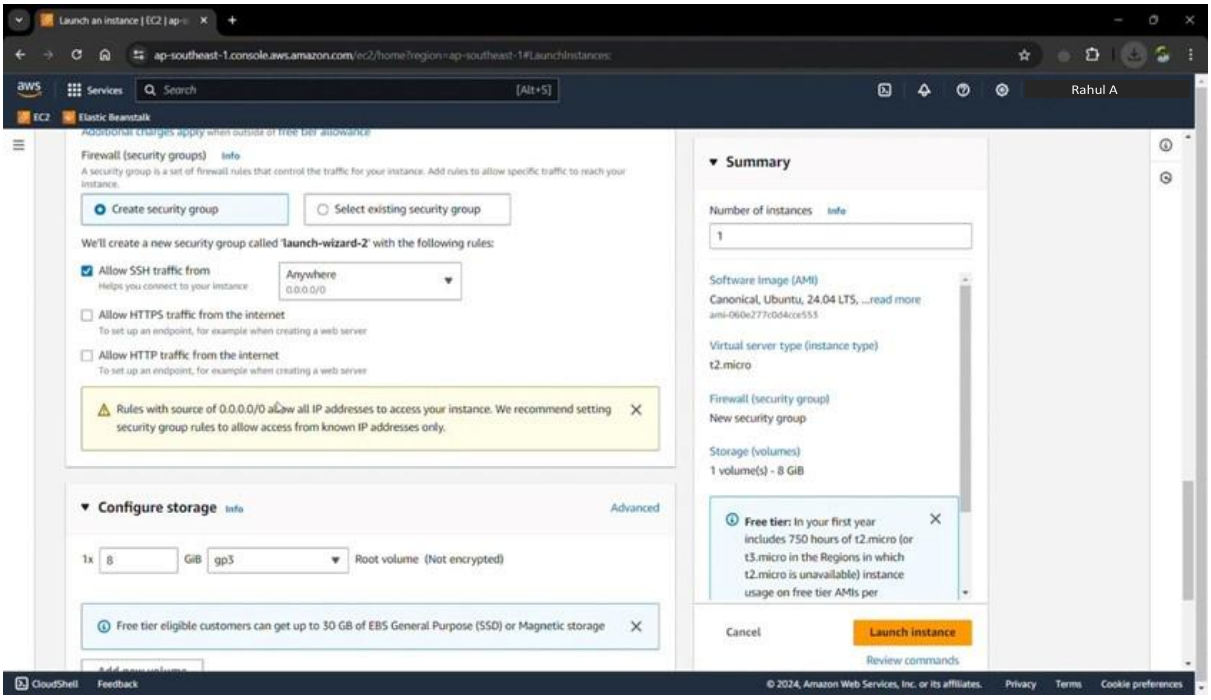
Step 2: Create an instance with Ubuntu OS.



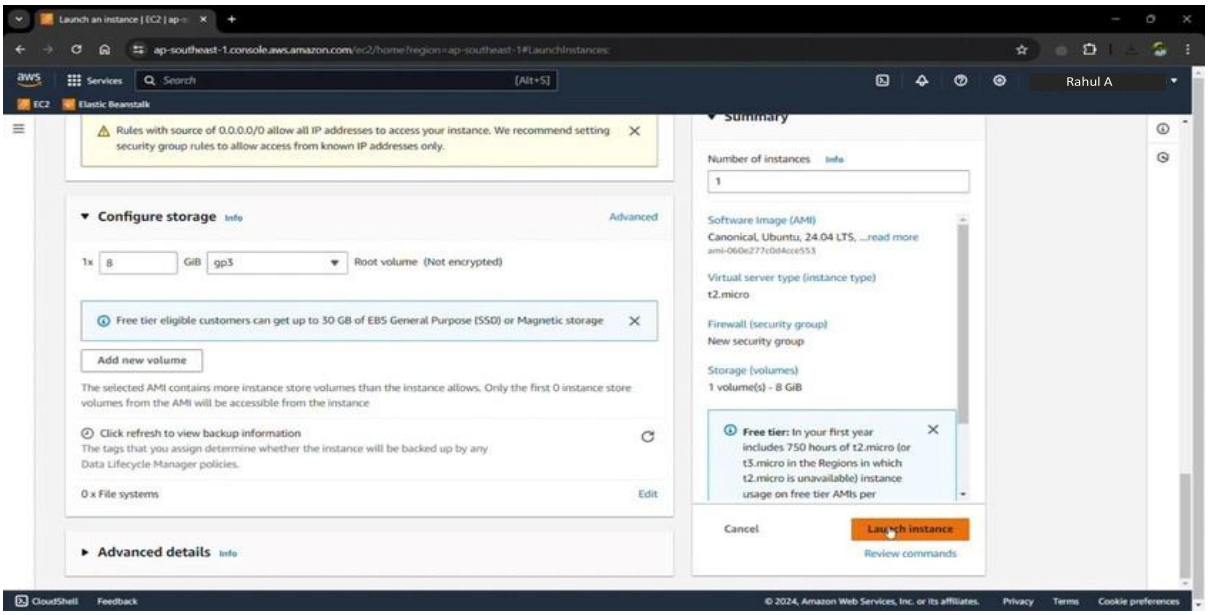
Step 3: Create a keypad for accessing the instances.



