Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598

Assignment (30 points)

Complete AWS Academy Lab Project - Cloud Security Builder: Securing and Monitoring Resources with AWS

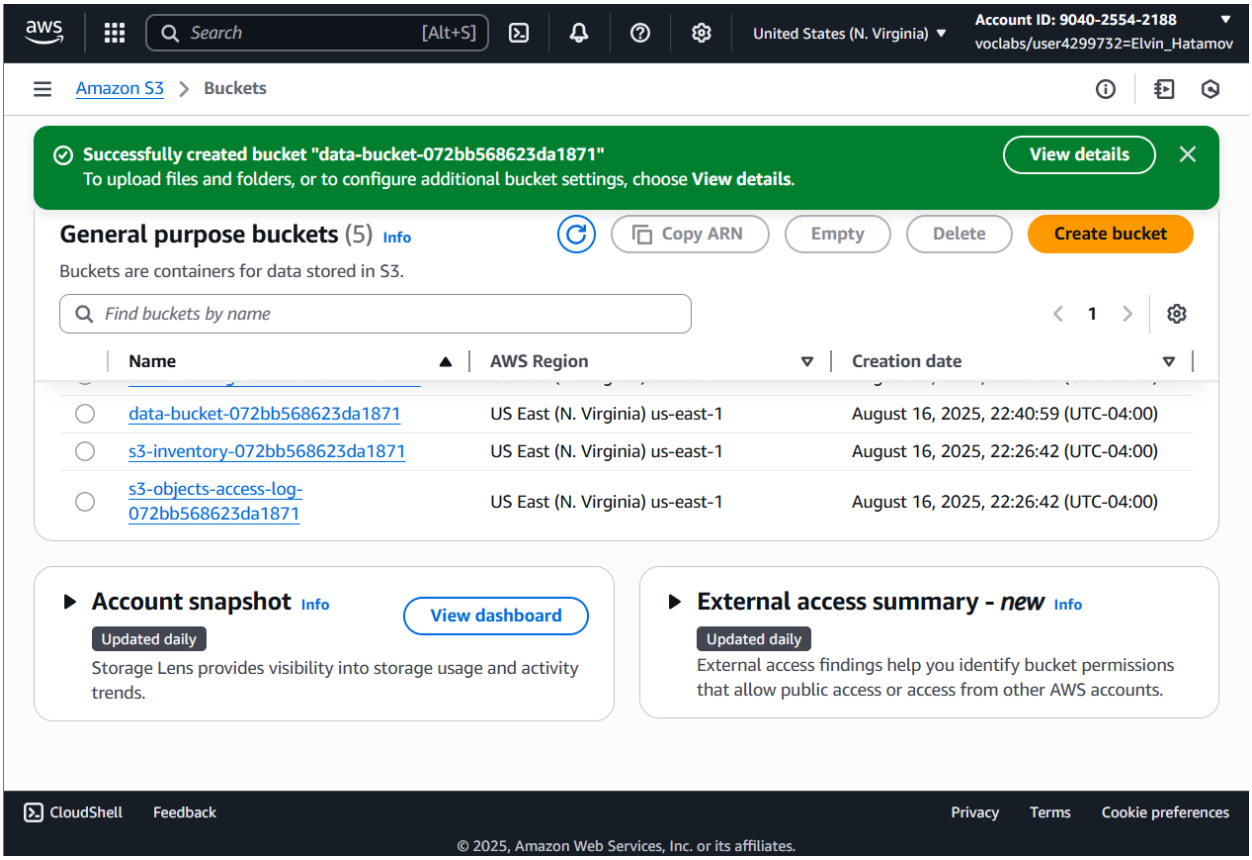
Paste screenshot of the AWS Management Console after completing each task.

Phase 1: Securing data in Amazon S3

Task 1.1: Create a bucket, apply a bucket policy, and test access

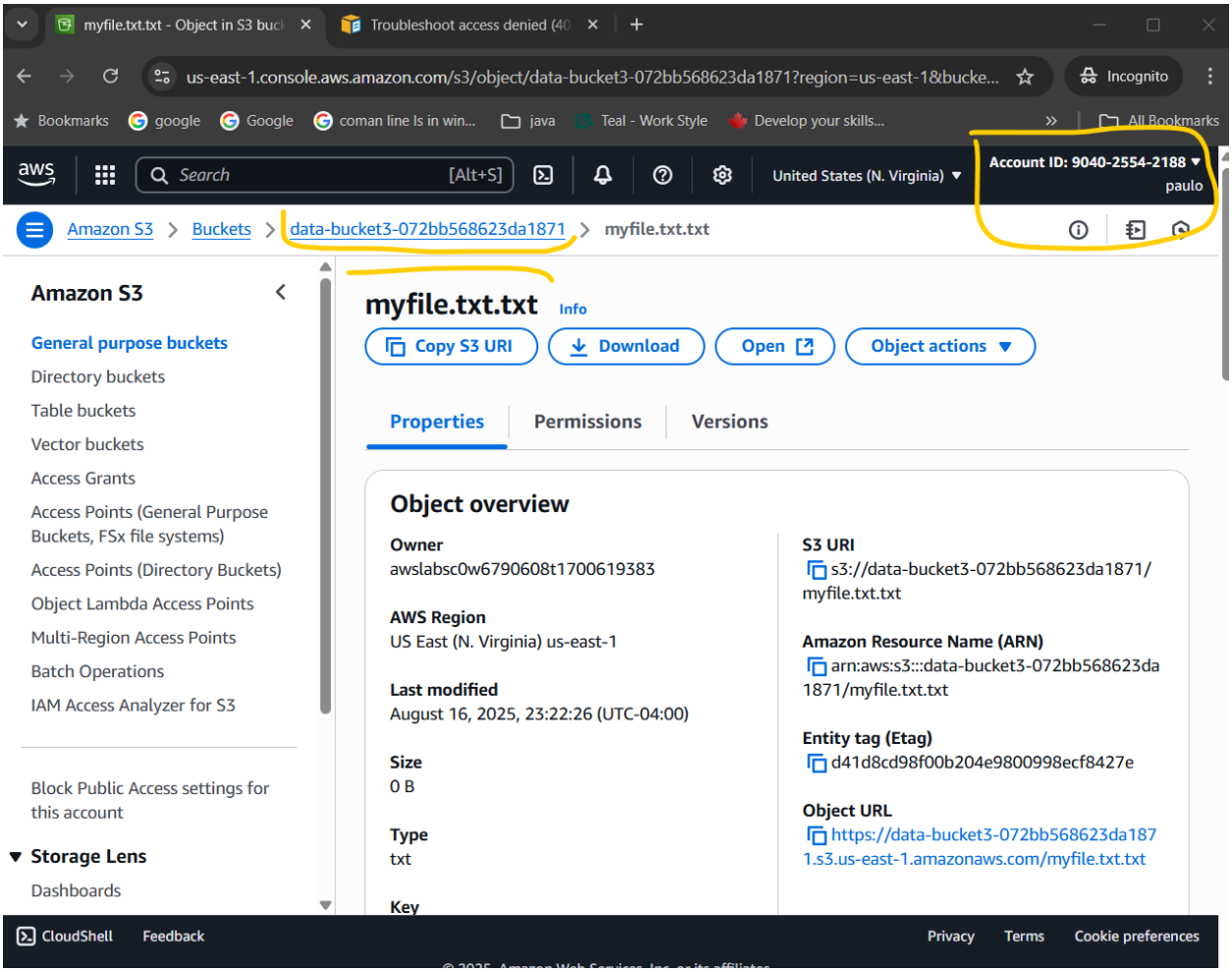
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



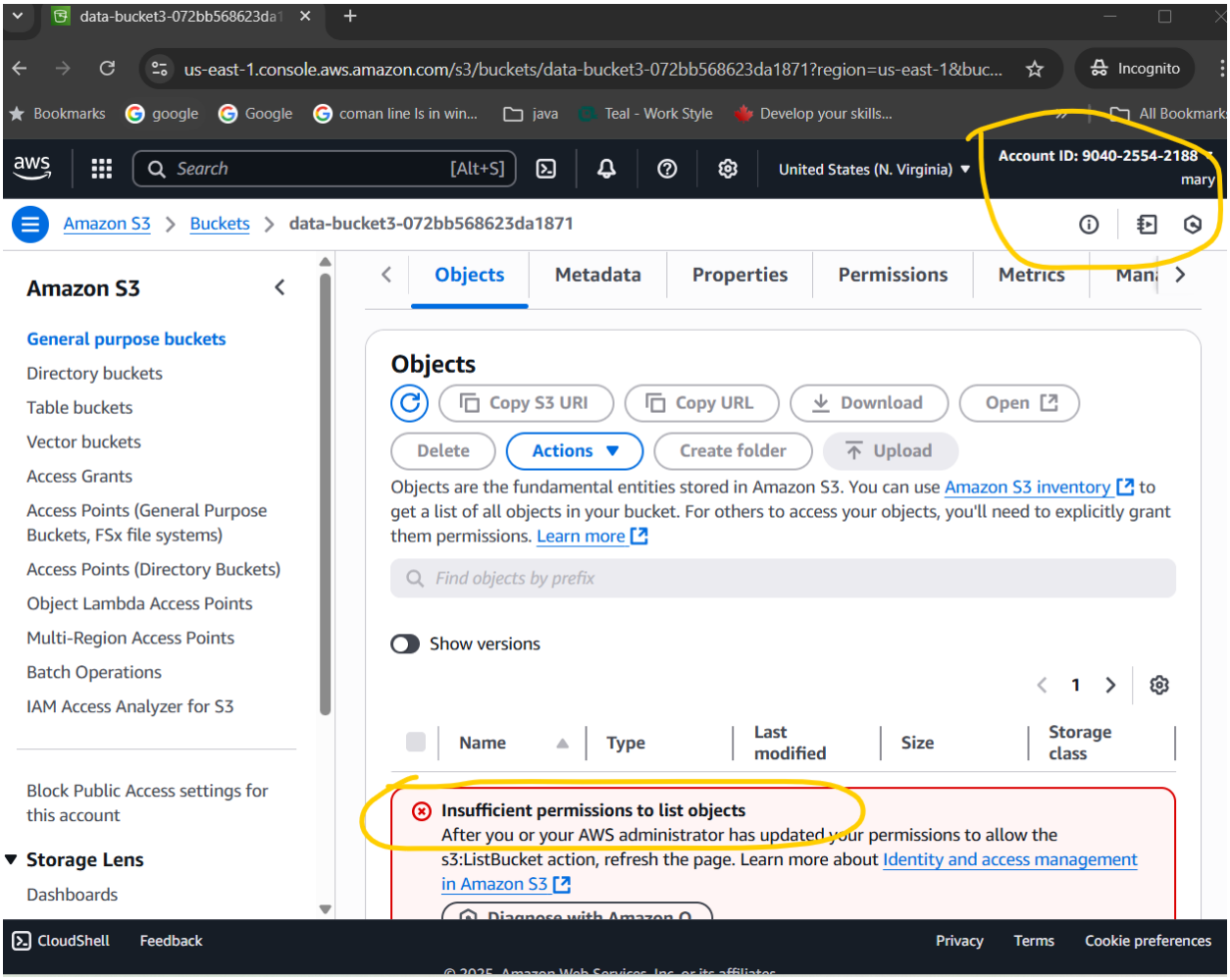
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

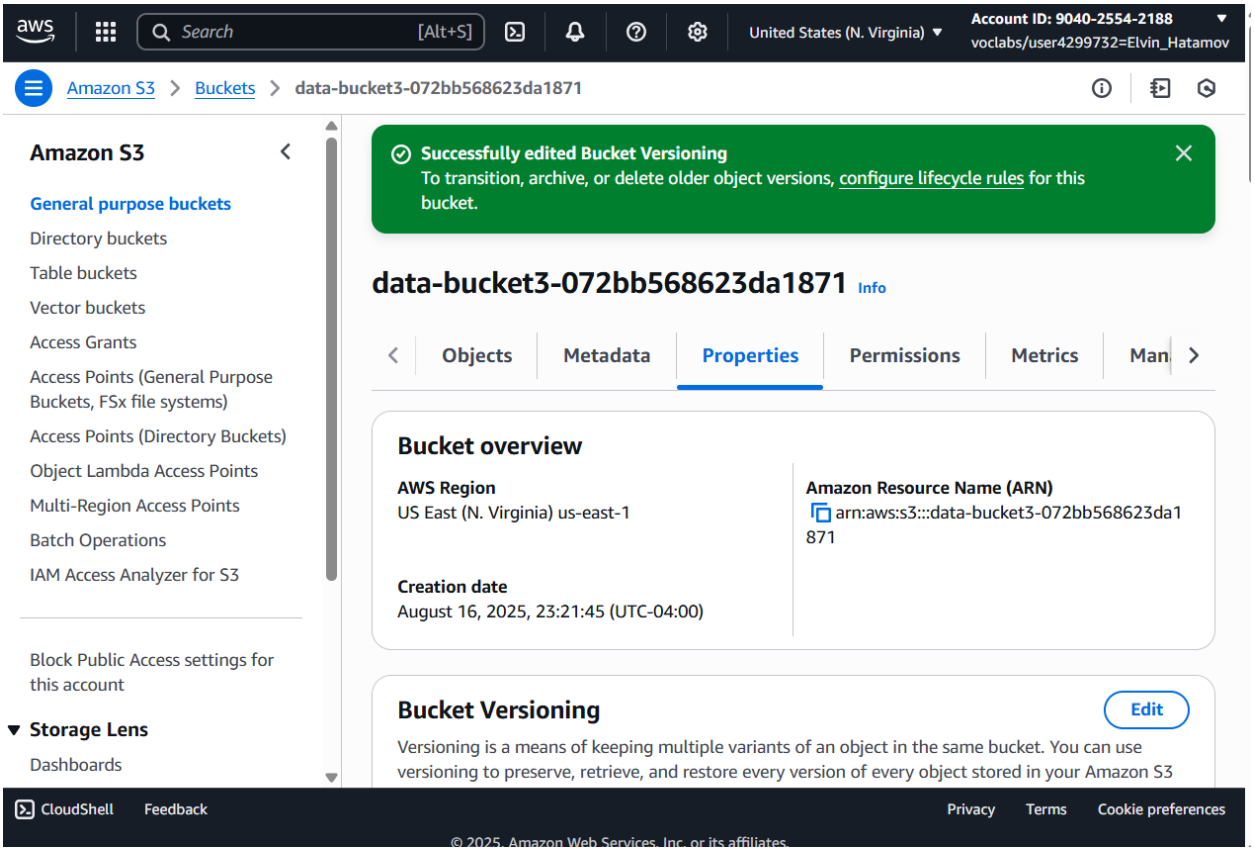
Term: SUMMER 2025



Task 1.2: Enable versioning and object-level logging on a bucket

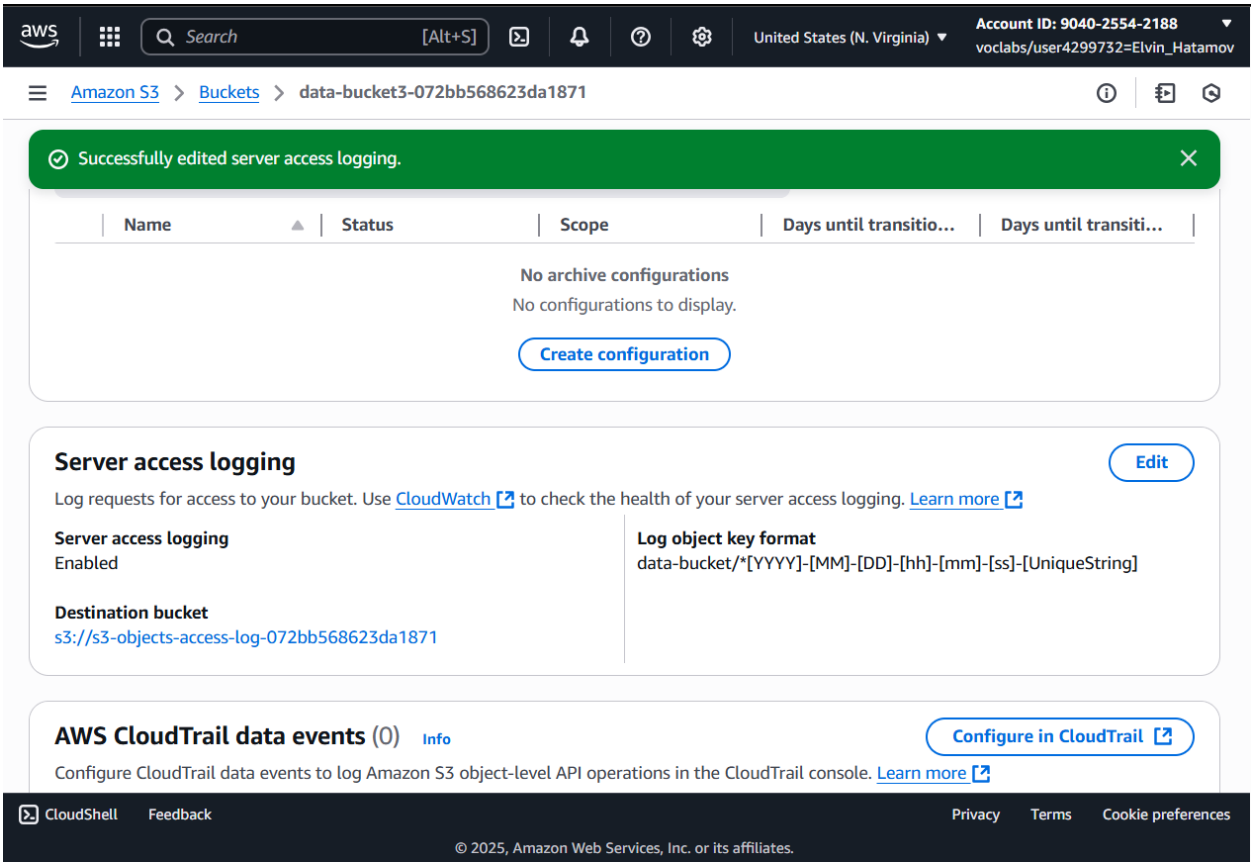
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