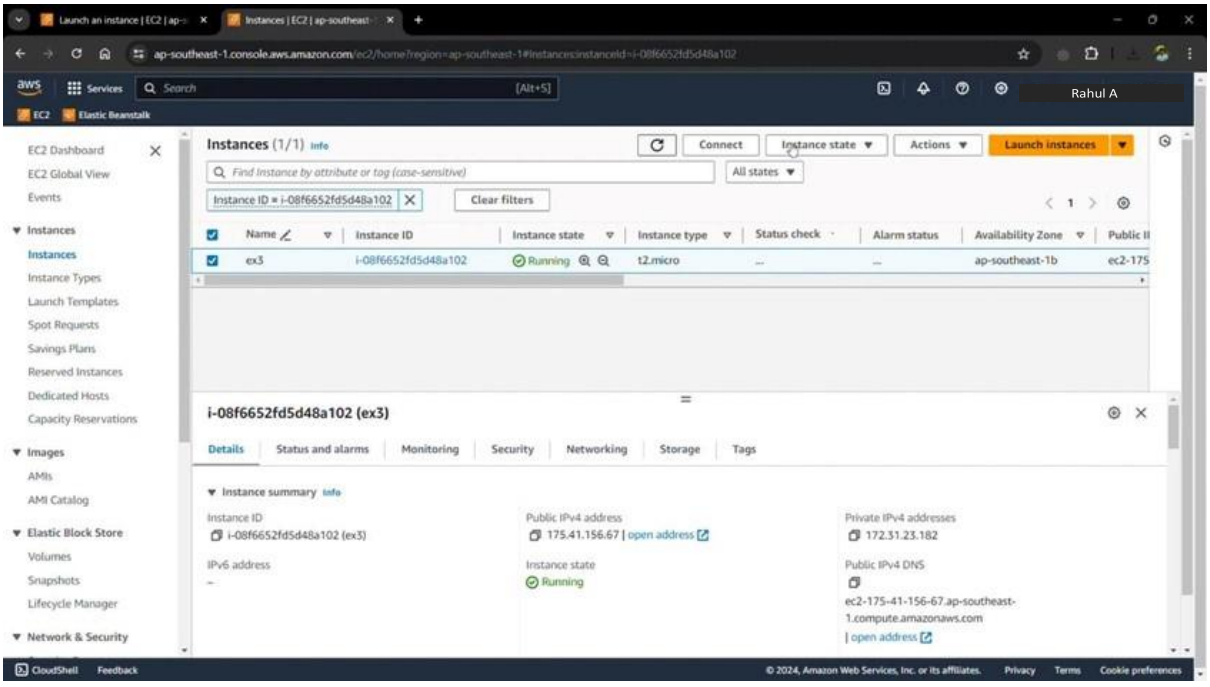
Step 4: For security group, leave as default.



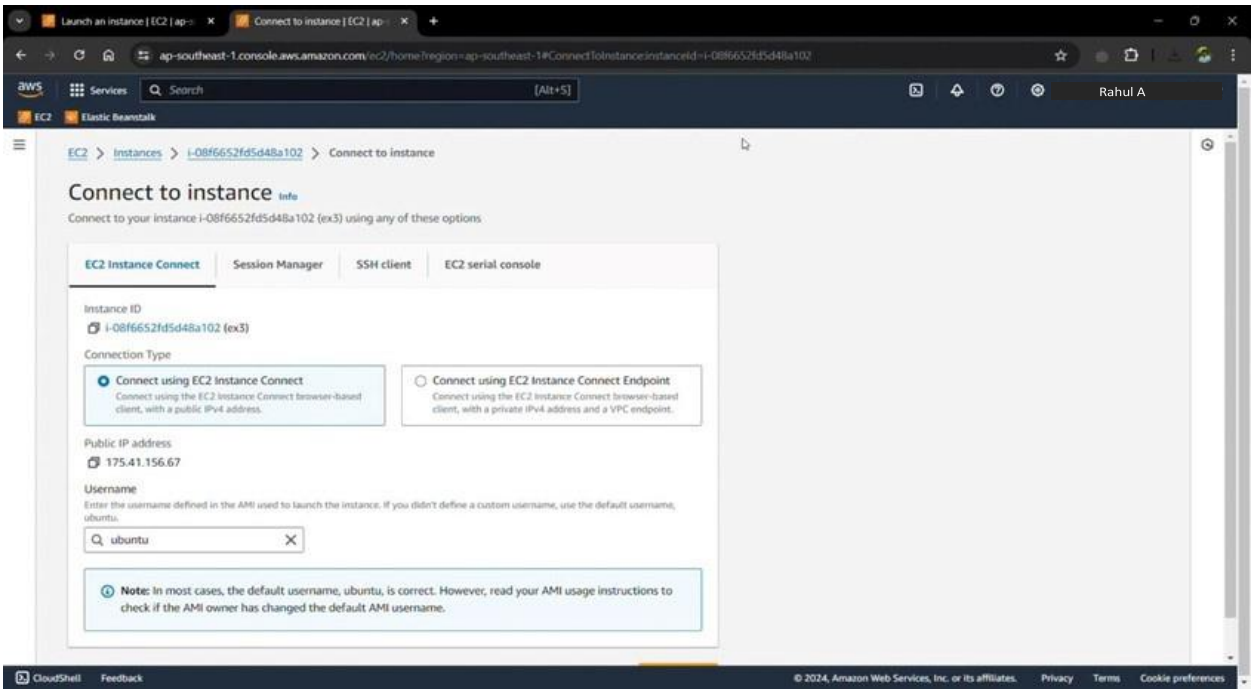
Step 5: Click launch instances.



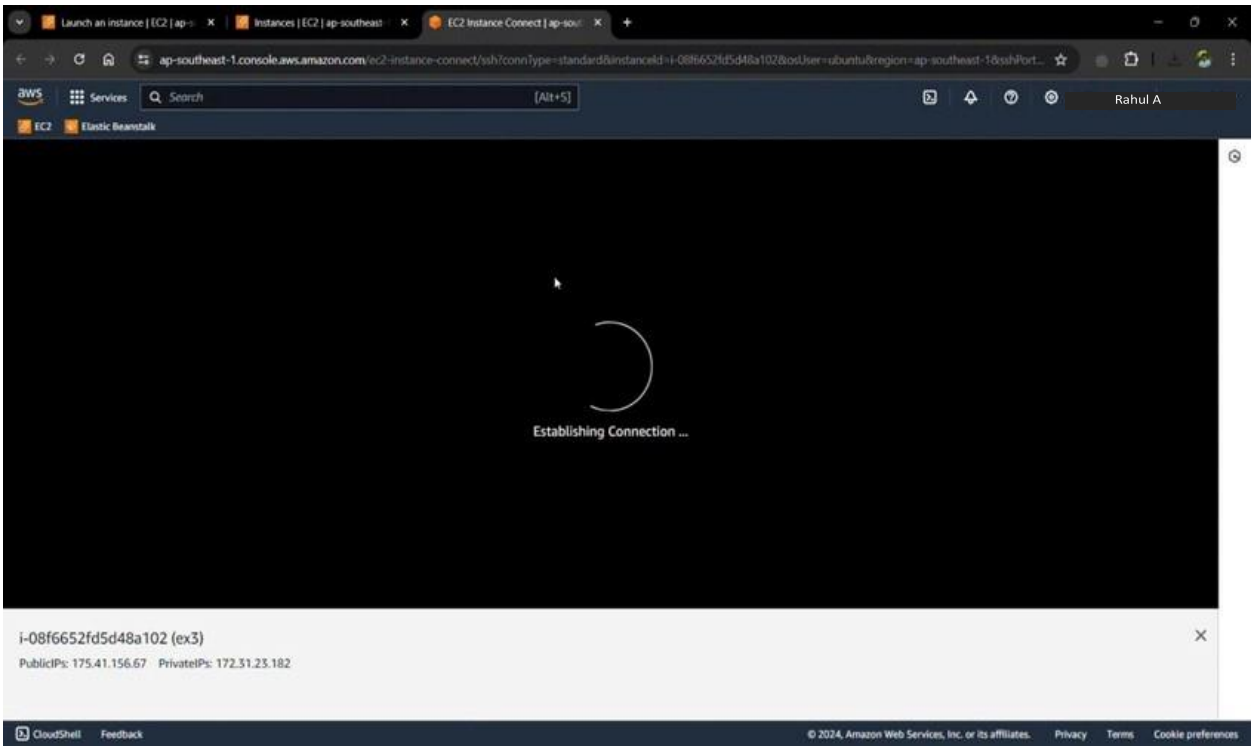
Step 6: Select the instance to connect.



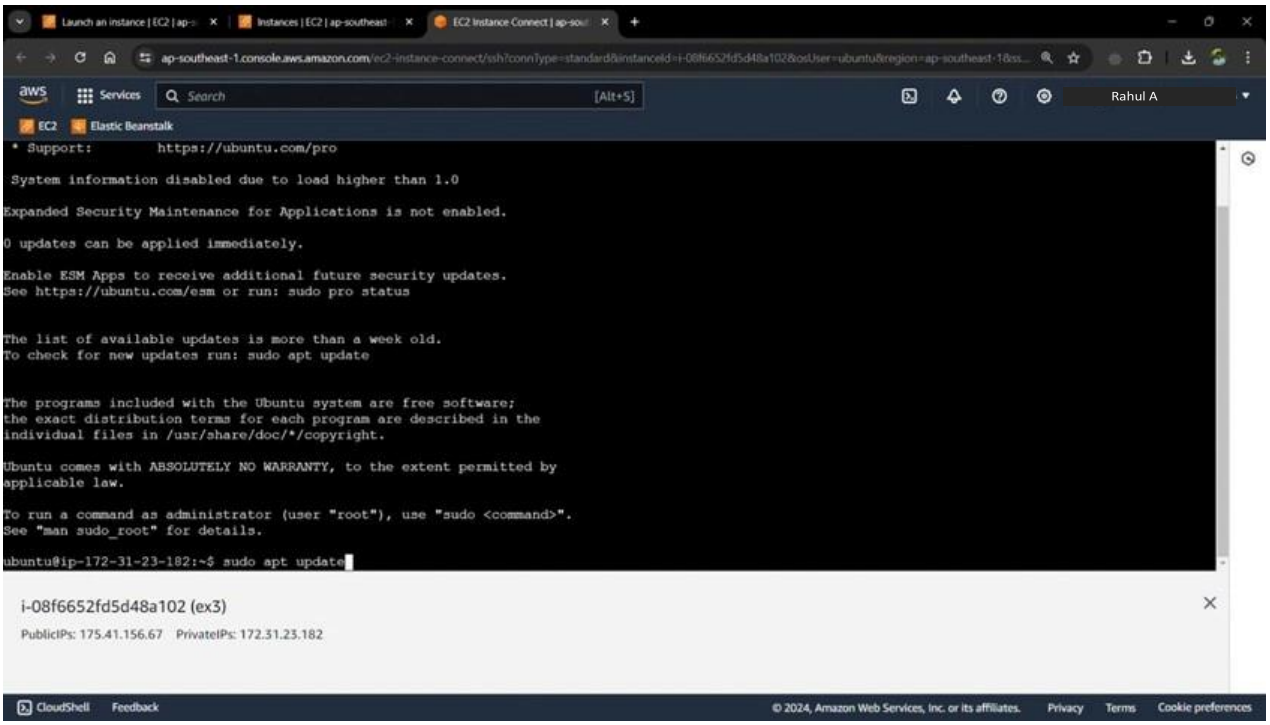
Step 7: Connect the instance.