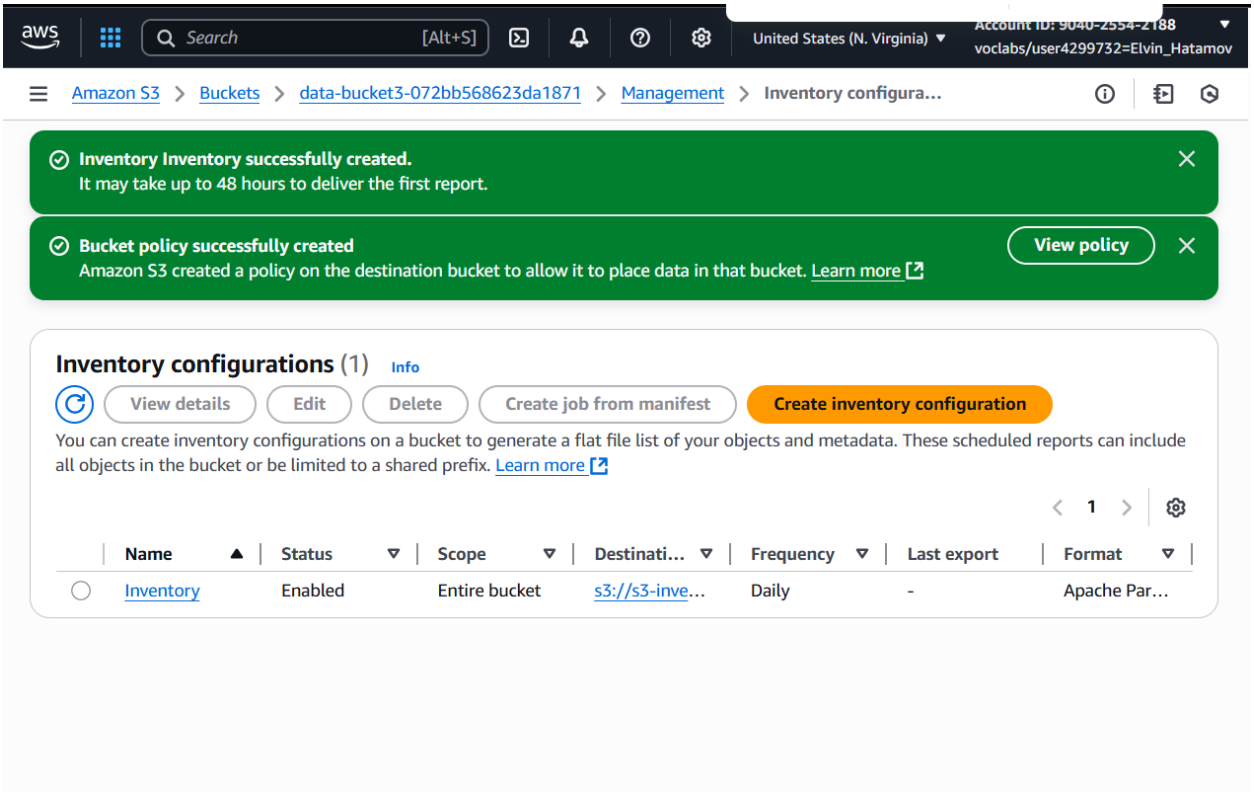
Term: SUMMER 2025



Task 1.3: Implement the S3 Inventory feature on a bucket

Student Name: ELVIN HATAMOV
Student ID: 101150598

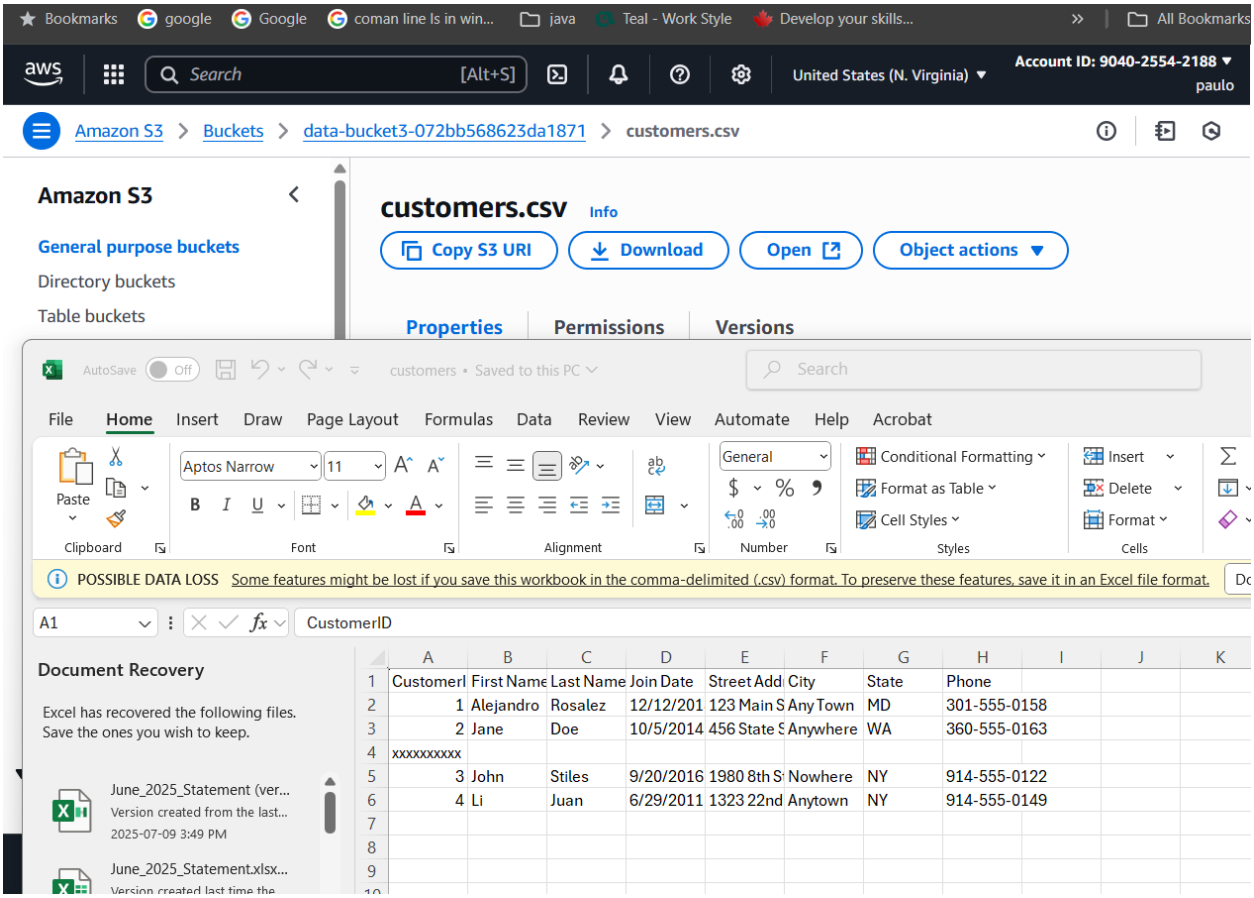
Term: SUMMER 2025



Task 1.4: Confirm that versioning works as intended

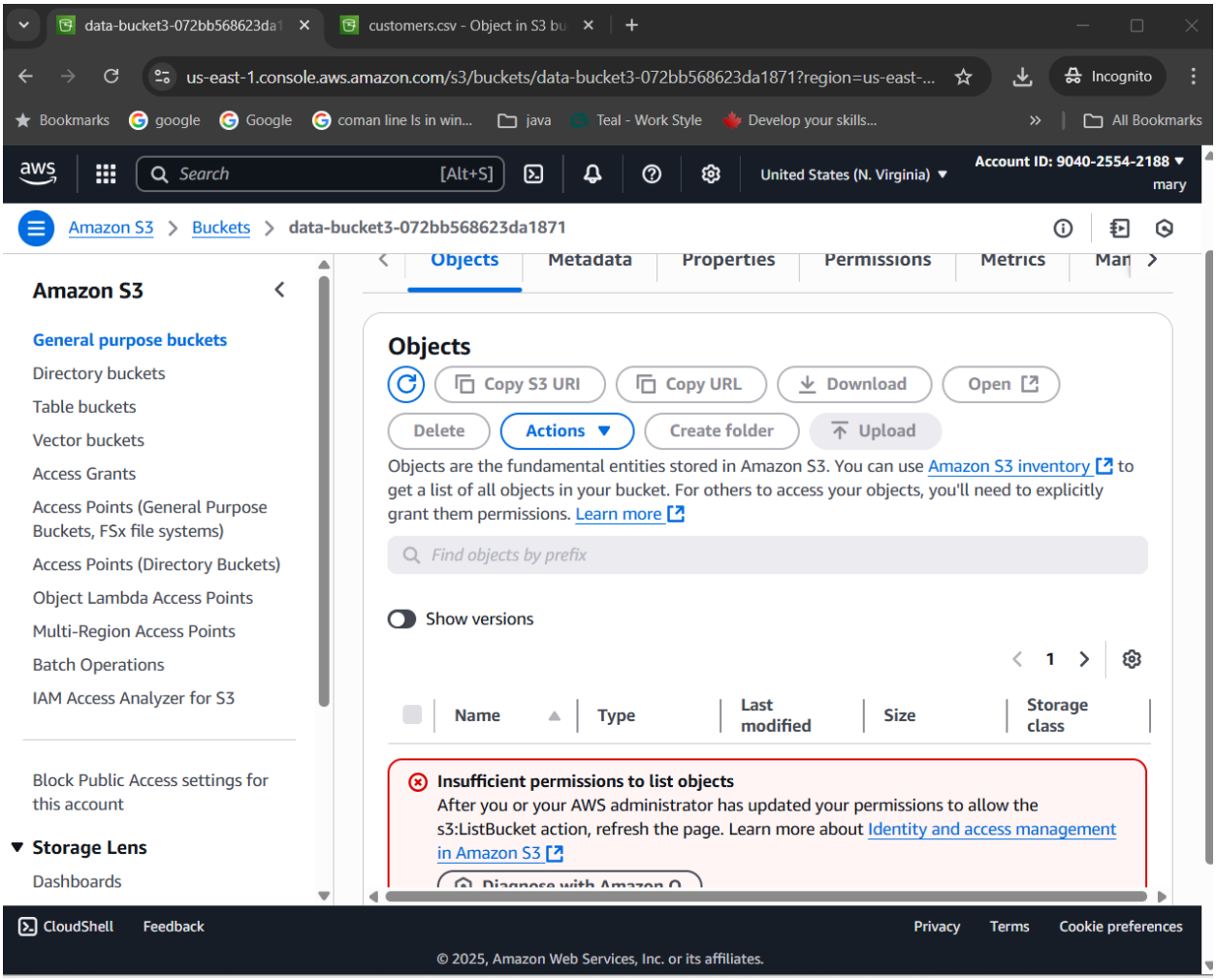
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

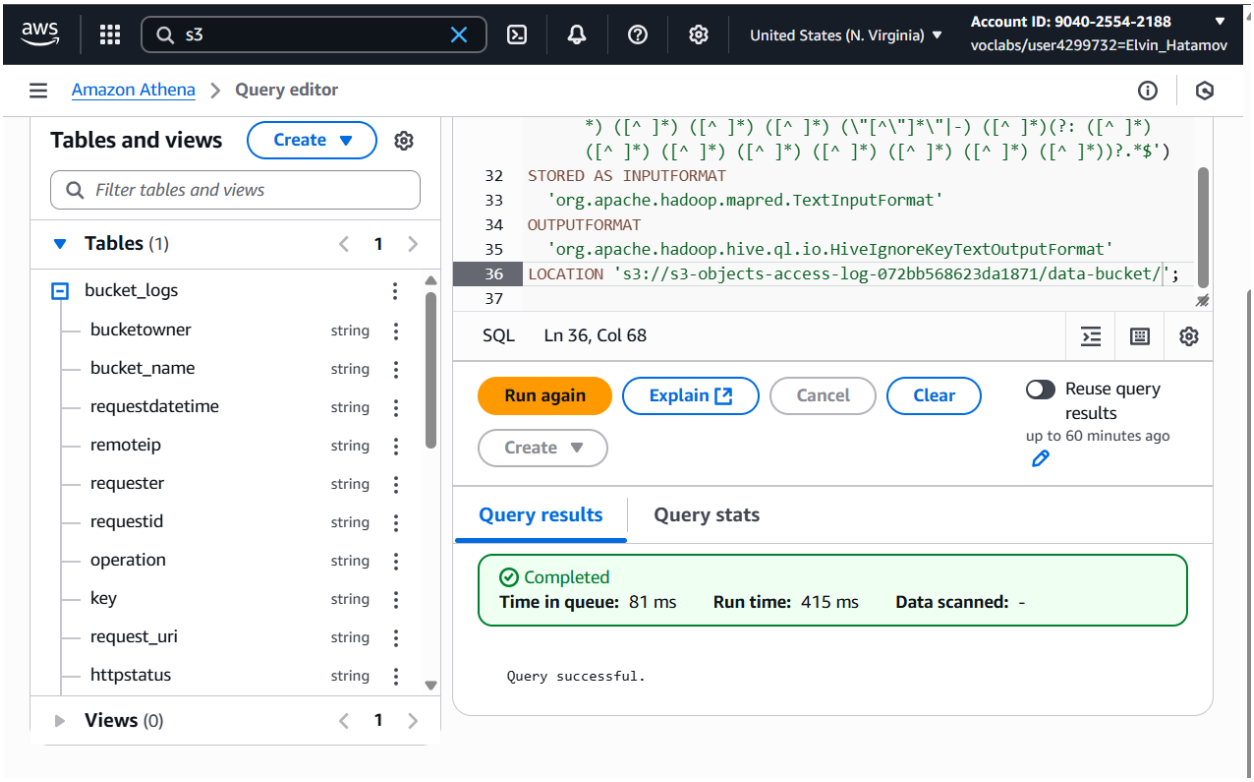
Term: SUMMER 2025



Task 1.5: Confirm object-level logging and query the access logs by using Athena

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



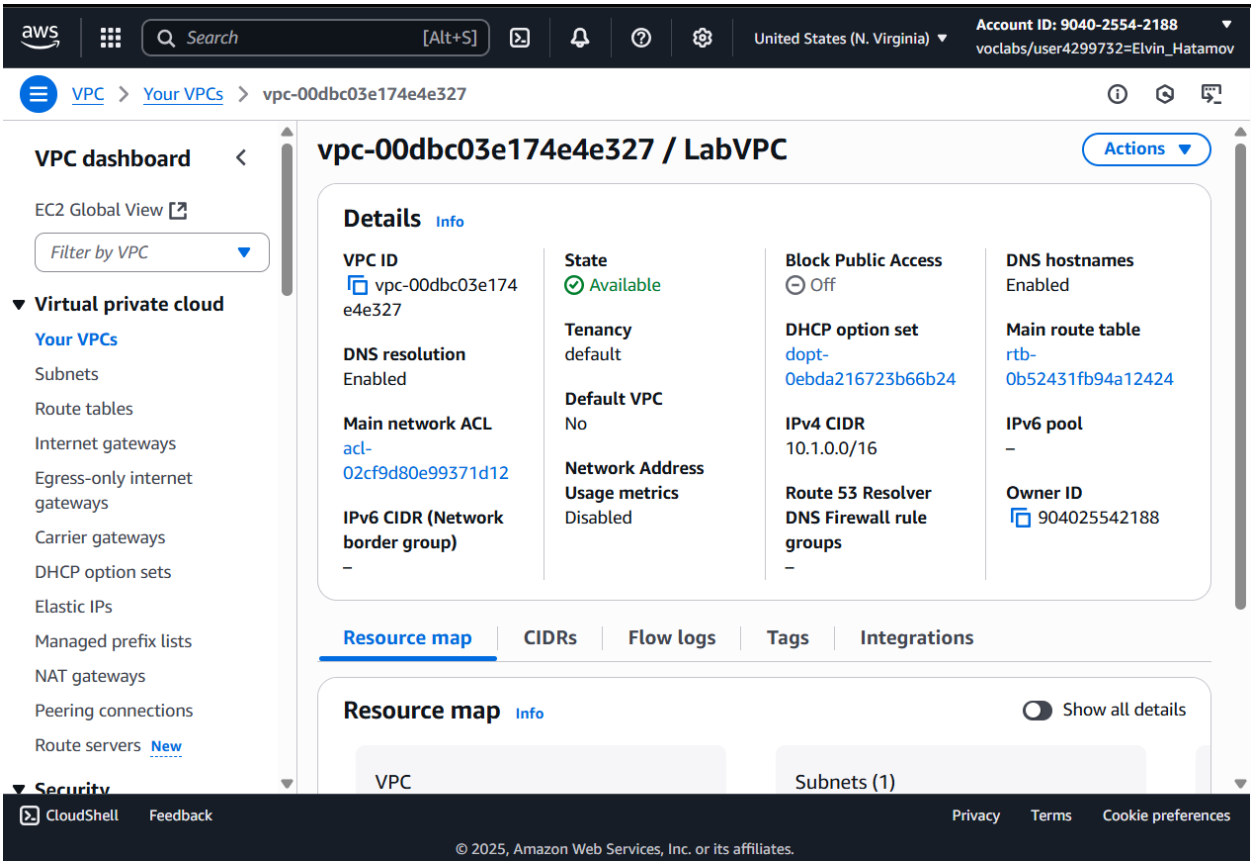
Cost assessment to secure Amazon S3

Phase 2: Securing VPCs

Task 2.1: Review LabVPC and its associated resources

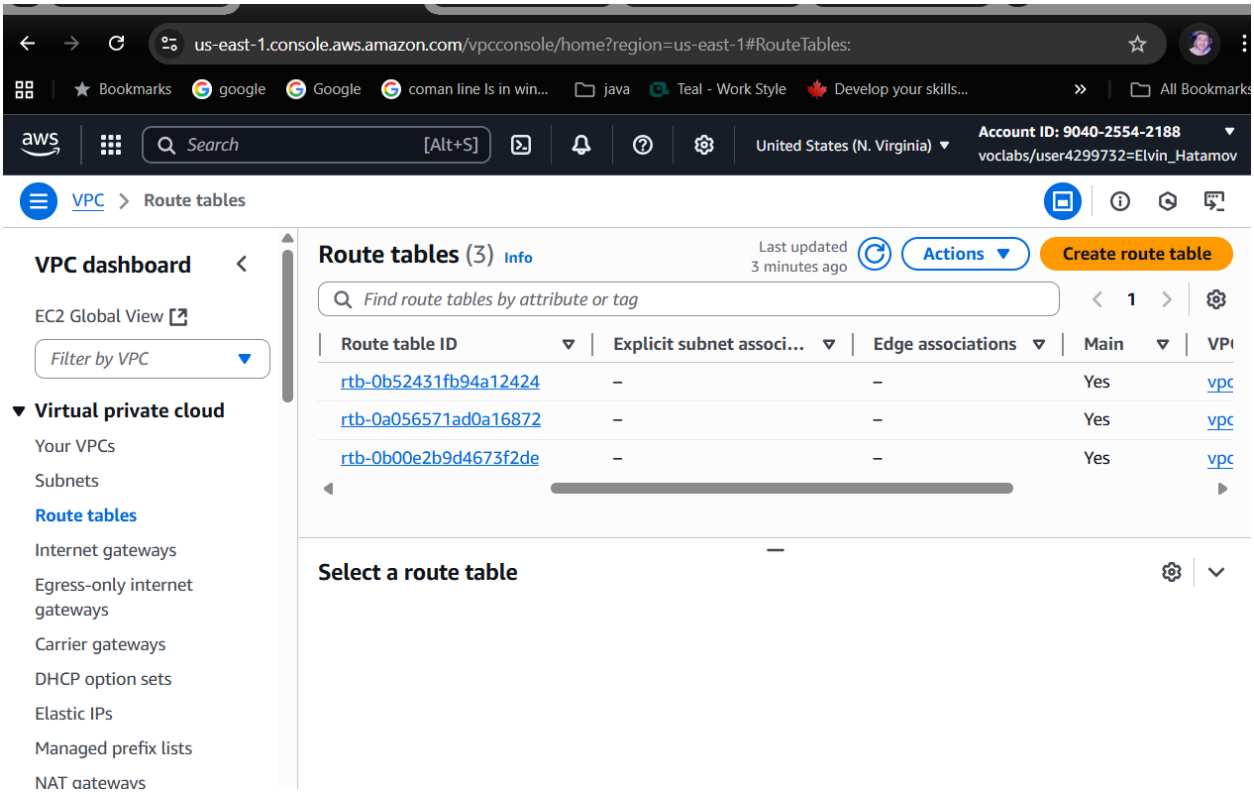
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