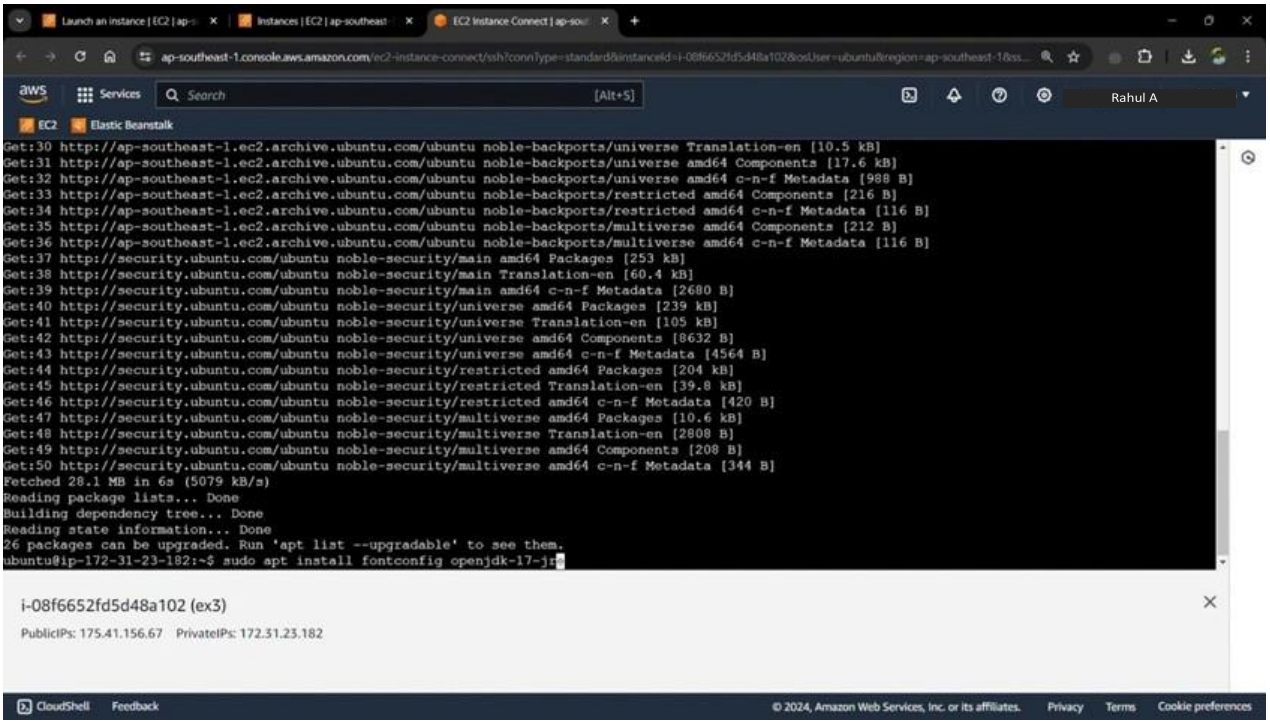
Step 8: Connection has been established.



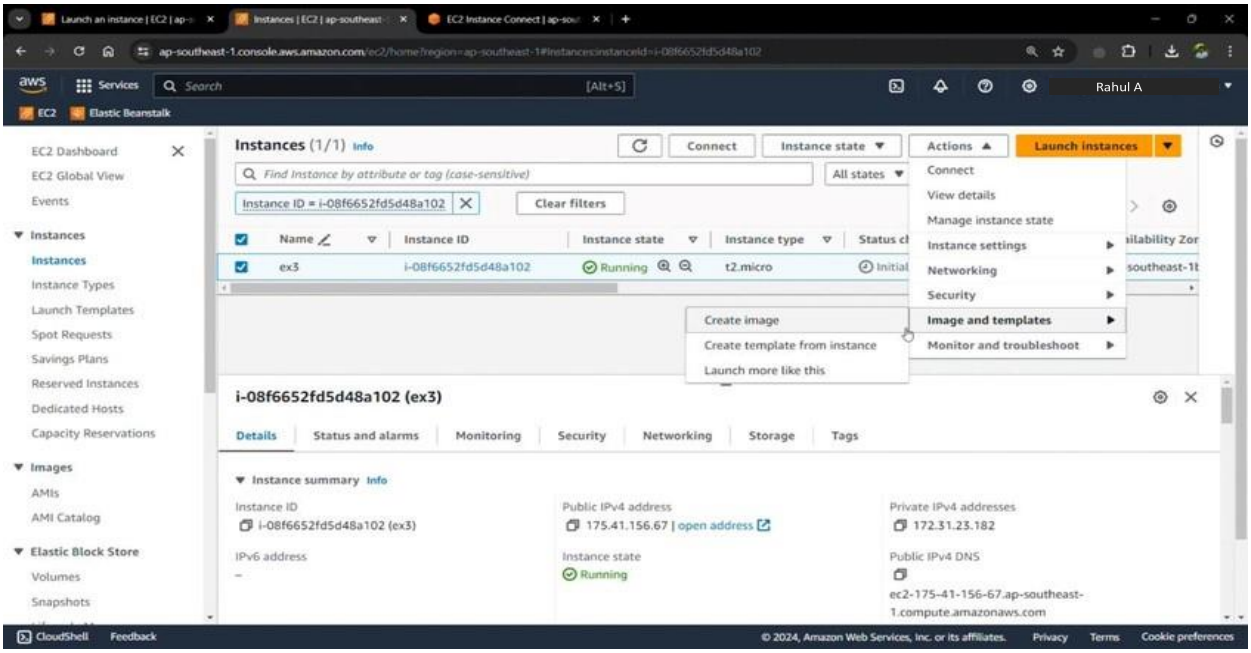
Step 9: Log into Ubuntu OS and update the system.

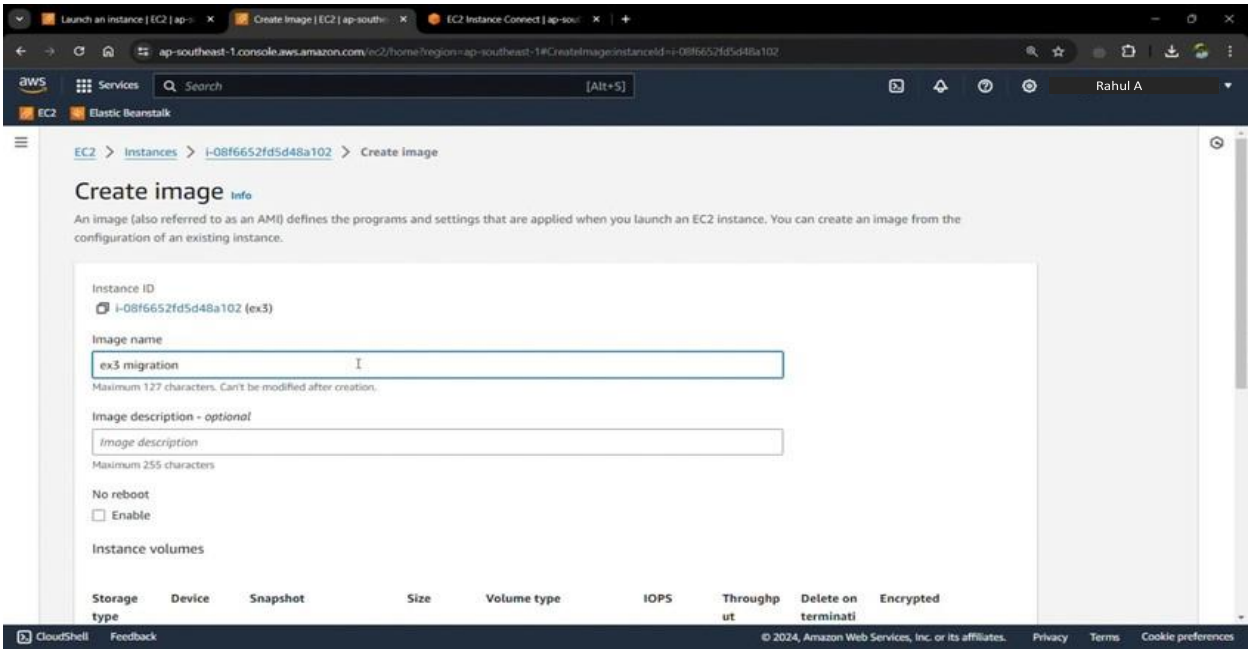


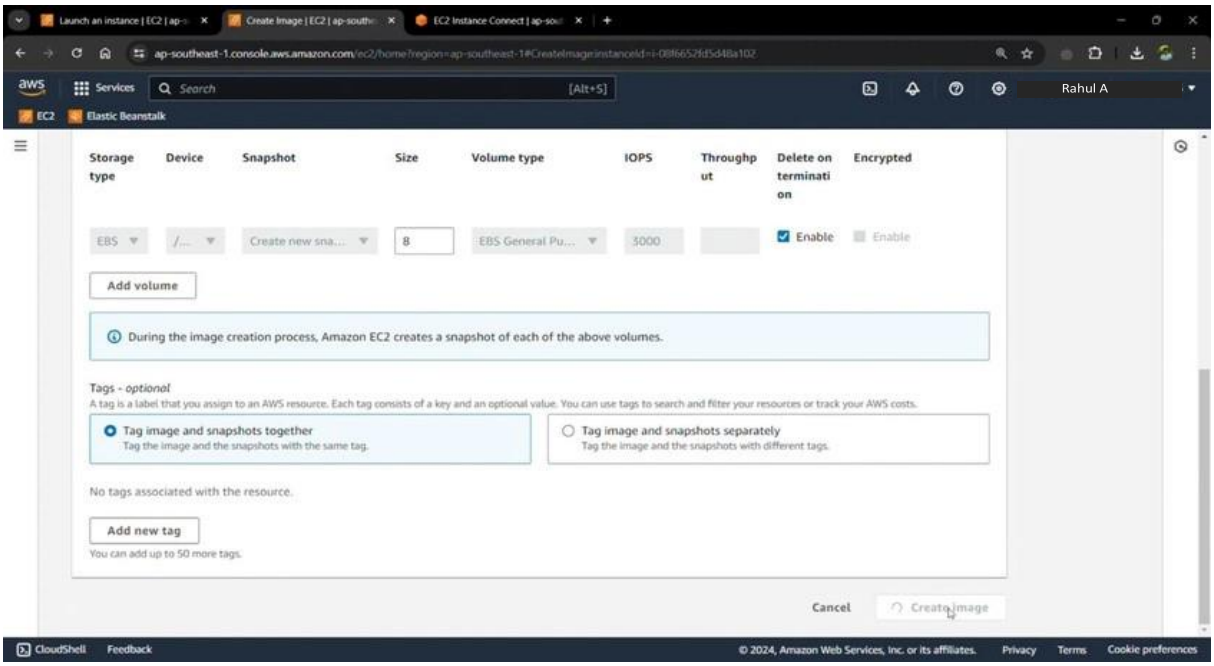
Step 10: Install the java application using JDK.