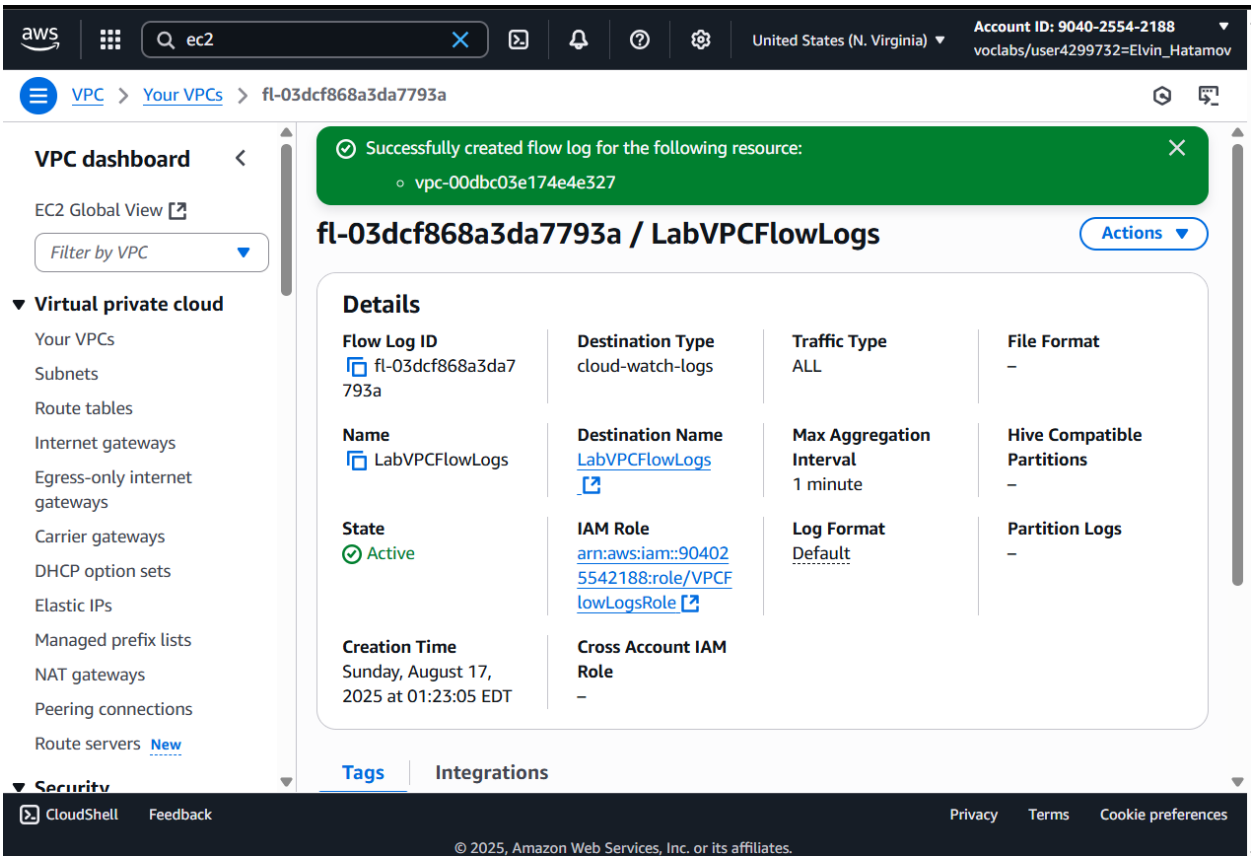
Term: SUMMER 2025



Task 2.2: Create a VPC flow log

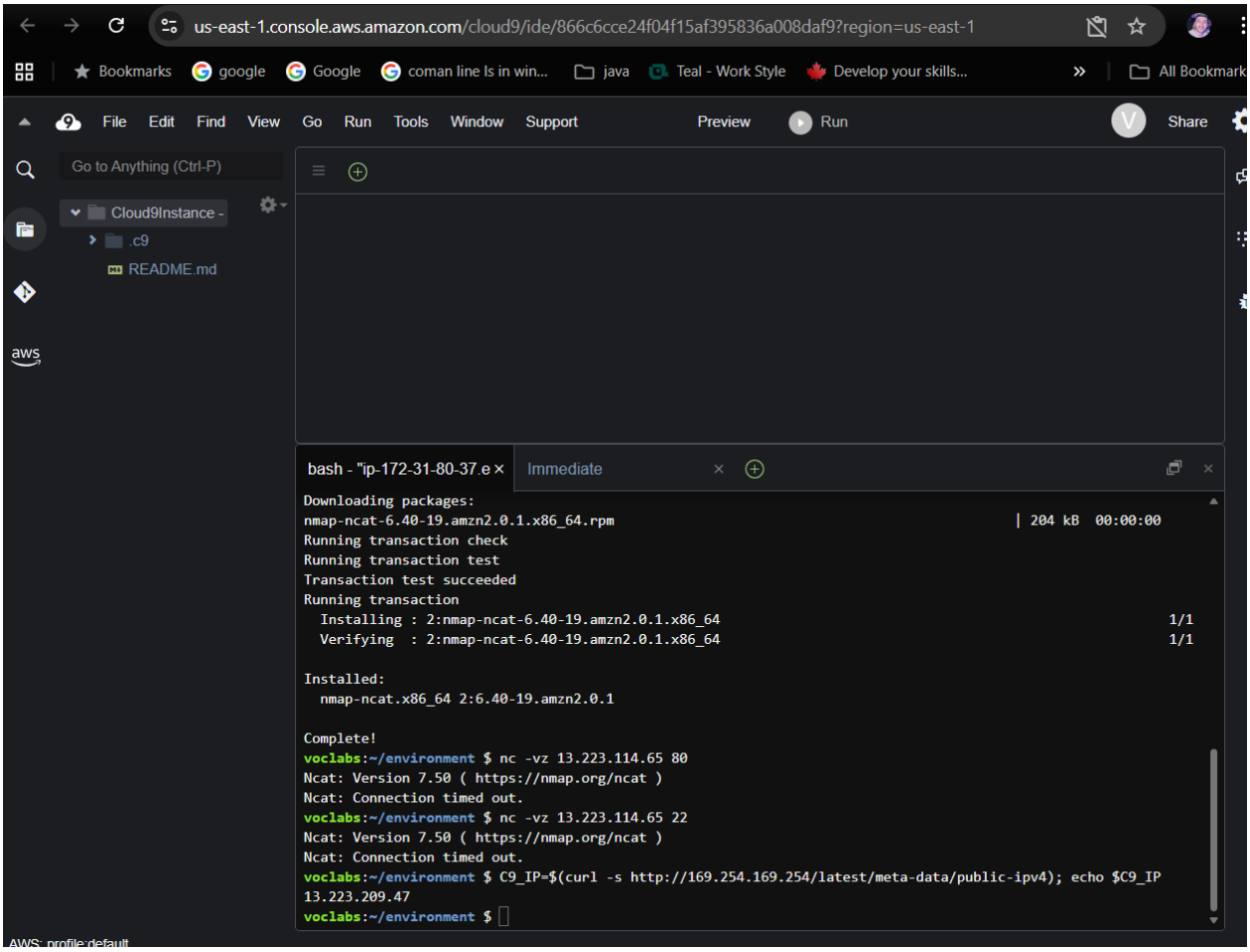
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

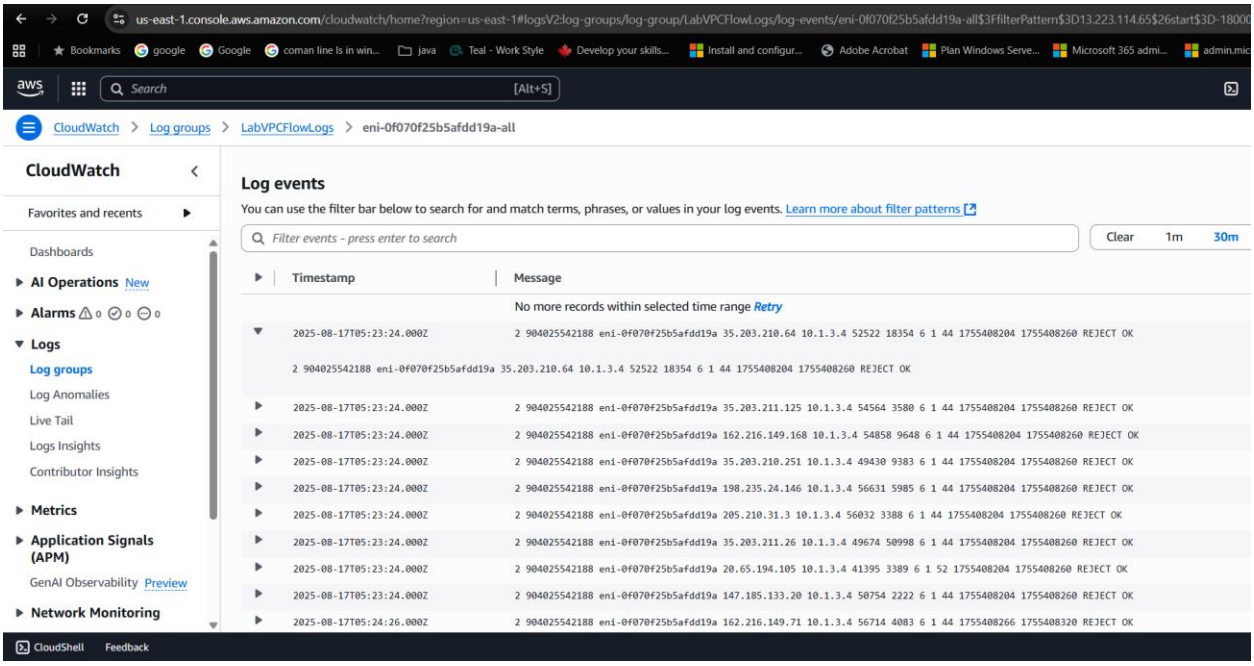


Task 2.3: Access the WebServer instance from the internet and review VPC flow logs in CloudWatch

Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598



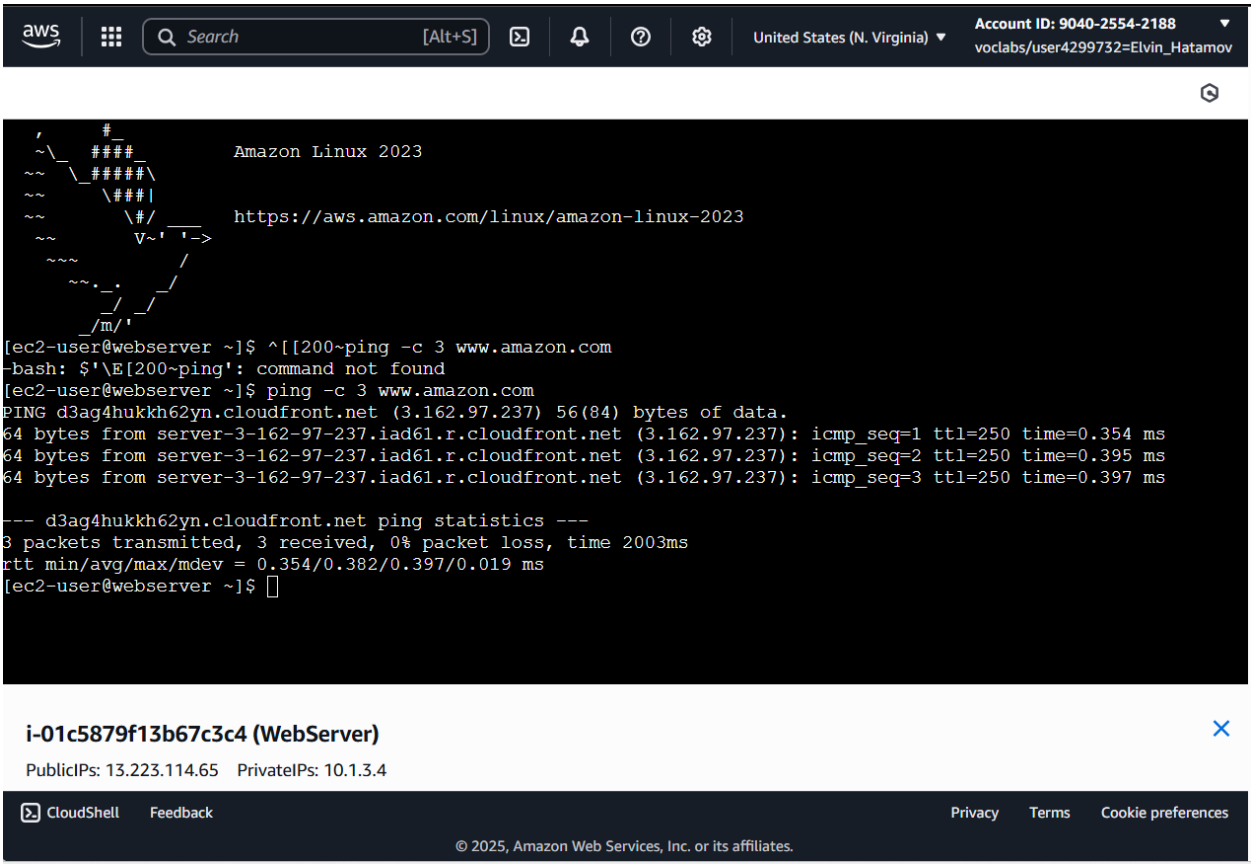
Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598



Task 2.4: Configure route table and security group settings

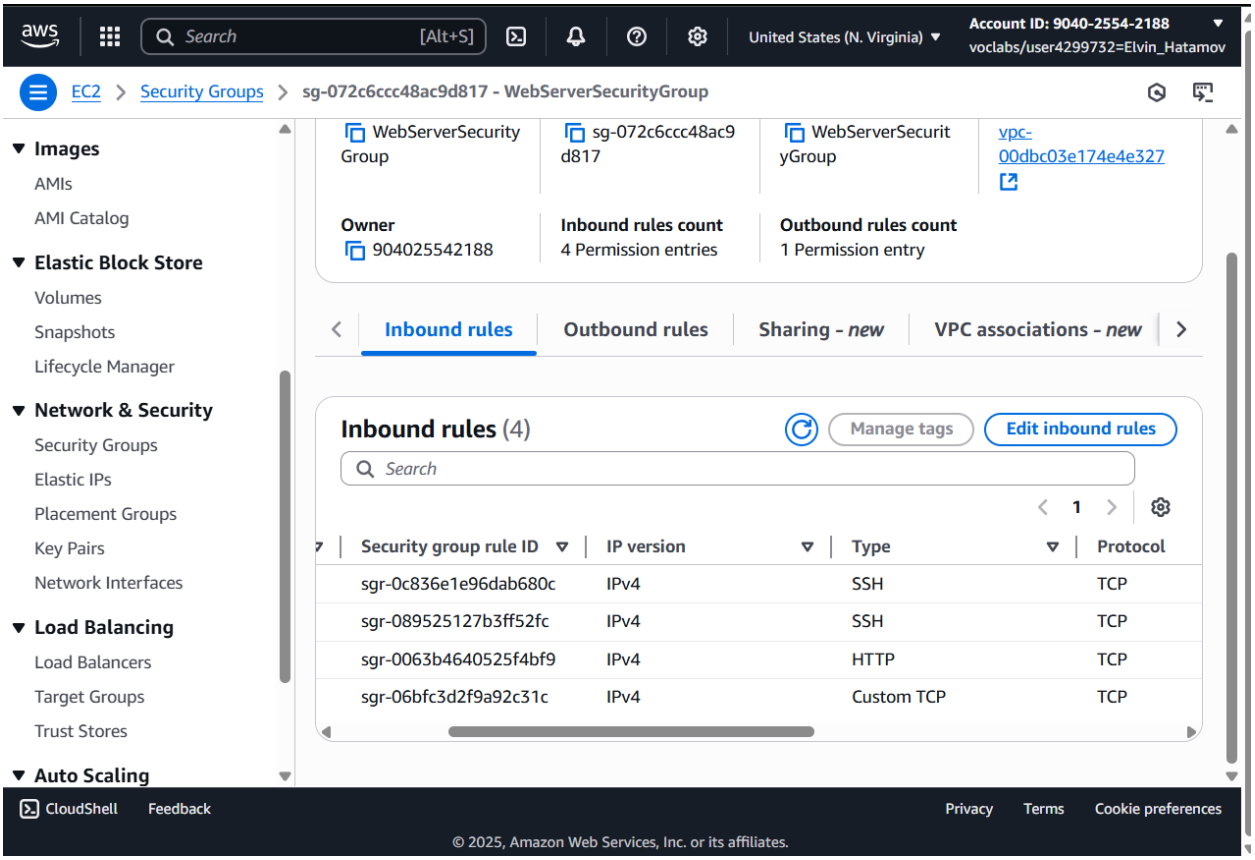
Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598

Hello world from WebServer!