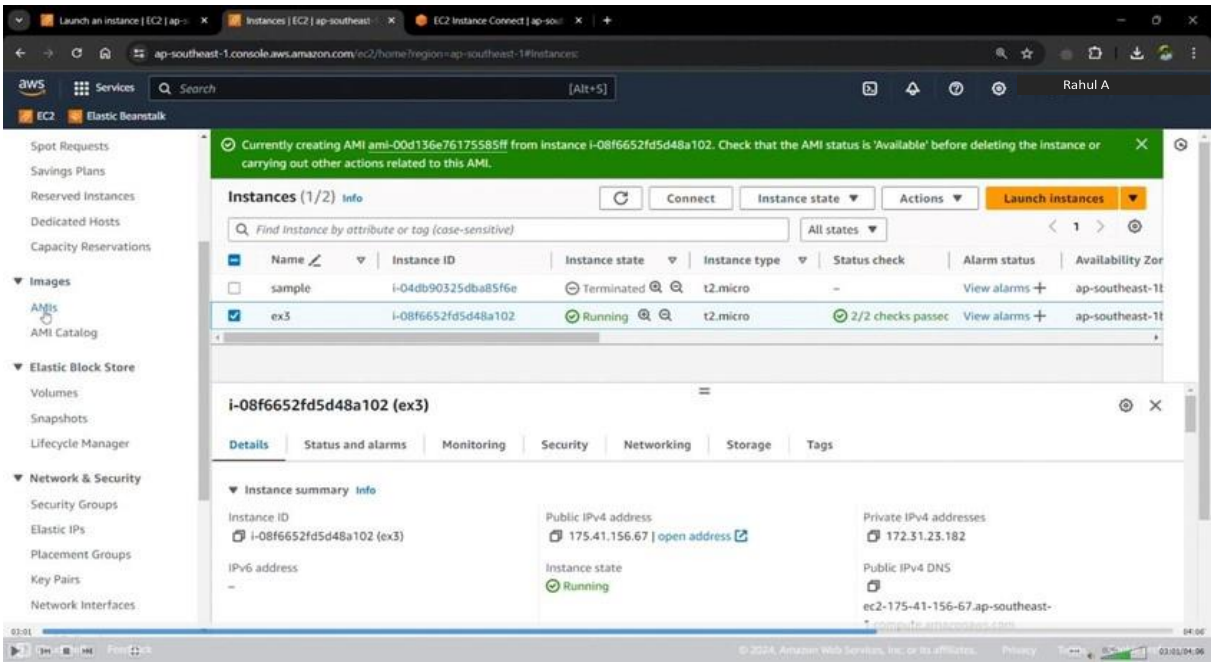


Step 11: Create an image for the instance.

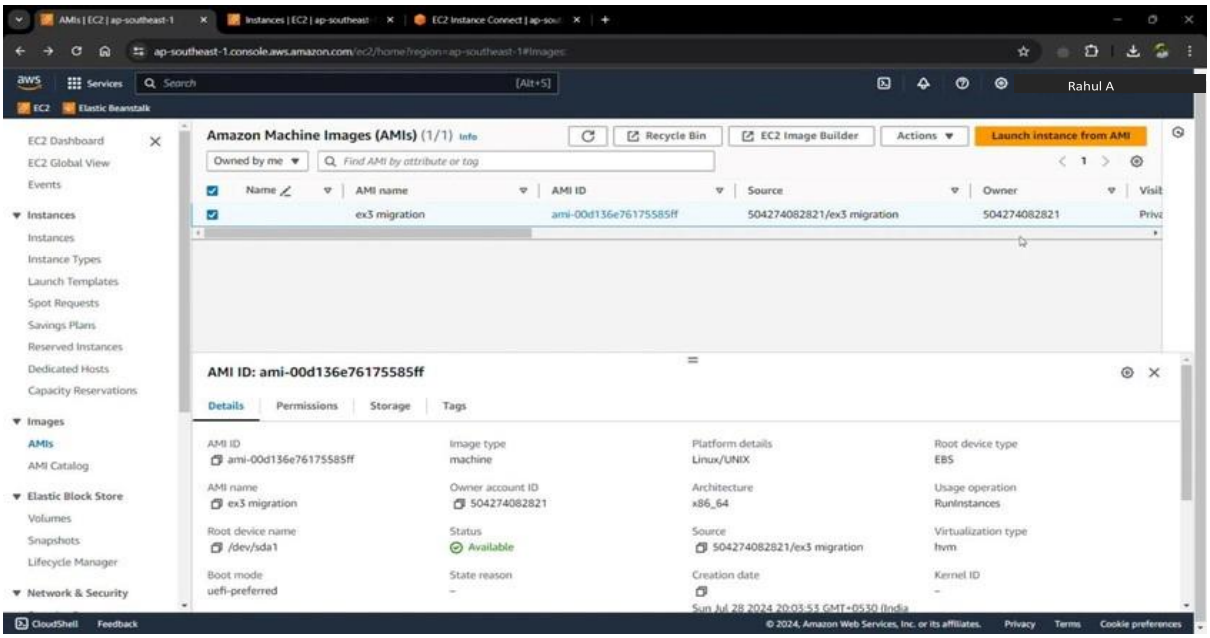




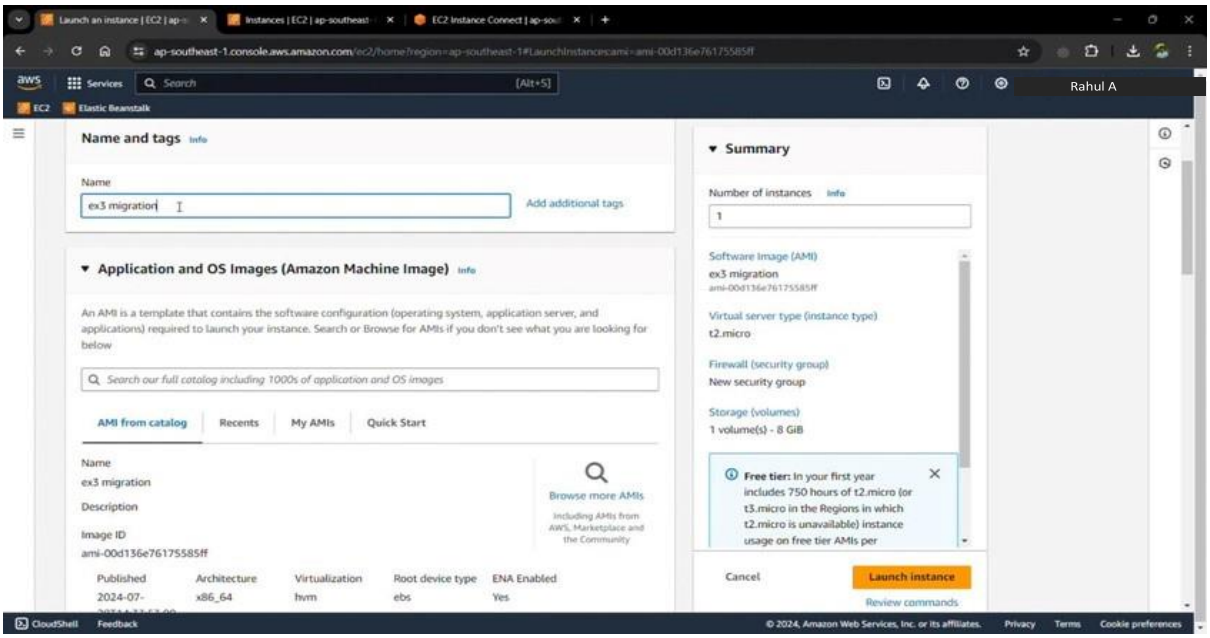

Launch an instance | EC2 | ap-s
Create Image | EC2 | ap-southe
EC2 Instance Connect | ap-sou
ap-southeast-1.console.aws.amazon.com/ec2/home?region=ap-southeast-1#CreateImage:instanceId=i-08f6652fd5d48a102
aws
Services
Search
[Alt+S]
Rahul A
EC2
Elastic Beanstalk
Storage type
Device
Snapshot
Size
Volume type
IOPS
Throughput
Delete on termination
Encrypted
EBS
/...
Create new sna...
8
EBS General Pu...
3000
Enable
Enable
Add volume
During the image creation process, Amazon EC2 creates a snapshot of each of the above volumes.
Tags - optional
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
Tag image and snapshots together
Tag the image and the snapshots with the same tag.
Tag image and snapshots separately
Tag the image and the snapshots with different tags.
No tags associated with the resource.
Add new tag
You can add up to 50 more tags.
Cancel
Create image
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


Launch an instance | EC2 | ap-s
Instances | EC2 | ap-southeast
EC2 Instance Connect | ap-sou
ap-southeast-1.console.aws.amazon.com/ec2/home?region=ap-southeast-1#Instances:
aws
Services
Search
[Alt+S]
Rahul A
EC2
Elastic Beanstalk
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
Currently creating AMI ami-00d136e76175585ff from instance i-08f6652fd5d48a102. Check that the AMI status is 'Available' before deleting the instance or carrying out other actions related to this AMI.
Instances (1/2) Info
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
All states
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zor
sample
i-04db90325dba85f6e
Terminated
t2.micro
-
View alarms
ap-southeast-1t
ex3
i-08f6652fd5d48a102
Running
t2.micro
2/2 checks passed
View alarms
ap-southeast-1t
i-08f6652fd5d48a102 (ex3)
Details
Status and alarms
Monitoring
Security
Networking
Storage
Tags
Instance summary Info
Instance ID
i-08f6652fd5d48a102 (ex3)
Public IPv4 address
175.41.156.67 | open address
Private IPv4 addresses
172.31.23.182
IPv6 address
-
Instance state
Running
Public IPv4 DNS
ec2-175-41-156-67.ap-southeast-

Step 14: Select the AMI.