Student Name: ELVIN HATAMOV
Student ID: 101150598

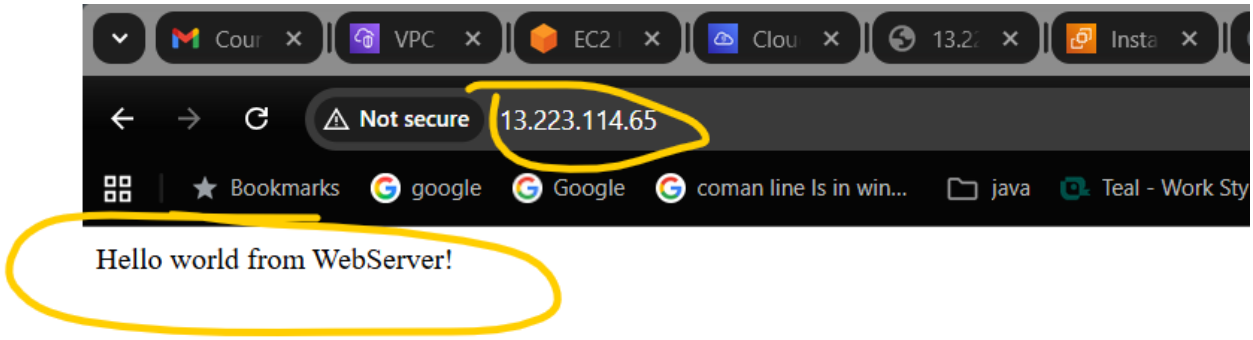
Term: SUMMER 2025

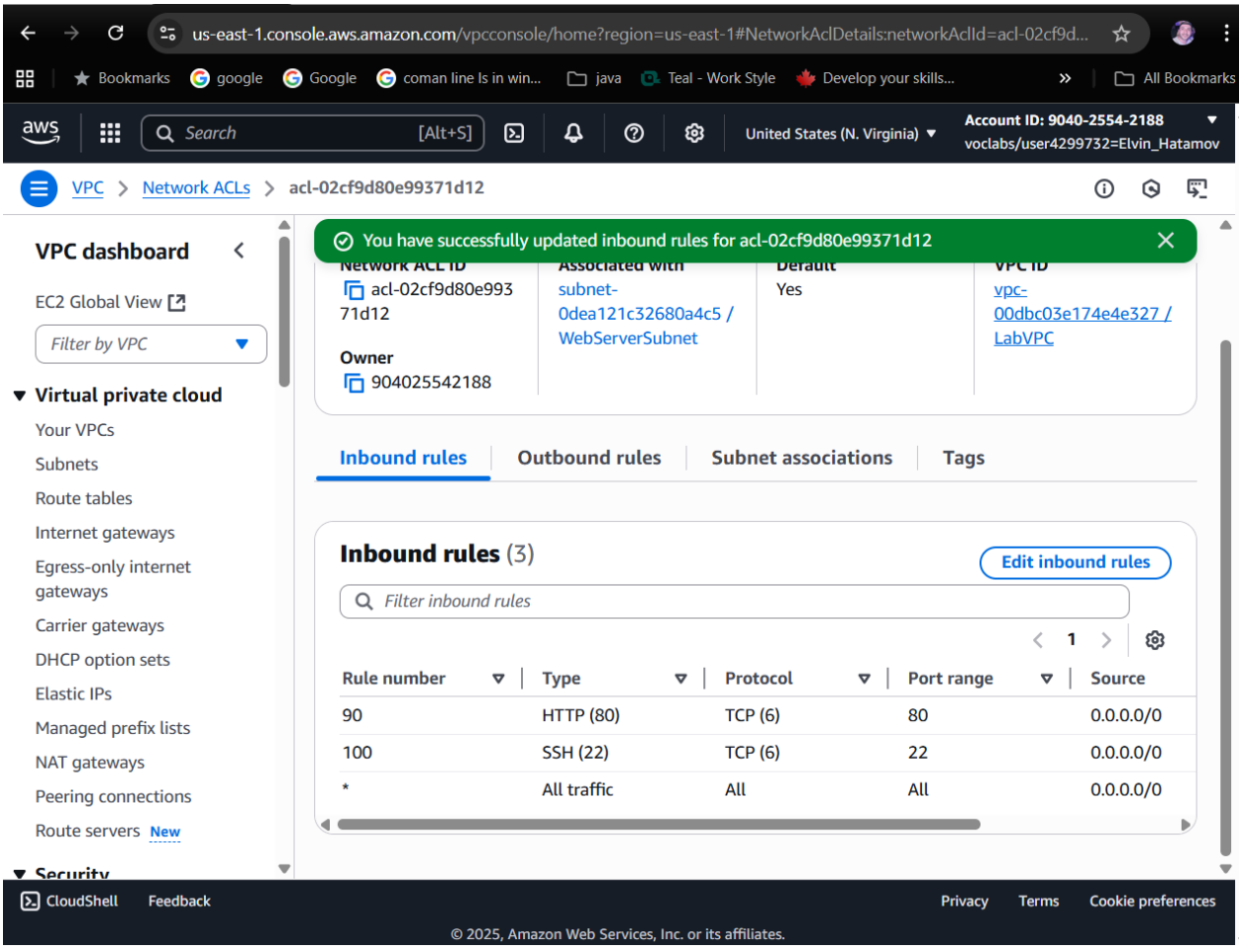


Task 2.5: Secure the WebServerSubnet with a network ACL

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

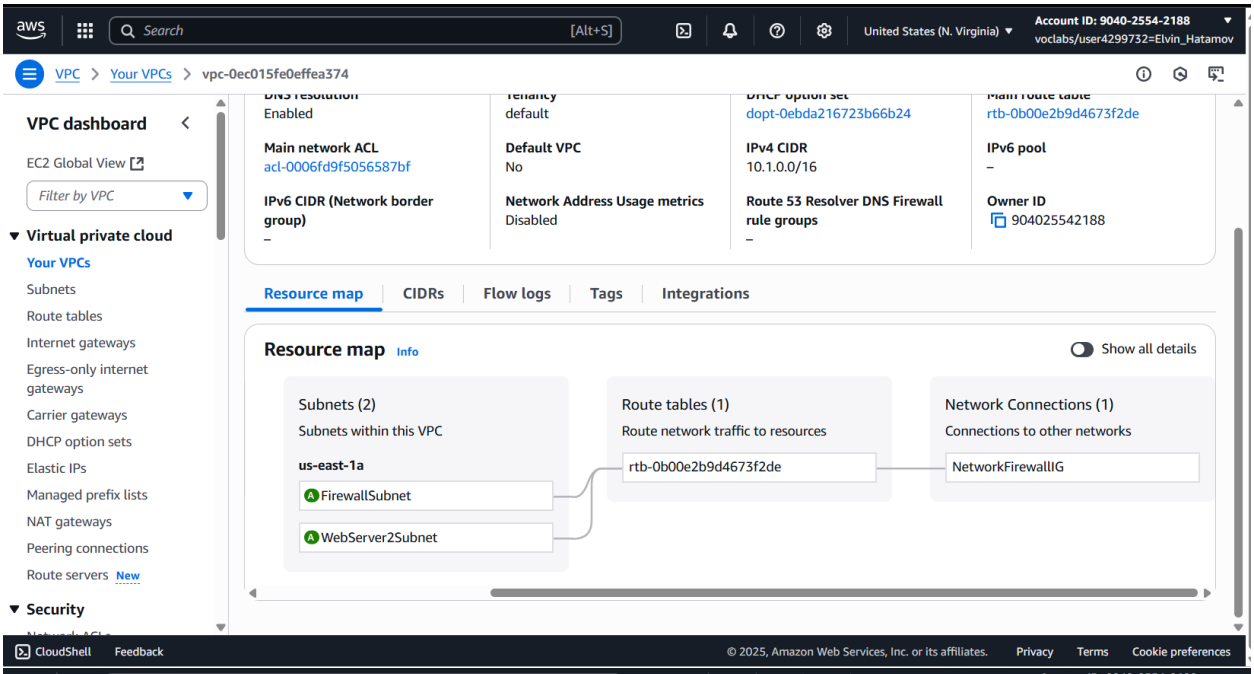


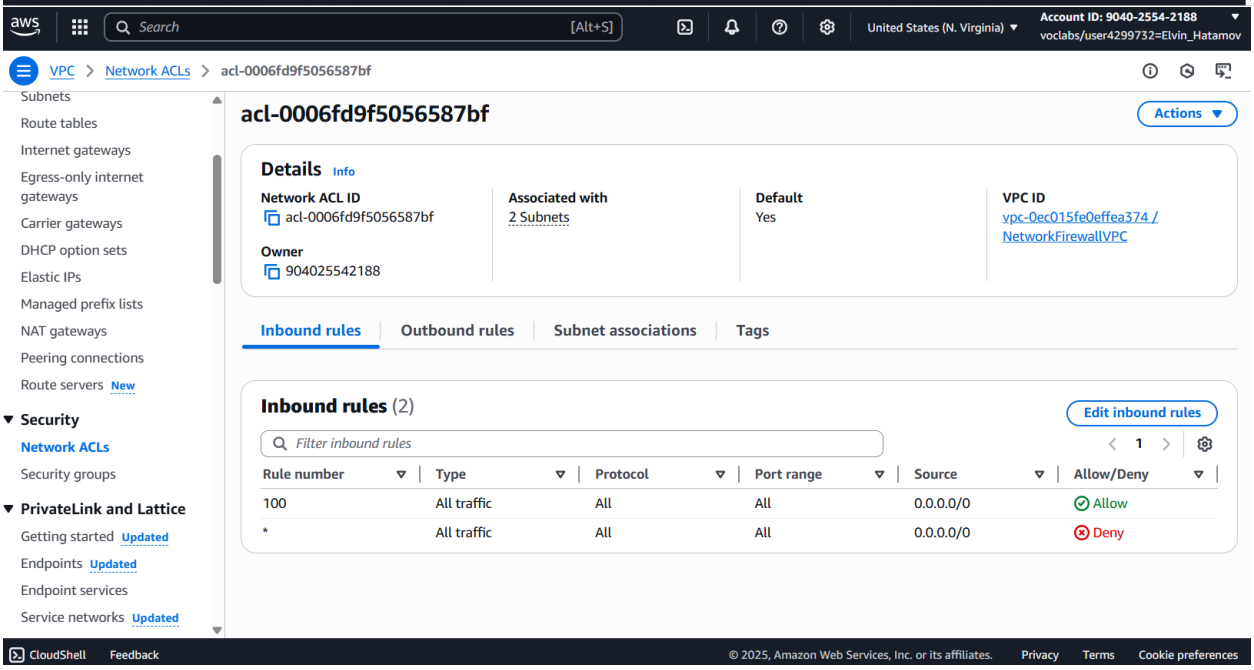


Task 2.6: Review NetworkFirewallVPC and its associated resources

Student Name: ELVIN HATAMOV
Student ID: 101150598

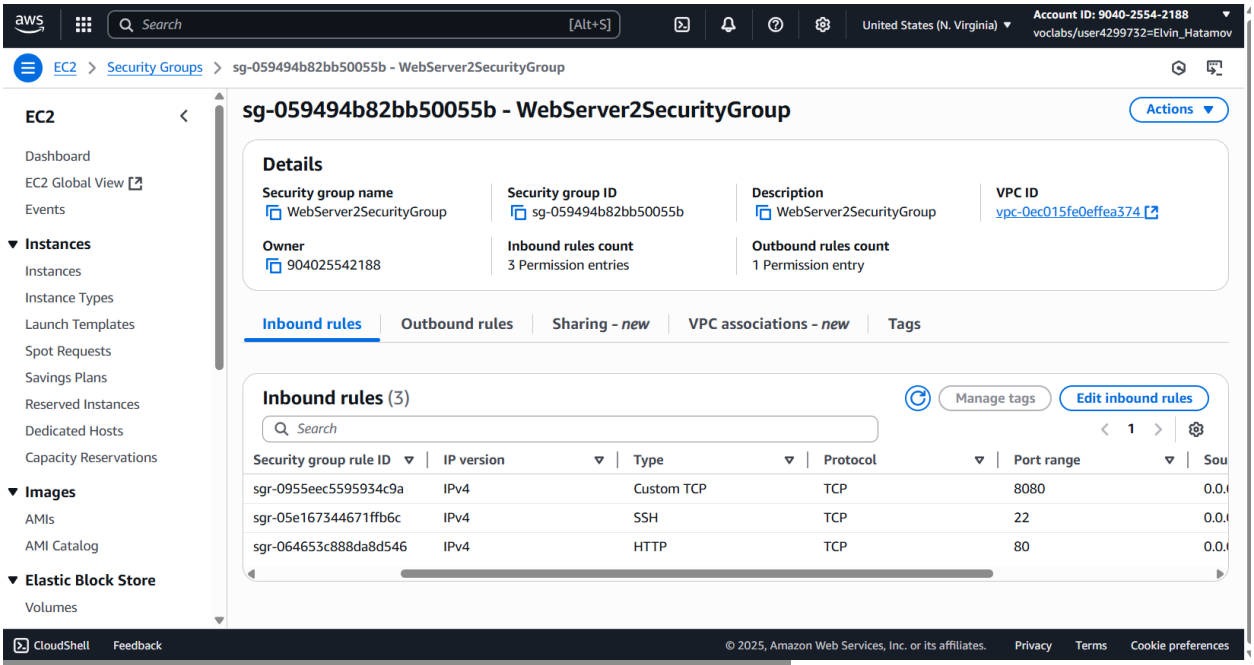
Term: SUMMER 2025

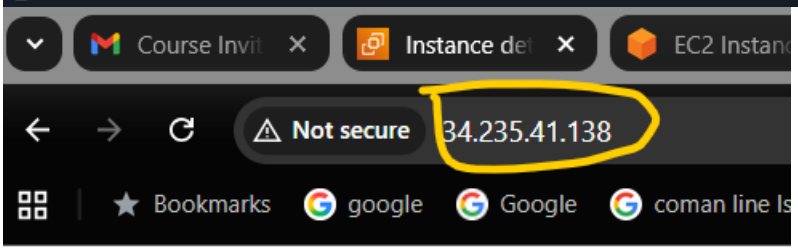




Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

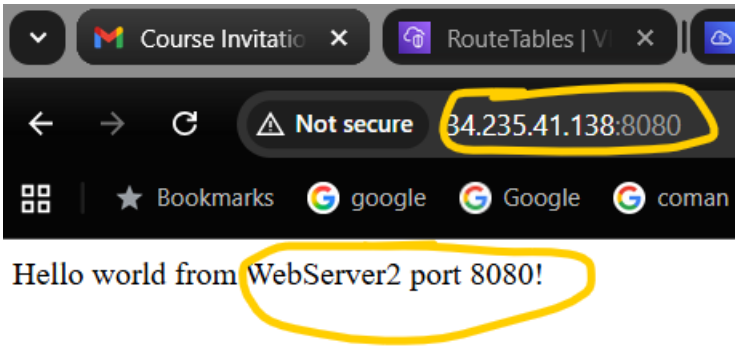




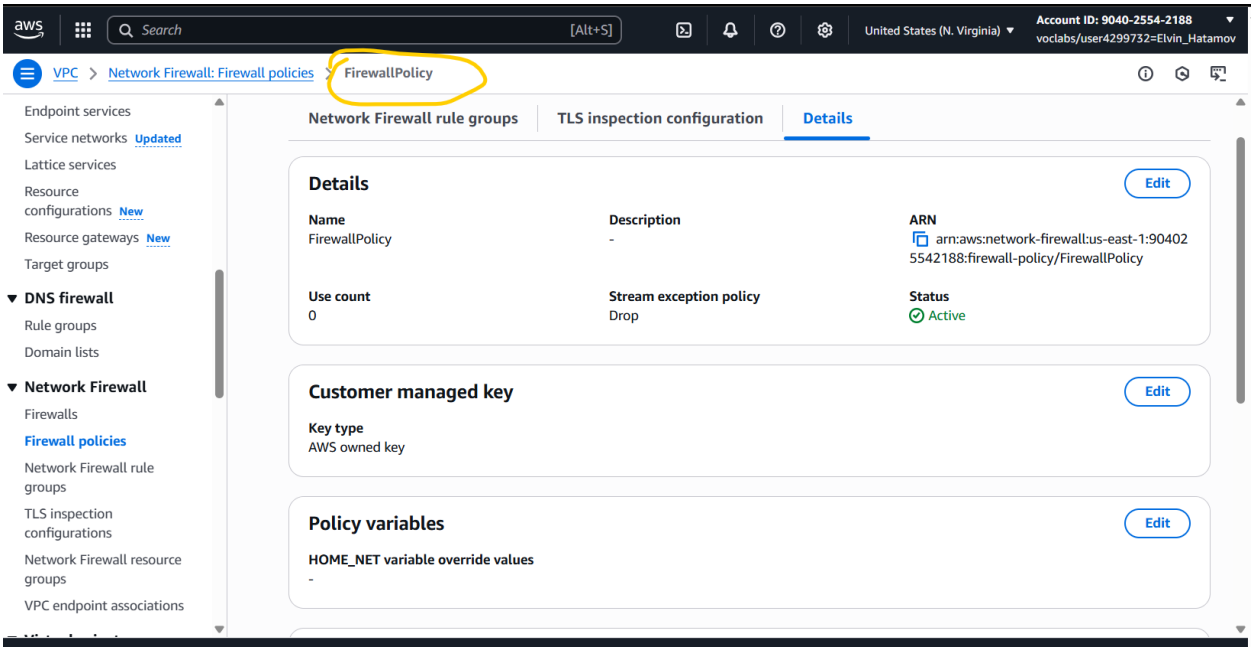
Hello world from WebServer2!

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



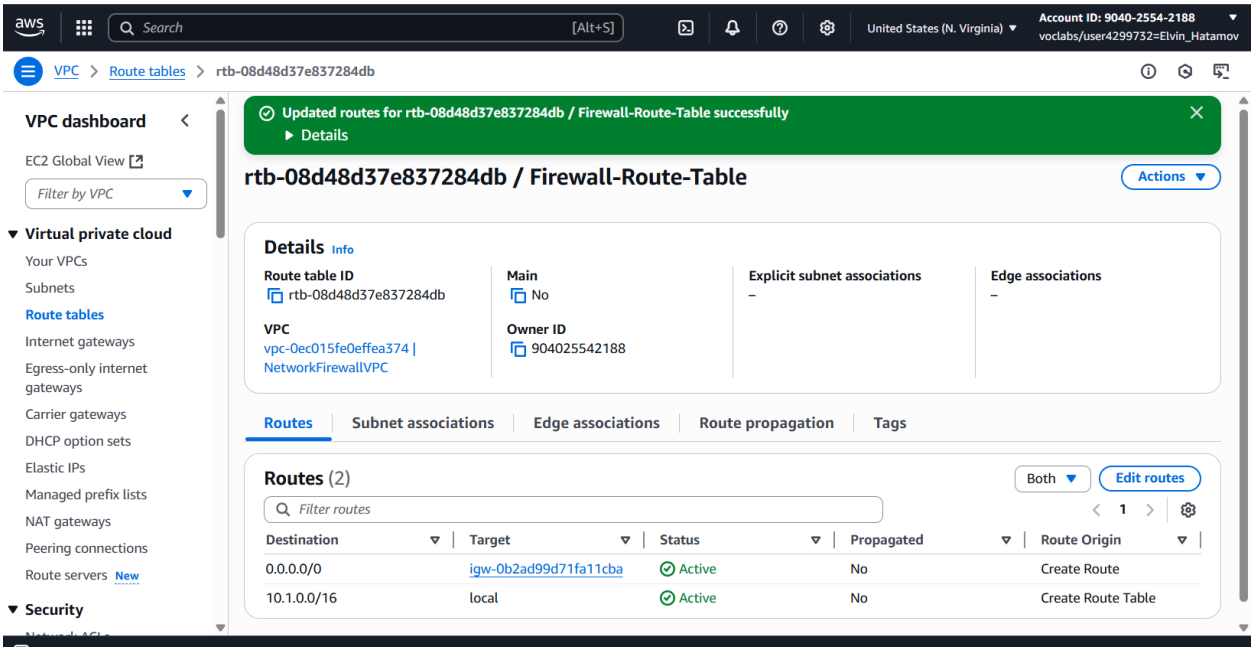
Task 2.7: Create a network firewall



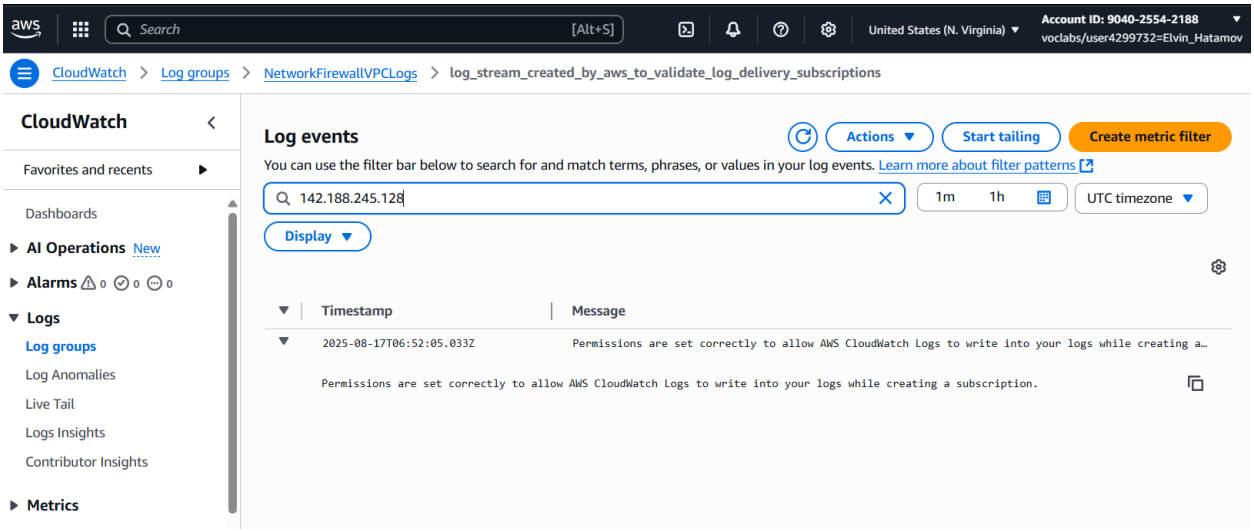
Task 2.8: Create route tables

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Task 2.9: Configure logging for the network firewall



Task 2.10: Configure the firewall policy and test access

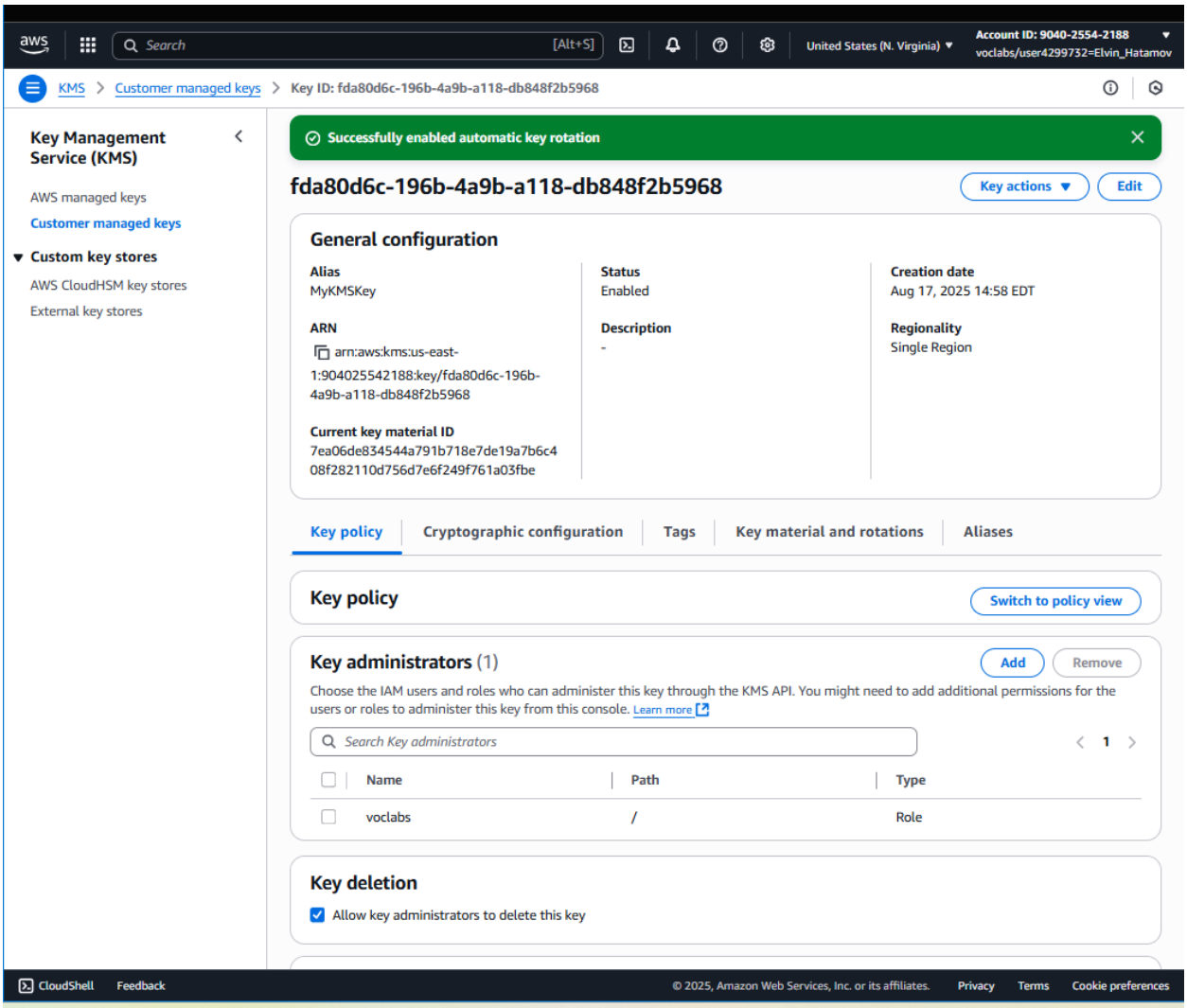
Cost estimate to secure a VPC with a network firewall

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

Phase 3: Securing AWS resources by using AWS KMS

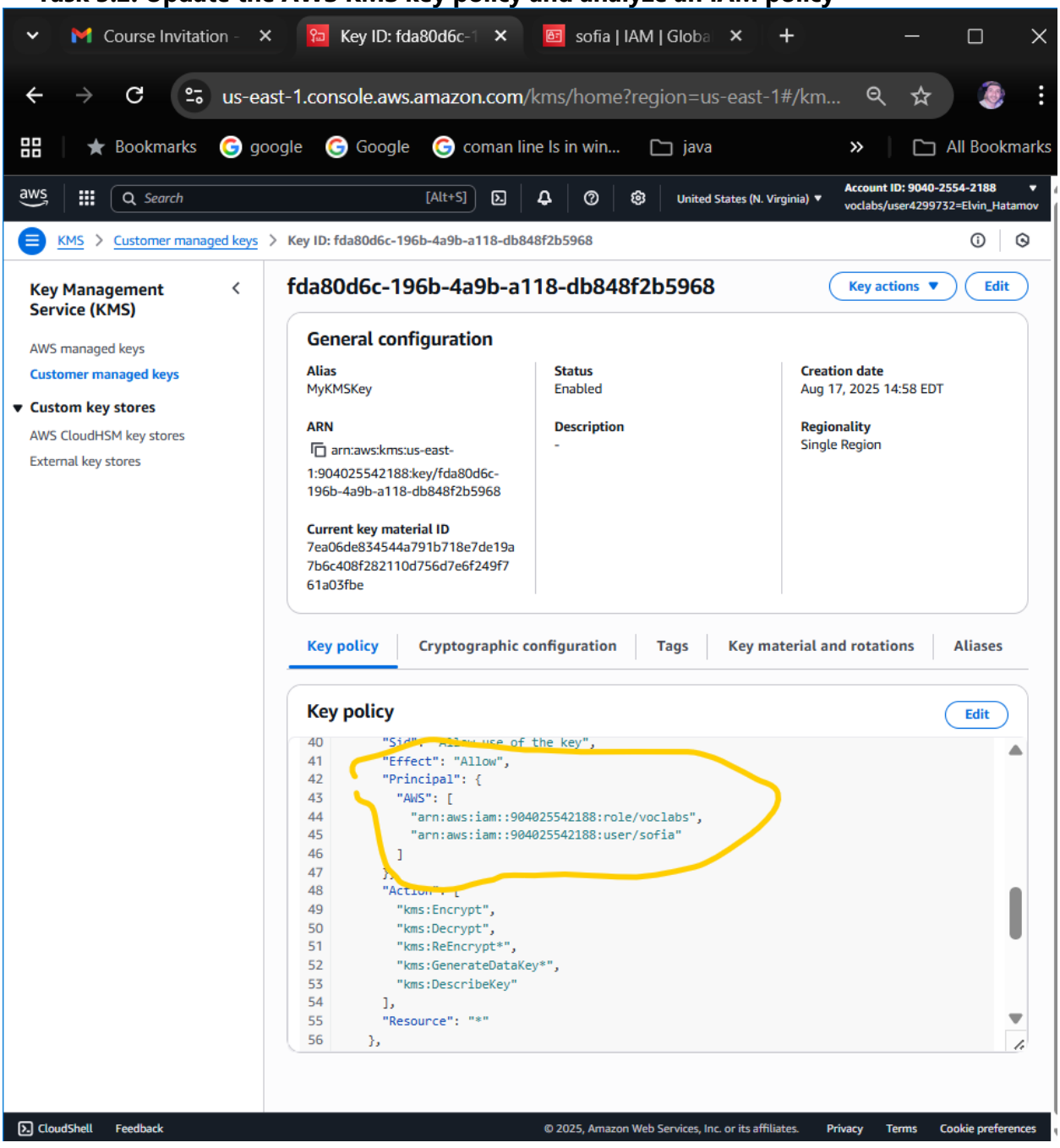
Task 3.1: Create a customer managed key and configure key rotation



Student Name: ELVIN HATAMOV
Student ID: 101150598

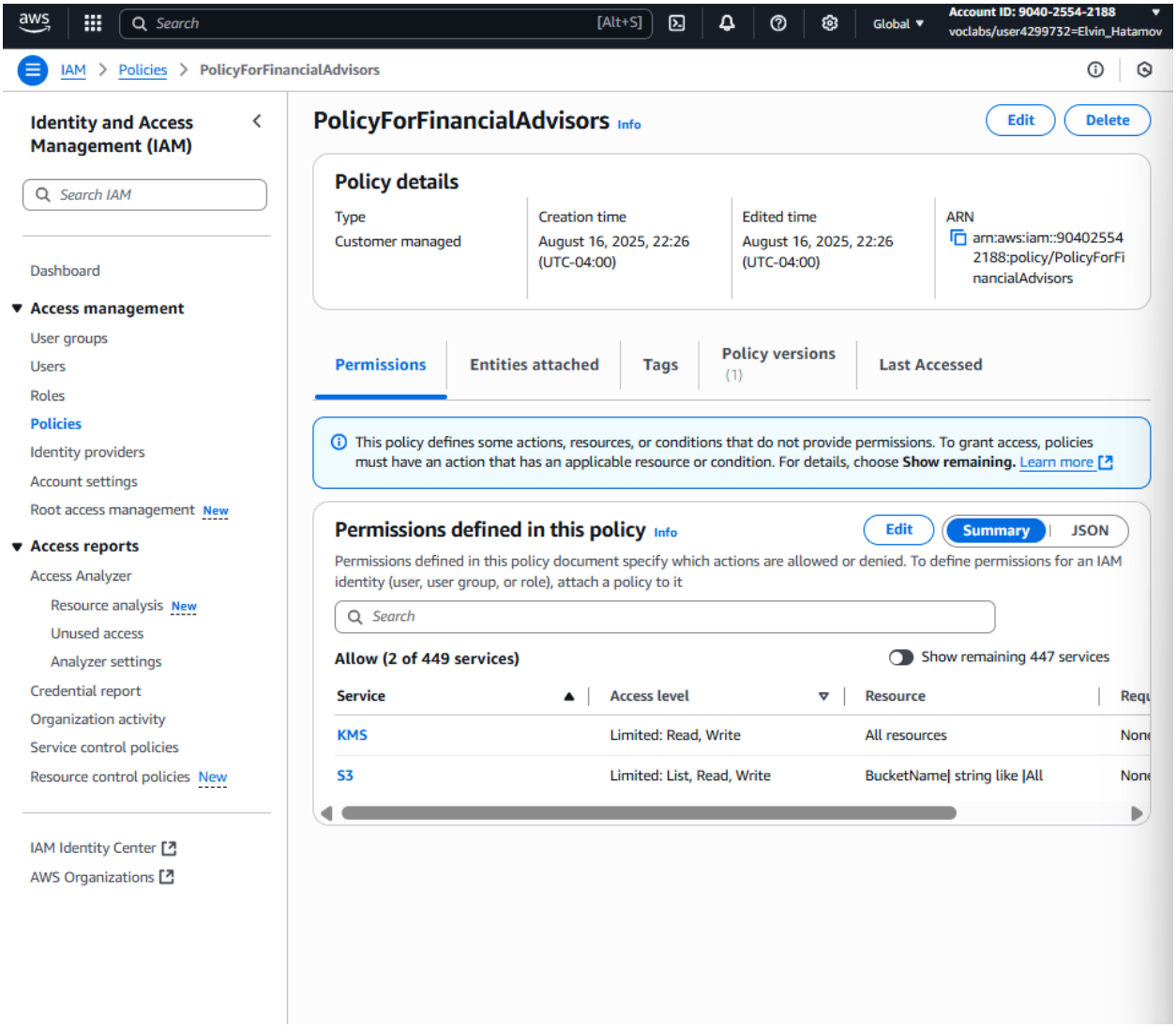
Term: SUMMER 2025

Task 3.2: Update the AWS KMS key policy and analyze an IAM policy



Student Name: ELVIN HATAMOV
Student ID: 101150598

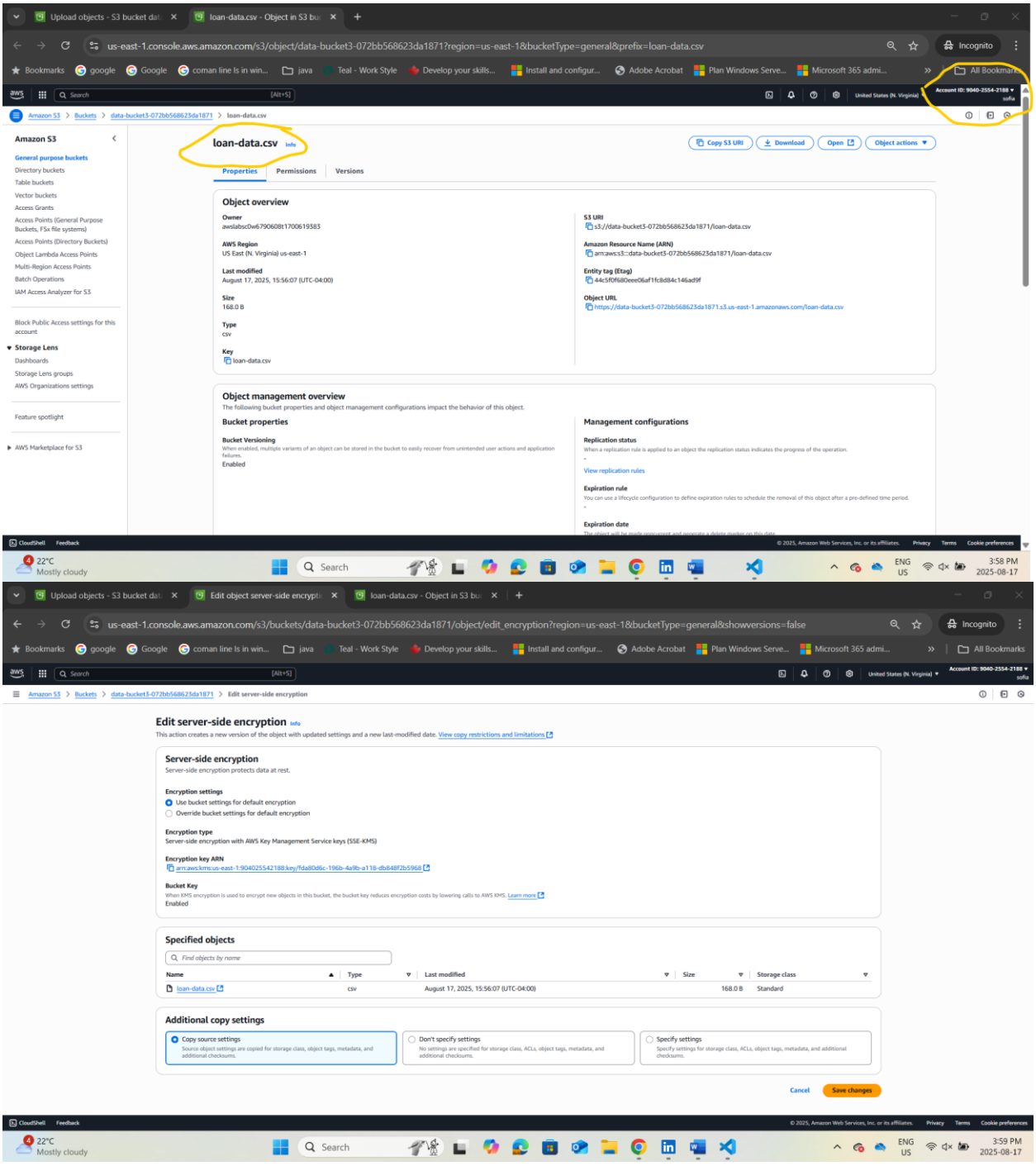
Term: SUMMER 2025



Task 3.3: Use AWS KMS to encrypt data in Amazon S3

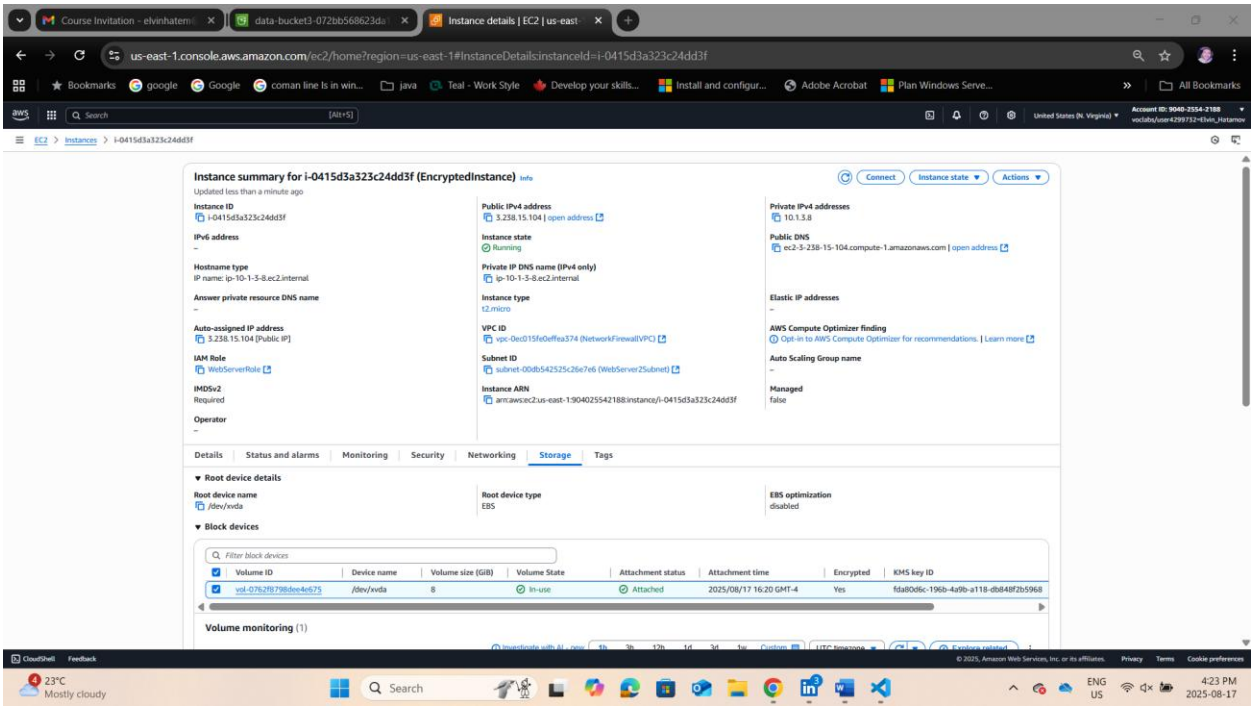
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Task 3.4: Use AWS KMS to encrypt the root volume of an EC2 instance

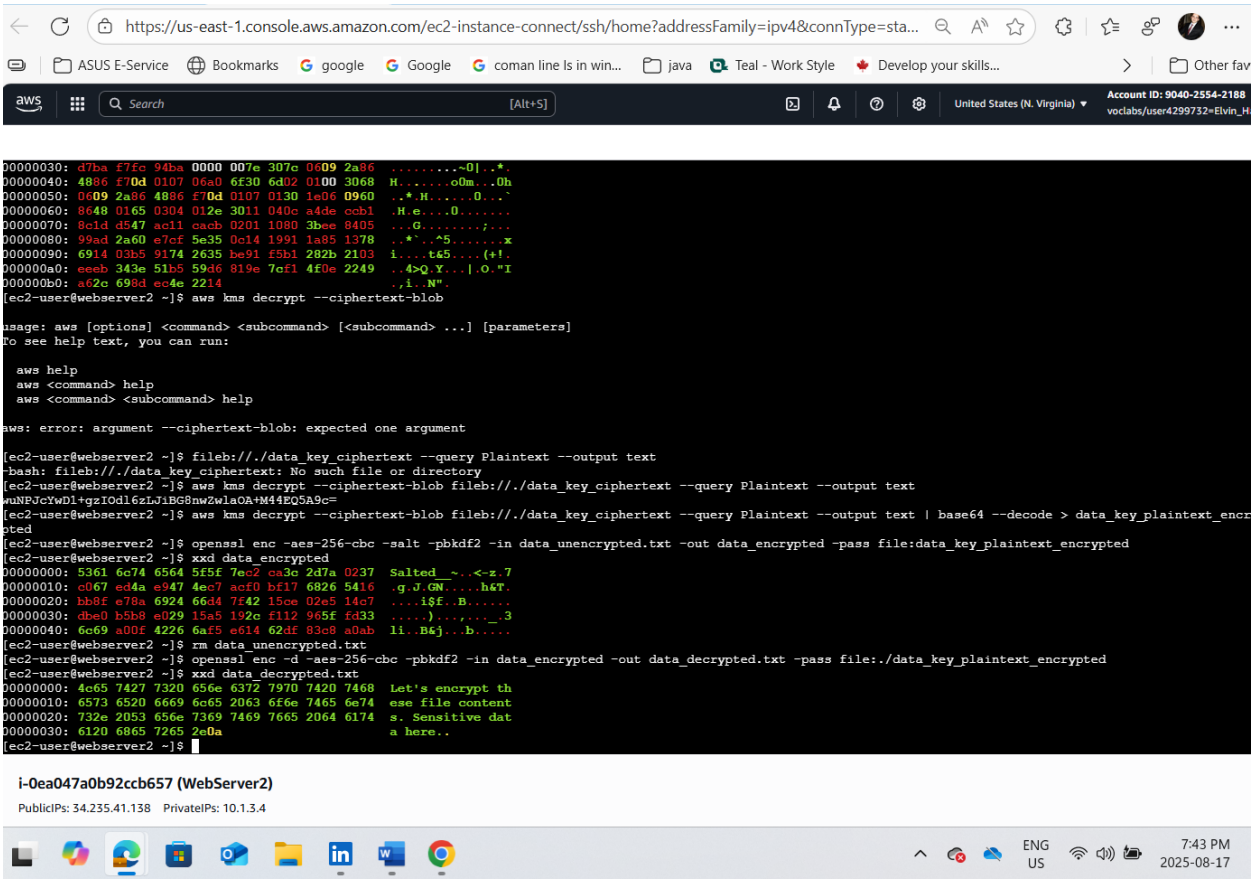
Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598



Task 3.5: Use AWS KMS envelope encryption to encrypt data in place

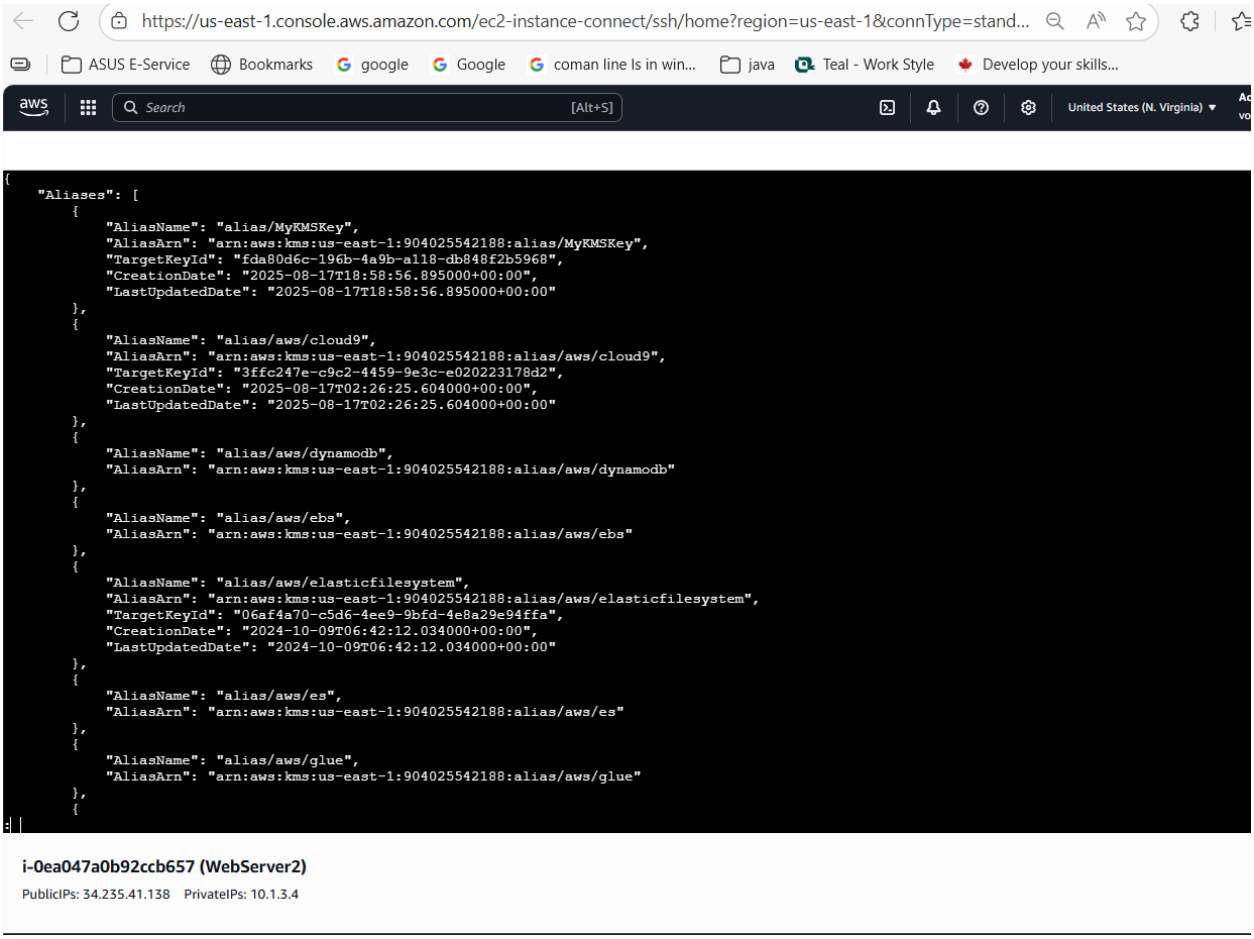
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Task 3.6: Use AWS KMS to encrypt a Secrets Manager secret

Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598



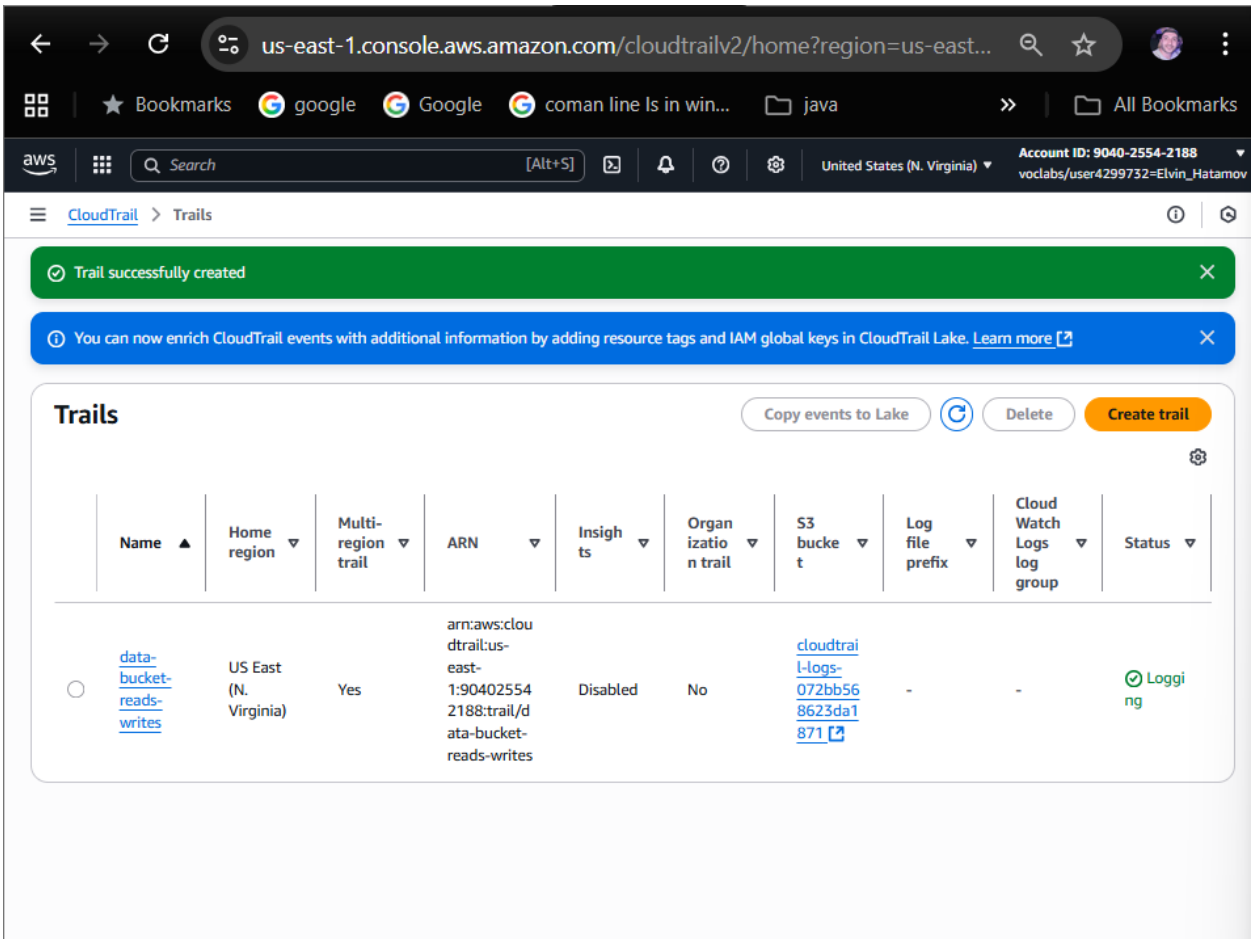
Cost assessment for using AWS KMS

Phase 4: Monitoring and logging

Student Name: ELVIN HATAMOV
Student ID: 101150598

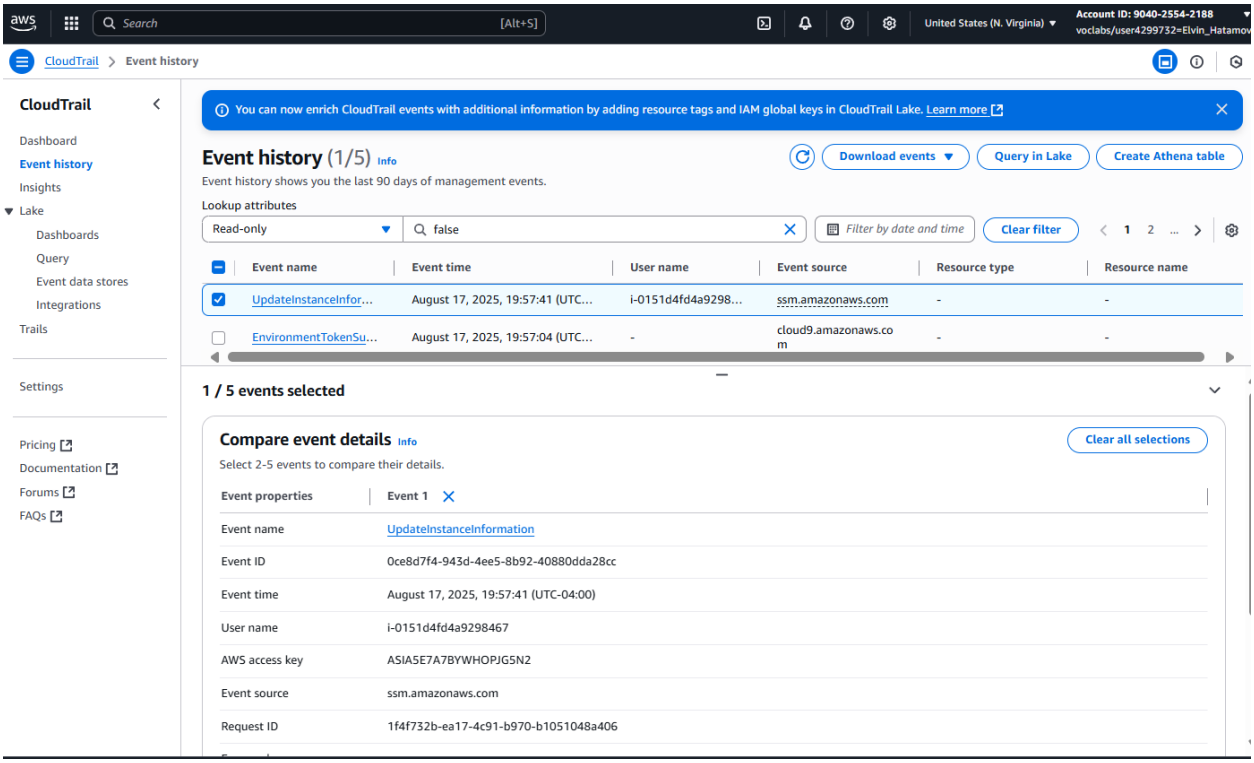
Term: SUMMER 2025

Task 4.1: Use CloudTrail to record Amazon S3 API calls



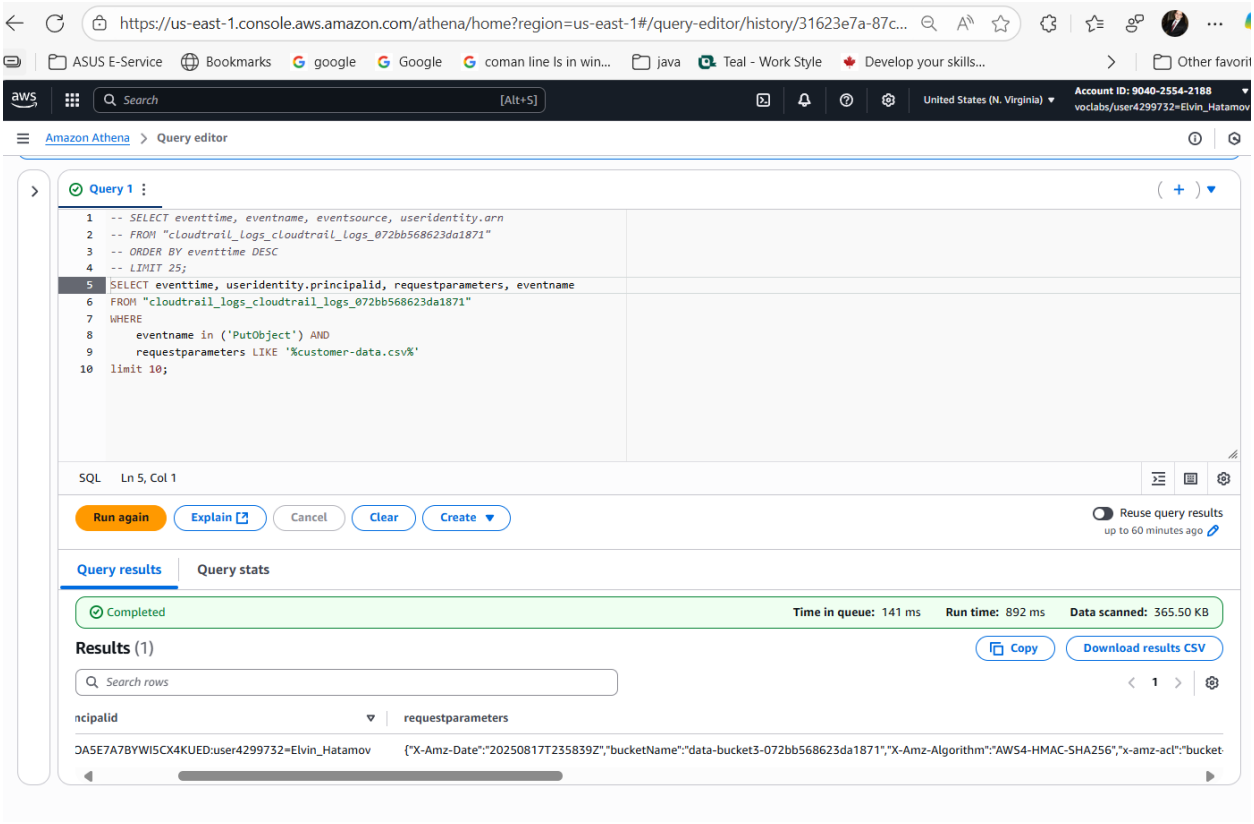
Student Name: ELVIN HATAMOV
Student ID: 101150598

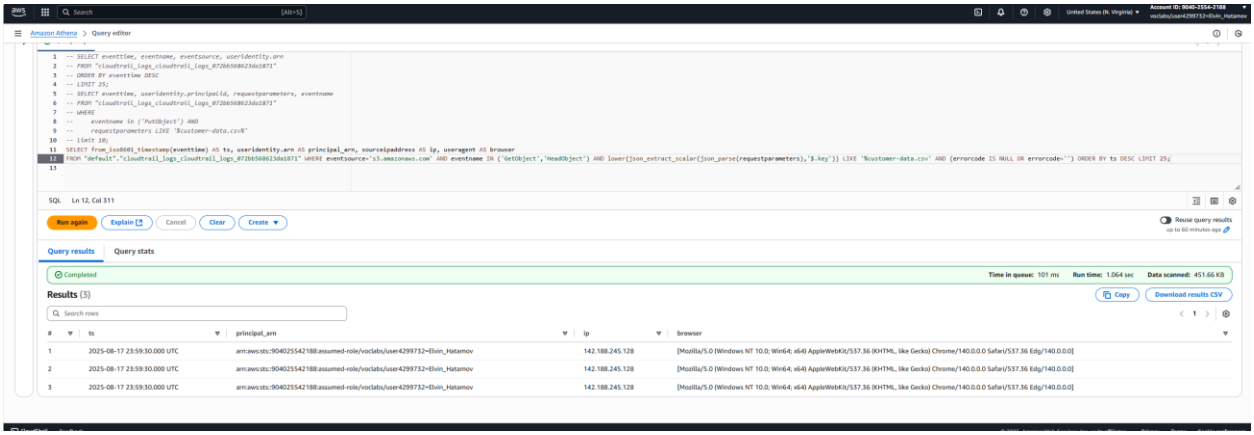
Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

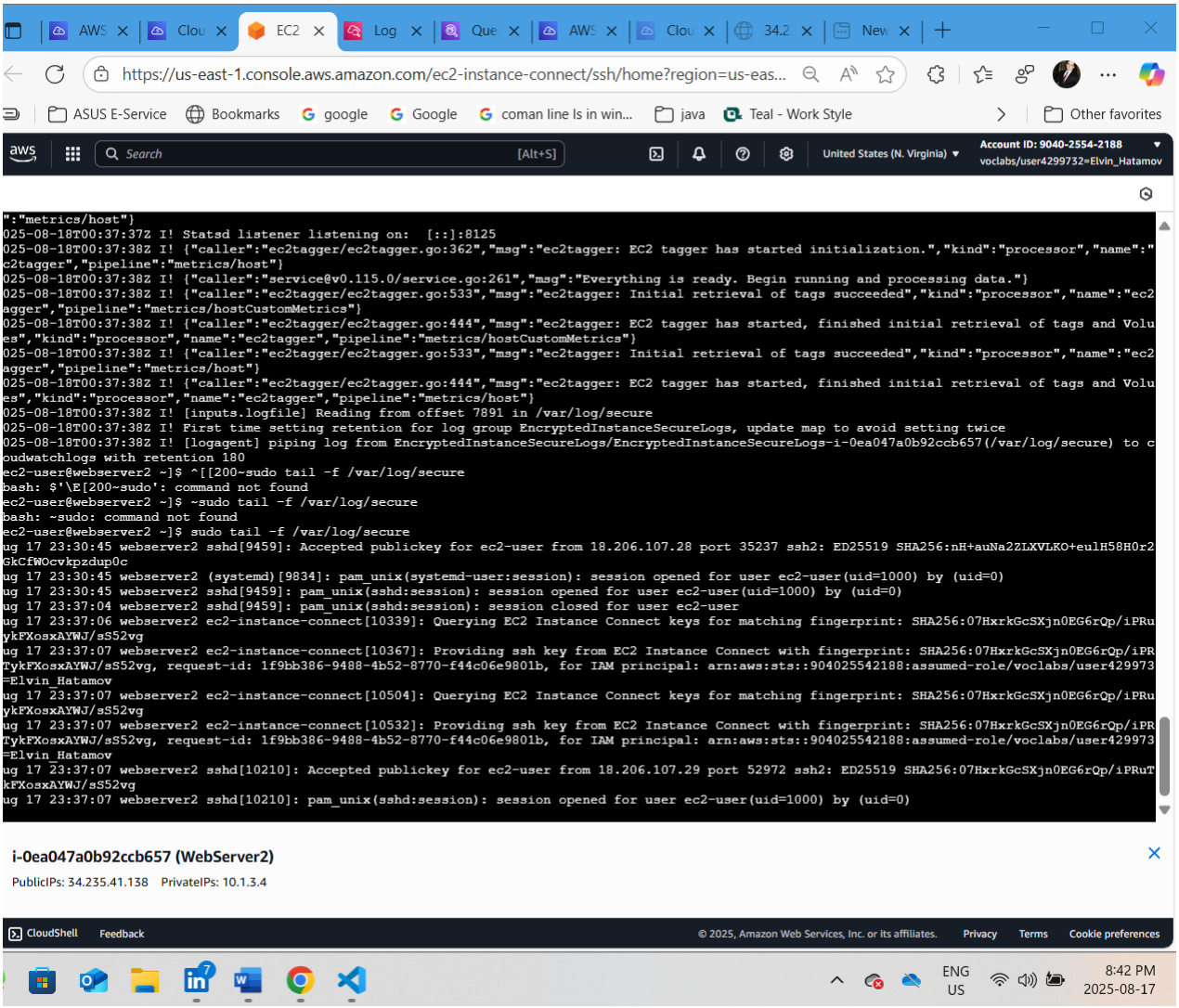




Task 4.2: Use CloudWatch Logs to monitor secure logs

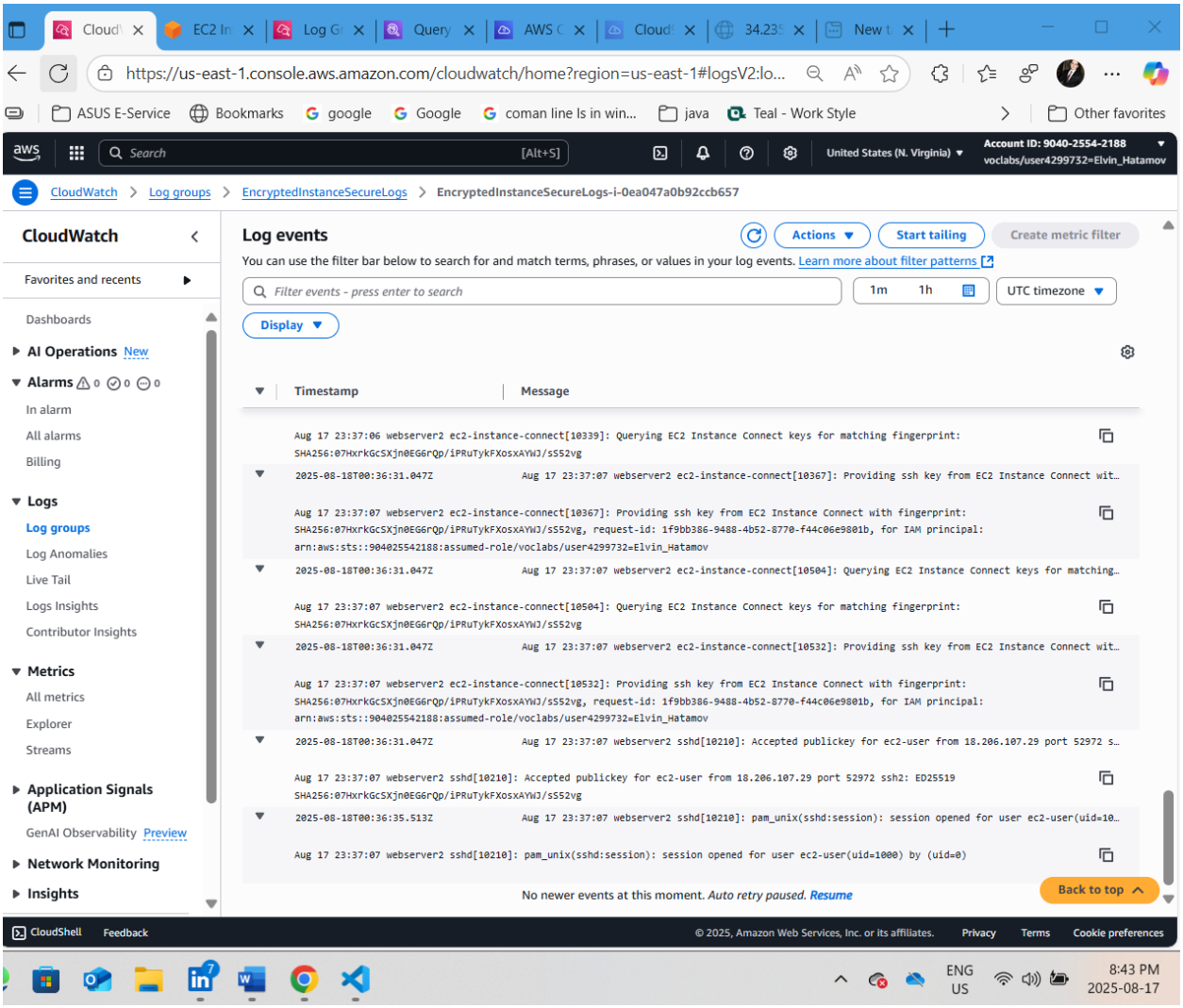
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

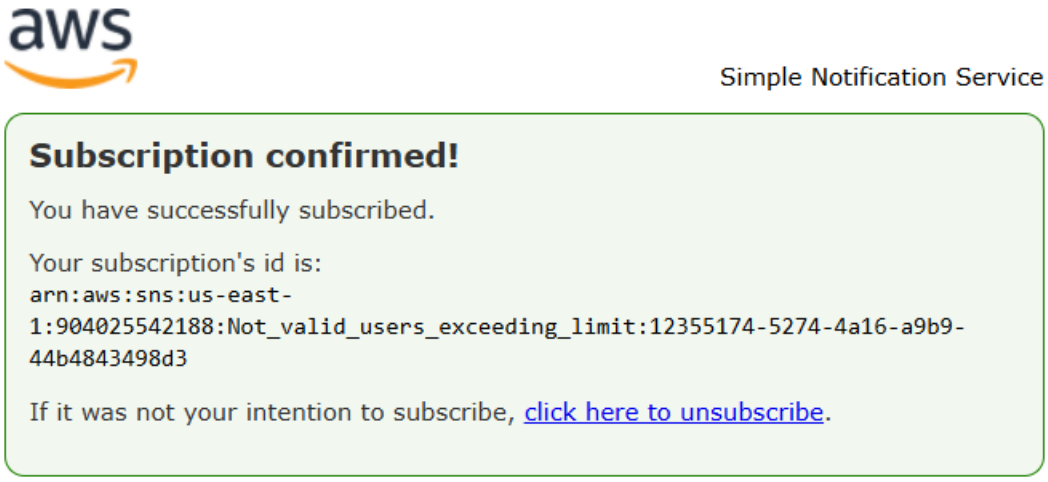
Term: SUMMER 2025



Task 4.3: Create a CloudWatch alarm to send notifications for security incidents

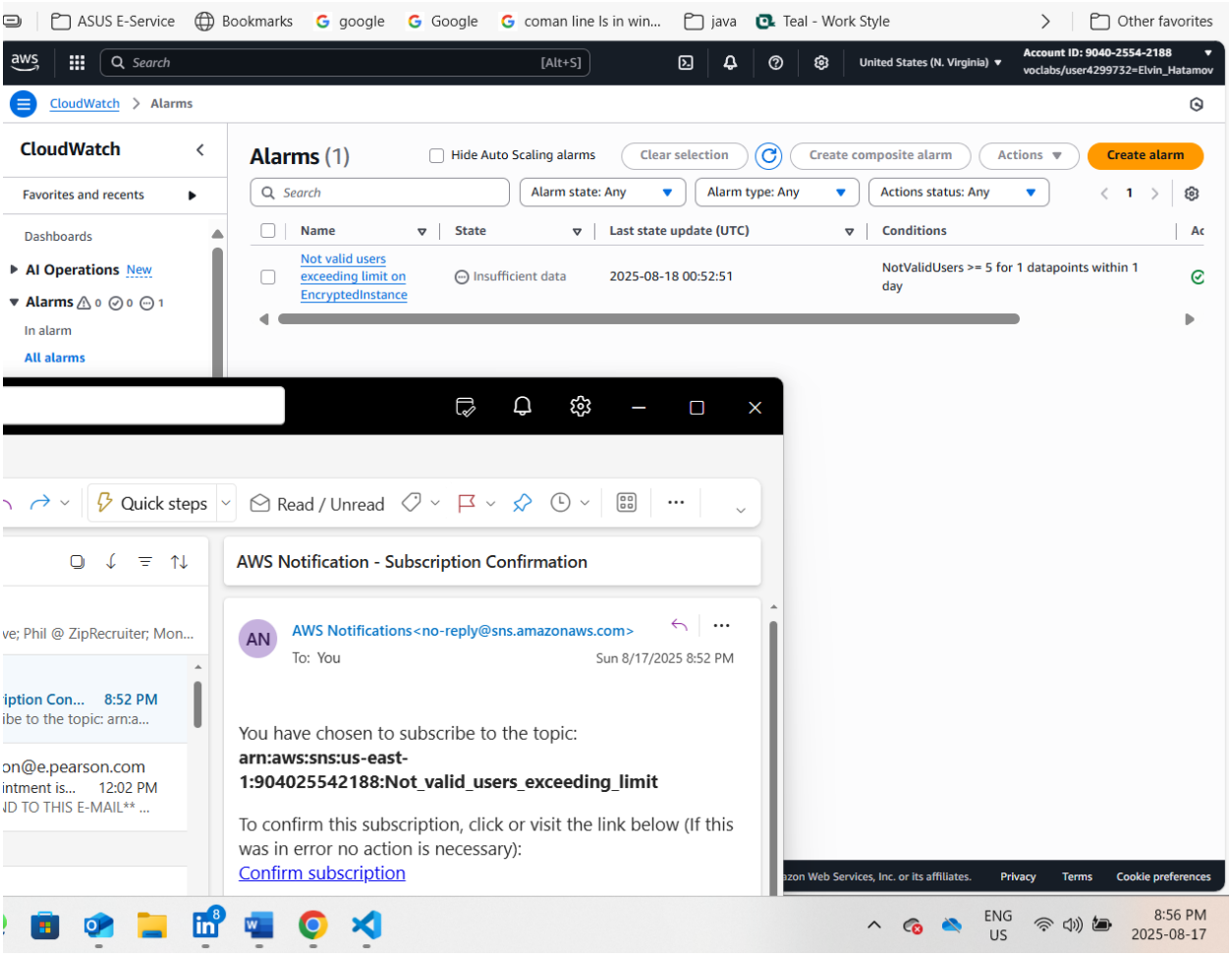
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



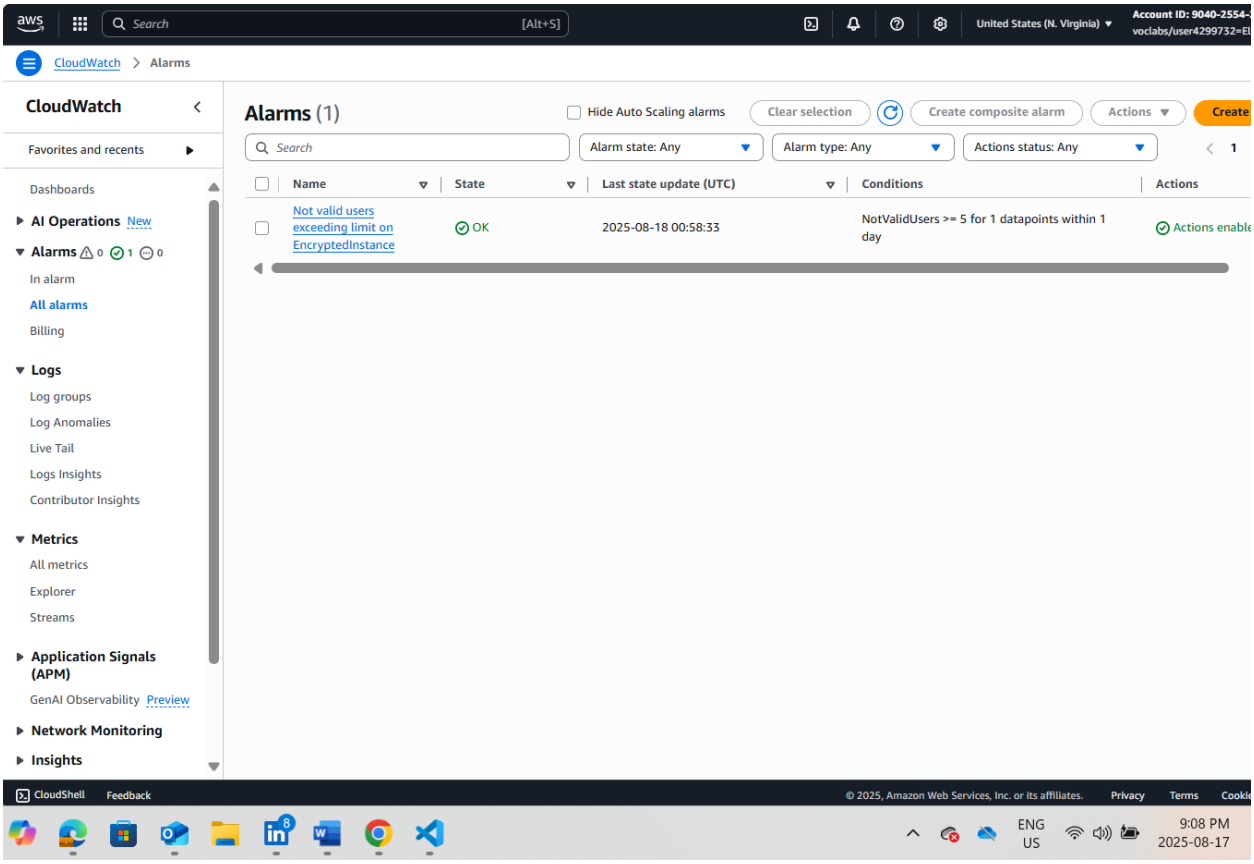
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Student Name: ELVIN HATAMOV
Student ID: 101150598

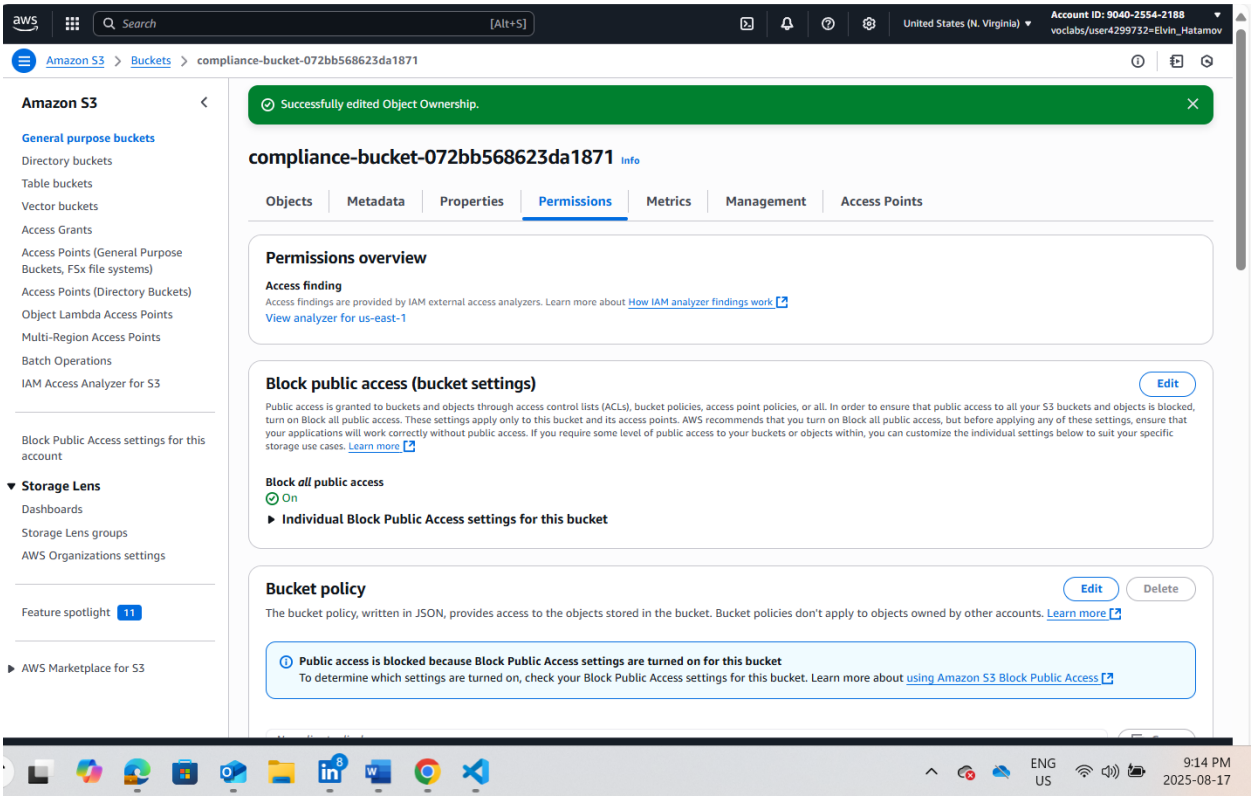
Term: SUMMER 2025



Task 4.4: Configure AWS Config to assess security settings and remediate the configuration of AWS resources

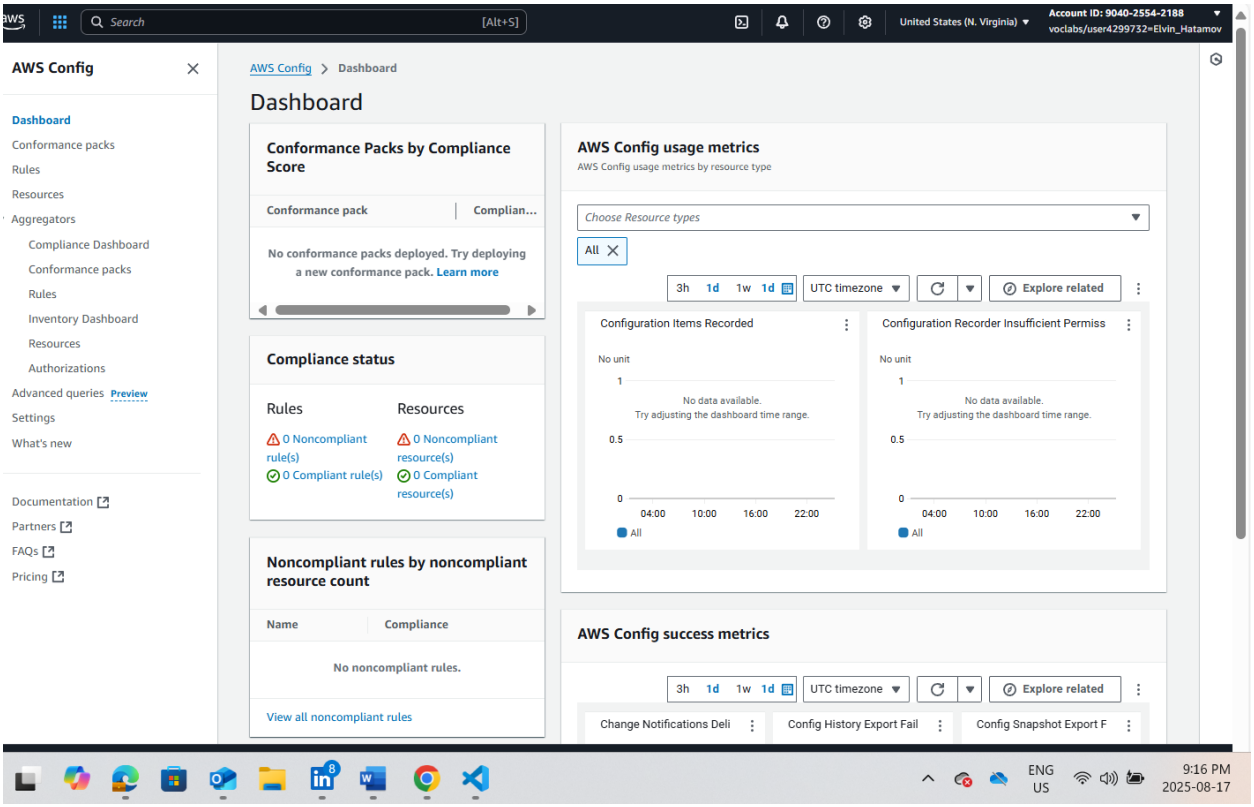
Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

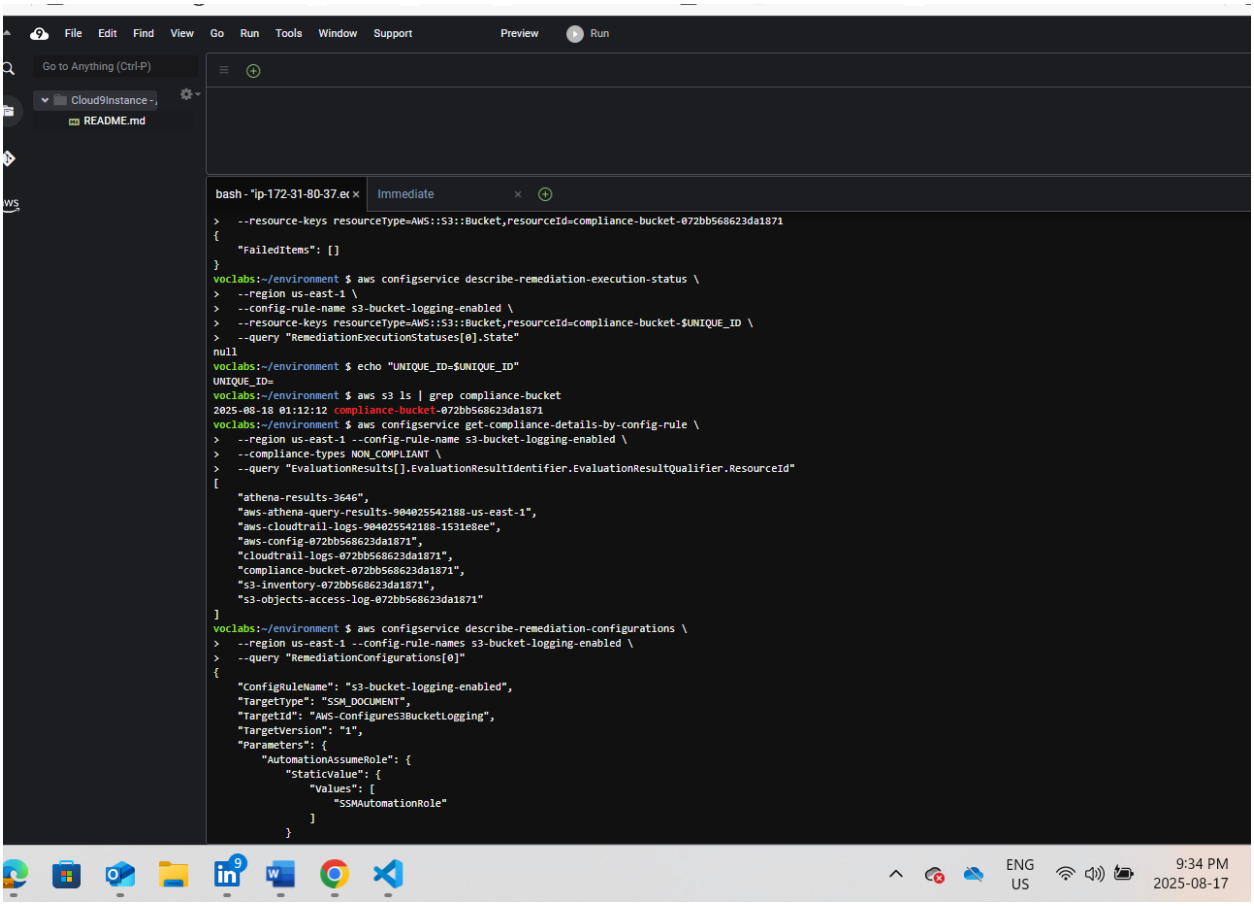


Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

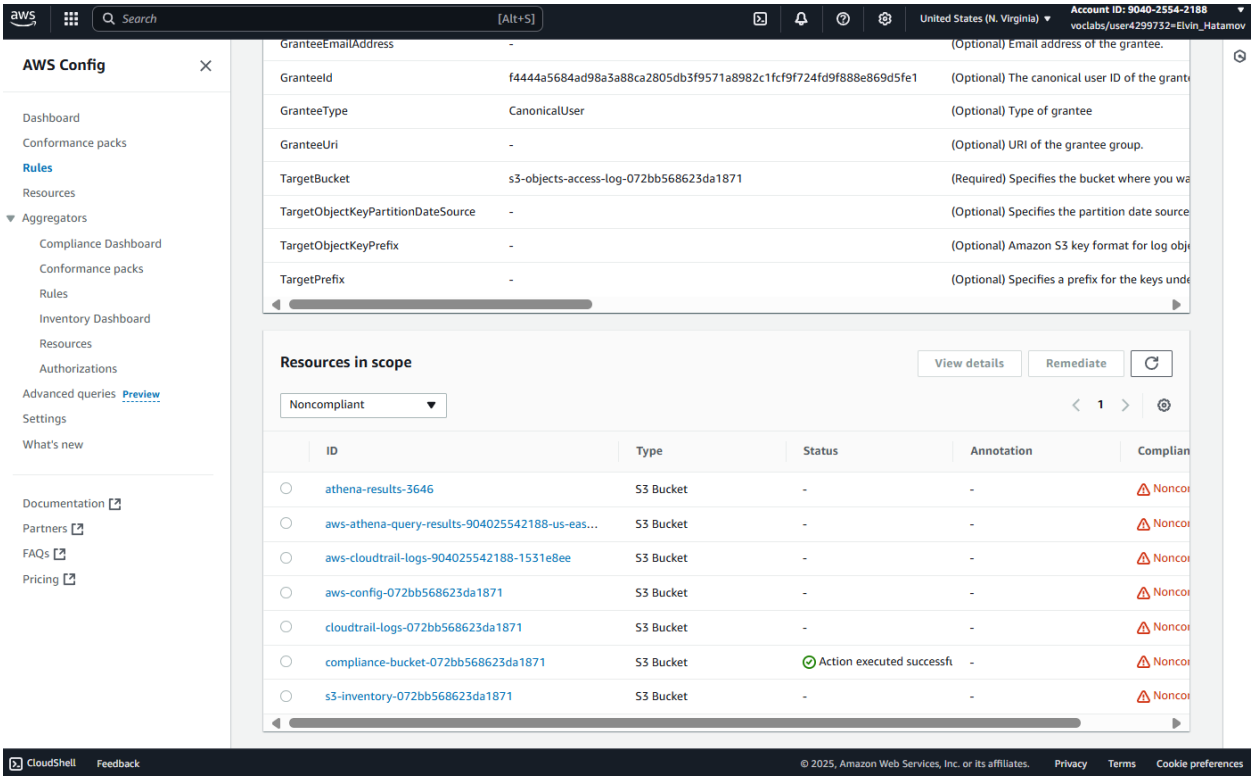


Student Name: ELVIN HATAMOV Term: SUMMER 2025
Student ID: 101150598



Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025



Cost assessment for monitoring and logging

It cost a small amount of money under 1 dollar.

Student Name: ELVIN HATAMOV
Student ID: 101150598

Term: SUMMER 2025

We can check it from cloudwatch metrics,