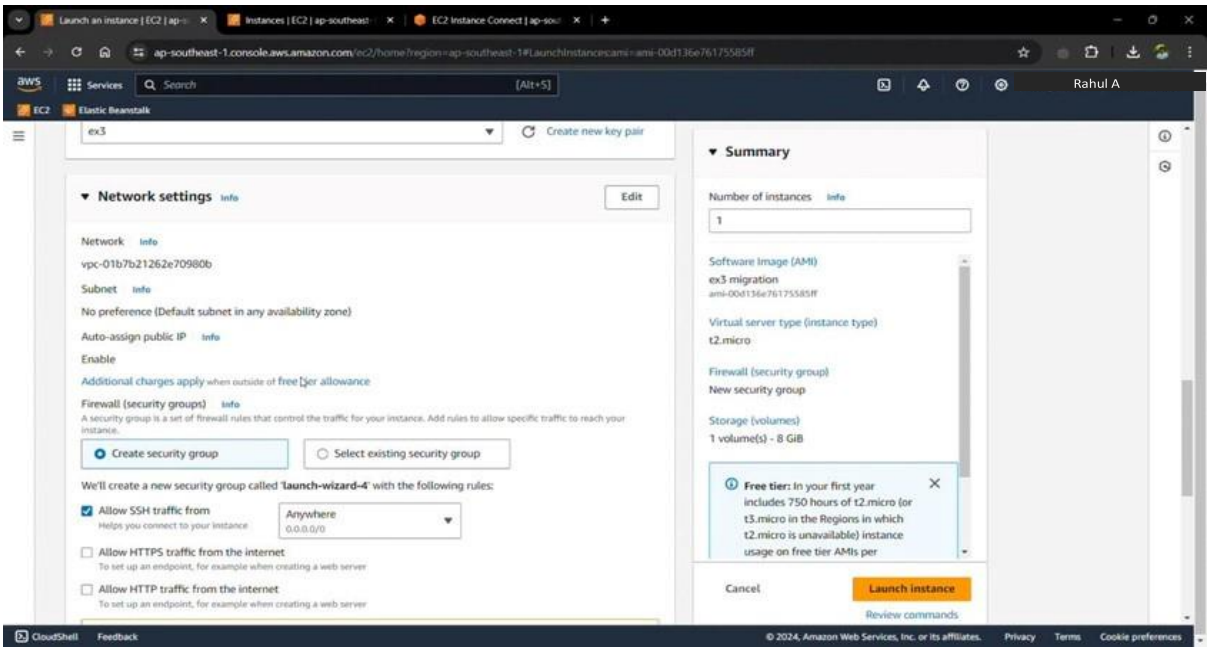


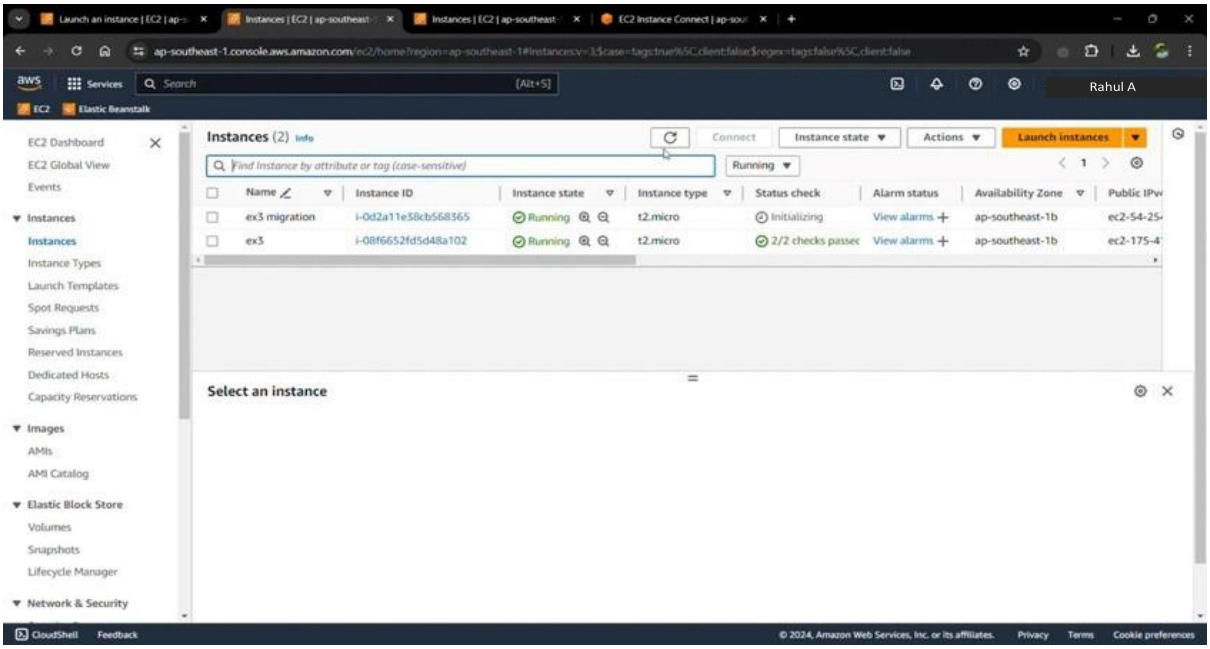
Step 15: Launch the instance using the created AMI.



Step 16: Click the launch instances.

Step 17: Successfully launched the instance using AMI.





Evaluation by faculty	
Criteria	**Marks**
Preparation	/20
Program	/25
Output/Result	/20
Viva	/10
Total	/75
Faculty Signature with Date	

RESULT: