D Y PATIL INTERNATIONAL UNIVERSITY
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School of Computer Science, Engineering and Applications (SCSEA)
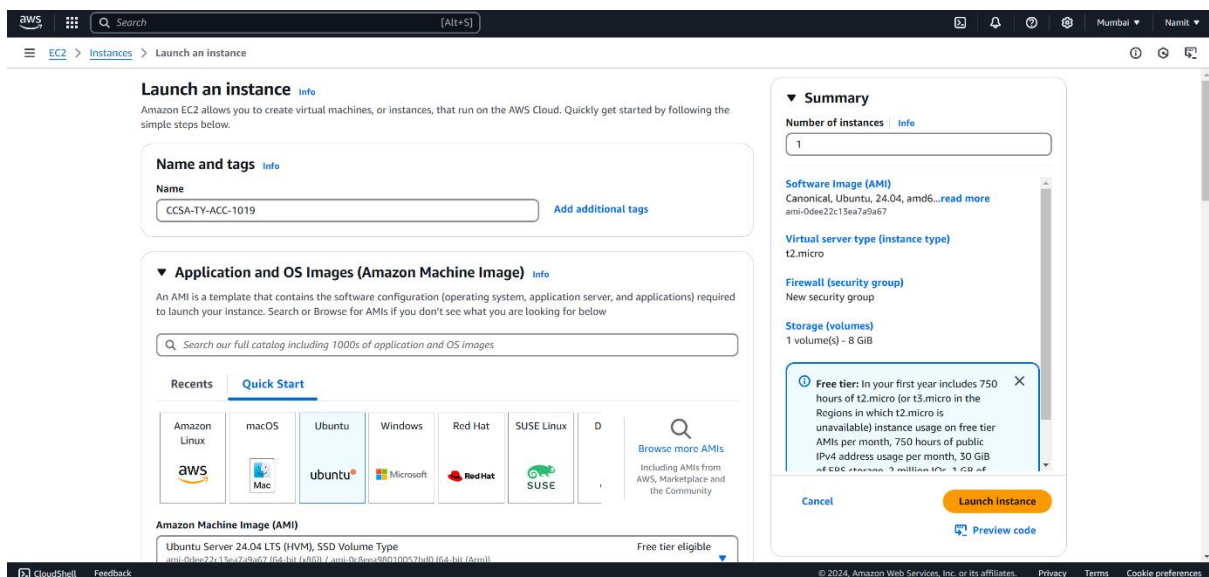## B.C.A. TY (CCSA)
Subject: Advanced Cloud Computing (P)

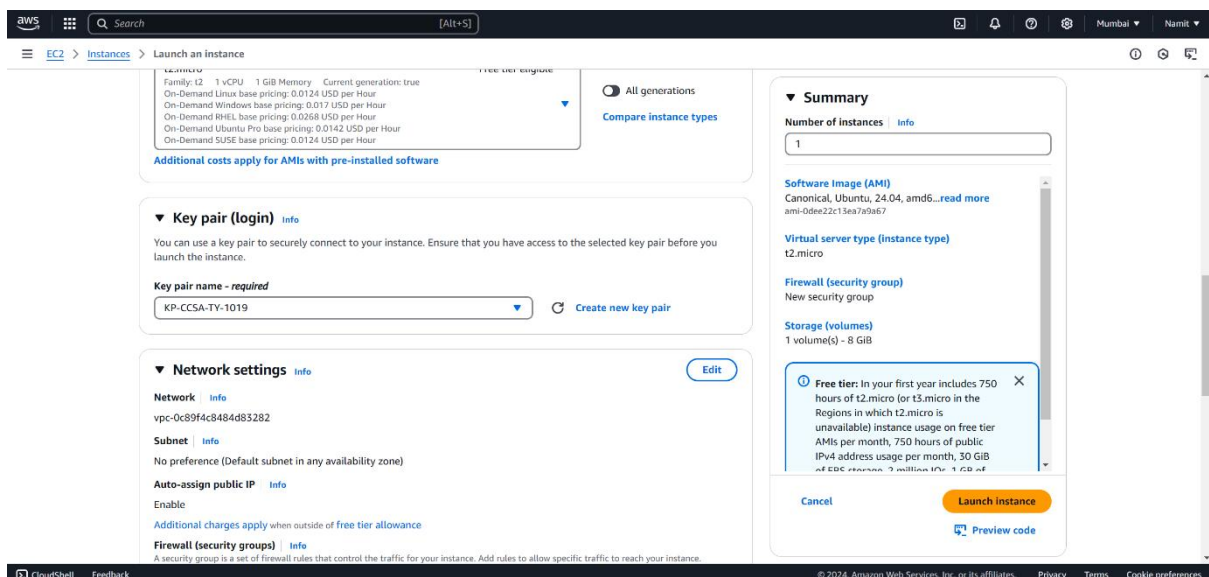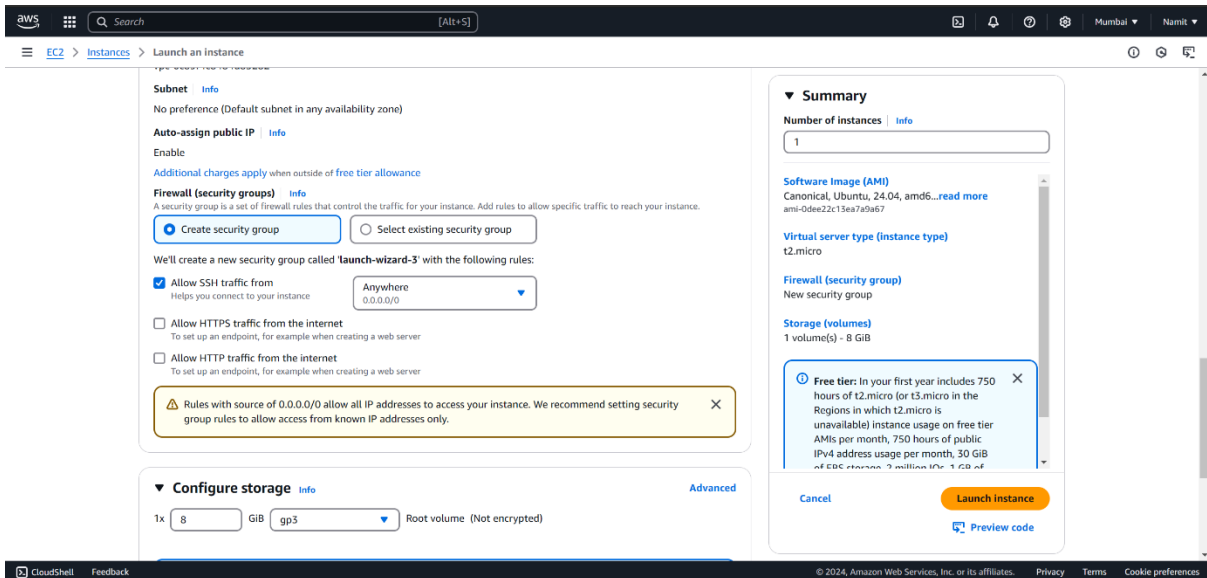**Name of the Student:**   Namit Agarwal   **PRN:**   20220801019

Title of Practical: Access S3 bucket through EC2 using IAM role

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Step 1: Launch an EC2 Instance

1. **Go to EC2 service** and click on **Launch Instance**.

2. **Give a name** to the EC2 instance.

3. **Select the AMI** for your instance, e.g., Ubuntu.

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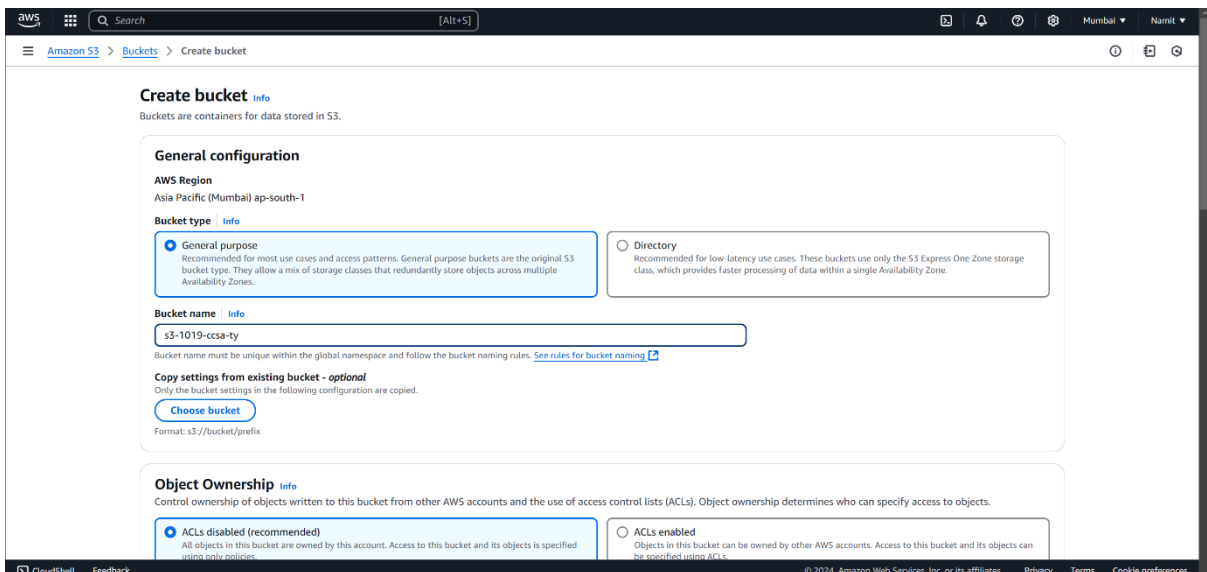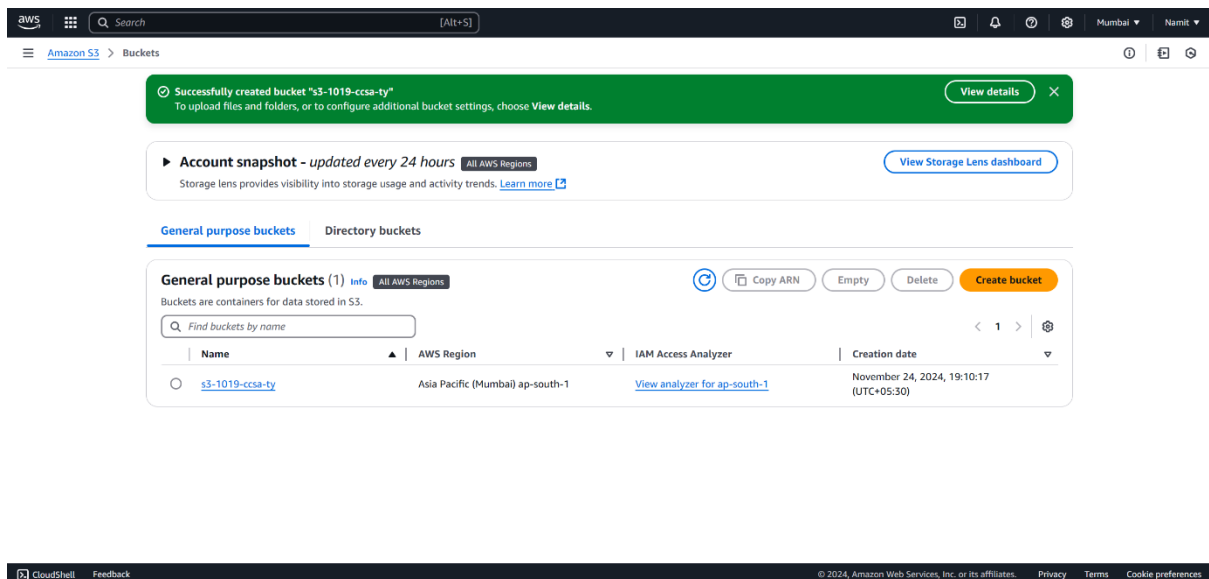
Title of Practical: Access S3 bucket through EC2 using IAM role

- Use existing keypair that we used earlier and launch instance

Step 2: Create an S3 Bucket

1. **Navigate to the S3 service** and click on **Create Bucket**.

2. **Enter a name** for your S3 bucket.

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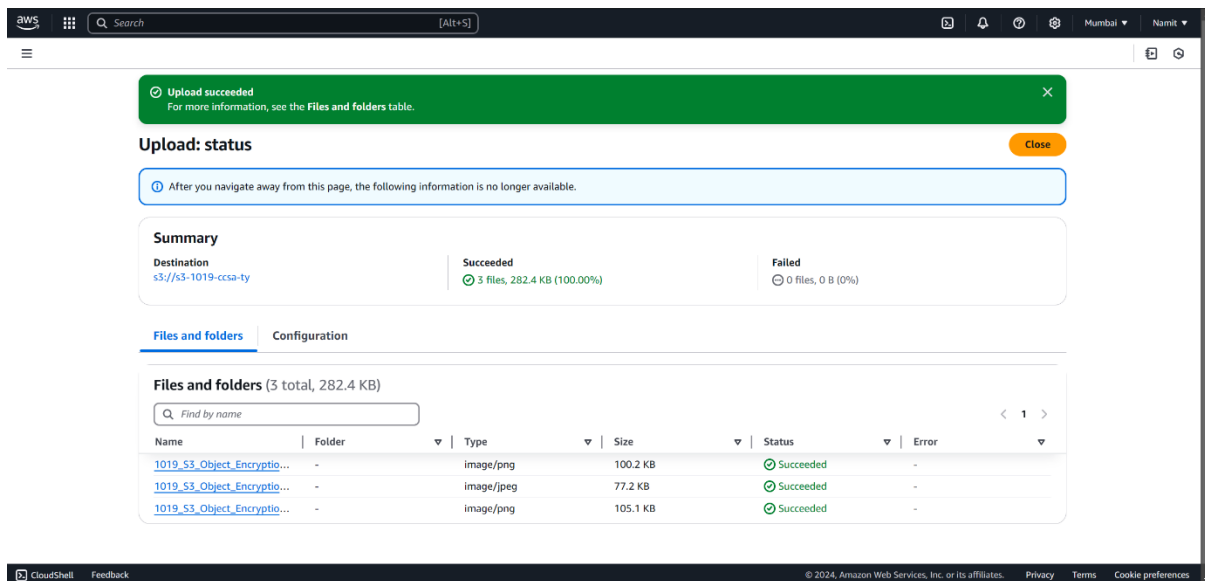**Subject: Advanced Cloud Computing (P)**

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3.   **Click on Create Bucket** to finish creating the bucket.

Step 3: Upload Files to the S3 Bucket

1.   Go to the S3 bucket you just created and click on **Upload**.

2.   Click on **Add Files** and select the files you want to upload.

3.   Scroll down and click on **Upload**.

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Step 4: Connect to the EC2 Instance

1. Go back to the **EC2 instance** and connect to it.

2. **Install AWS CLI** in the instance using:

sudo snap install aws-cli --classic

3. Verify the installation by typing aws in the command line.

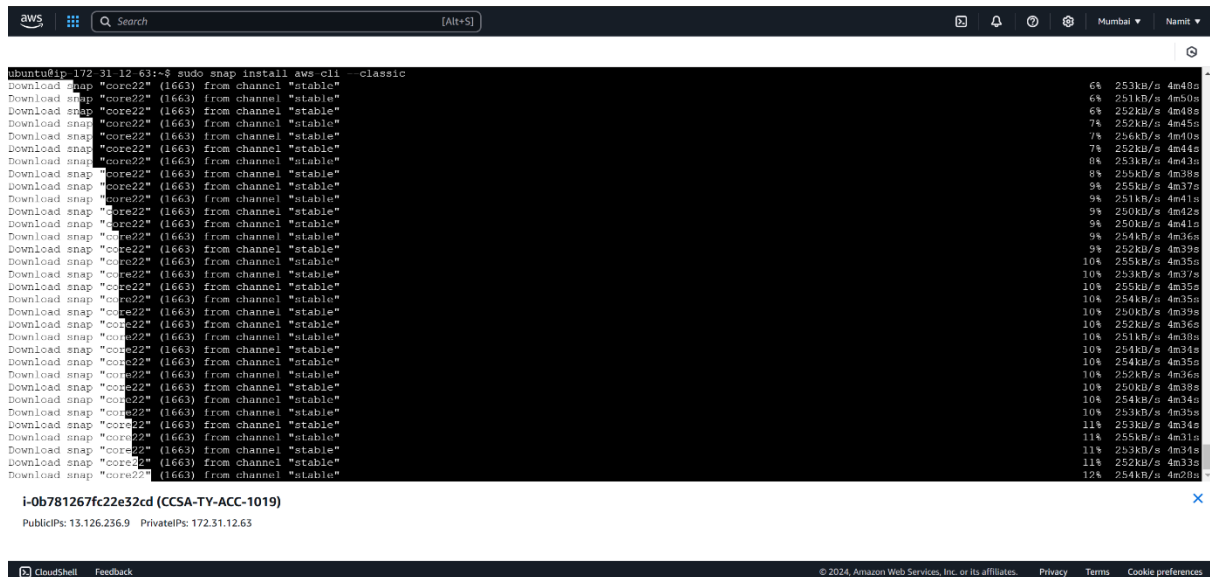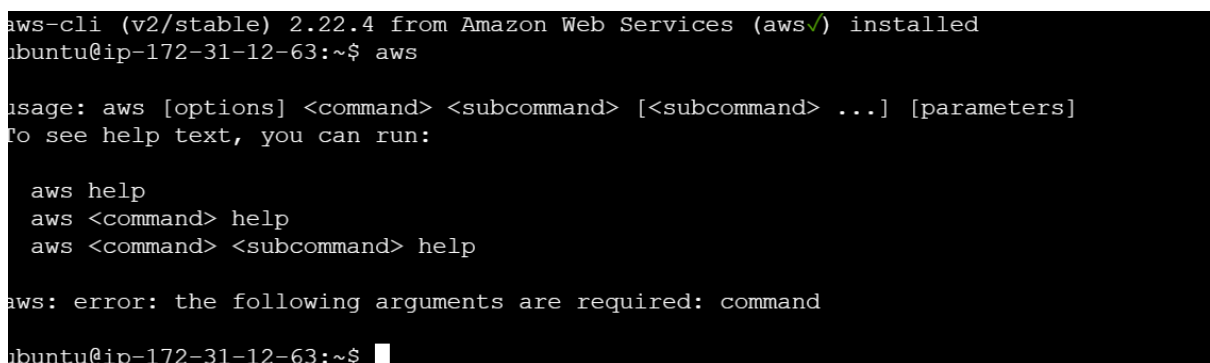# School of Computer Science, Engineering and Applications (SCSEA)
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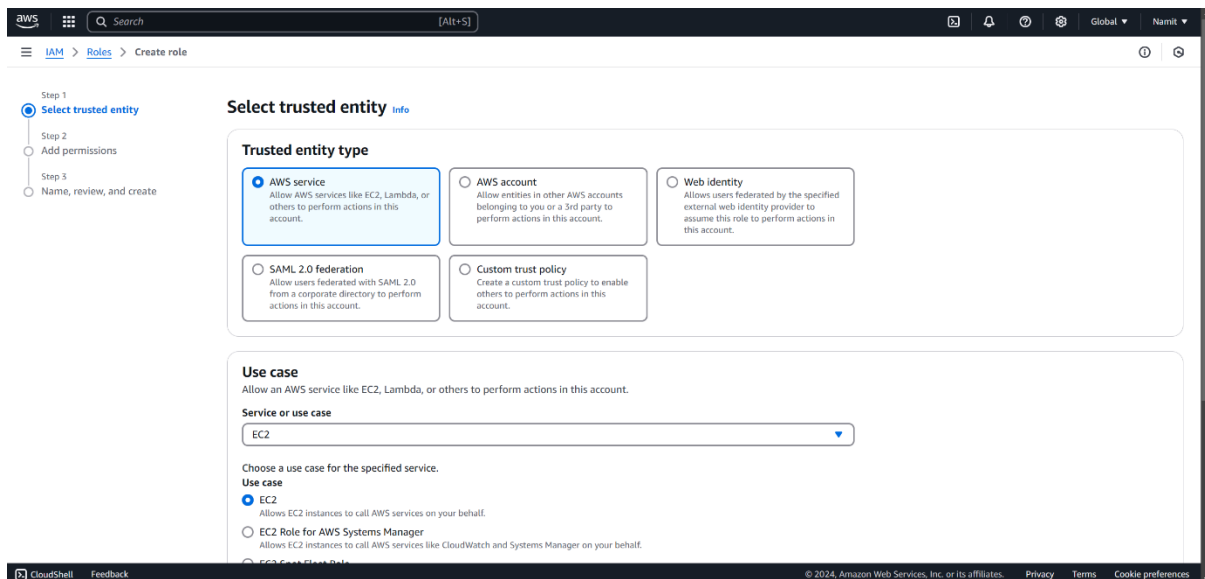

Step 5: Create an IAM Role

1. Go to the **IAM service**, then to **Roles**, and click on **Create Role**.

2. Select **Trusted Entity Type** as **AWS Service** and **Use Case** as **EC2**, then click **Next**.

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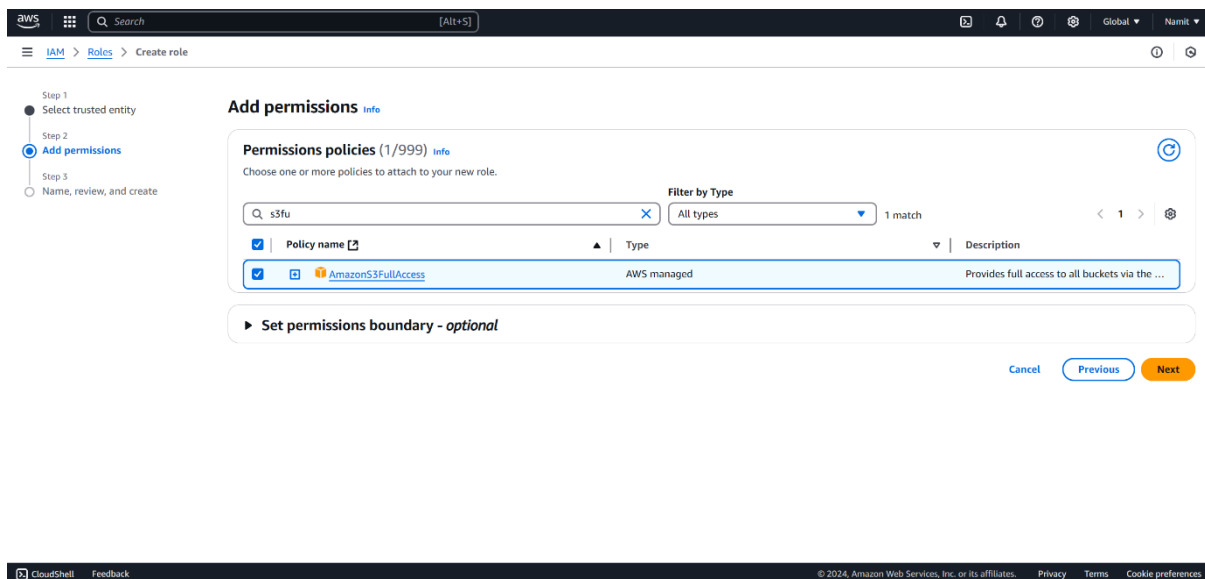**Title of Practical:**   Access S3 bucket through EC2 using IAM role

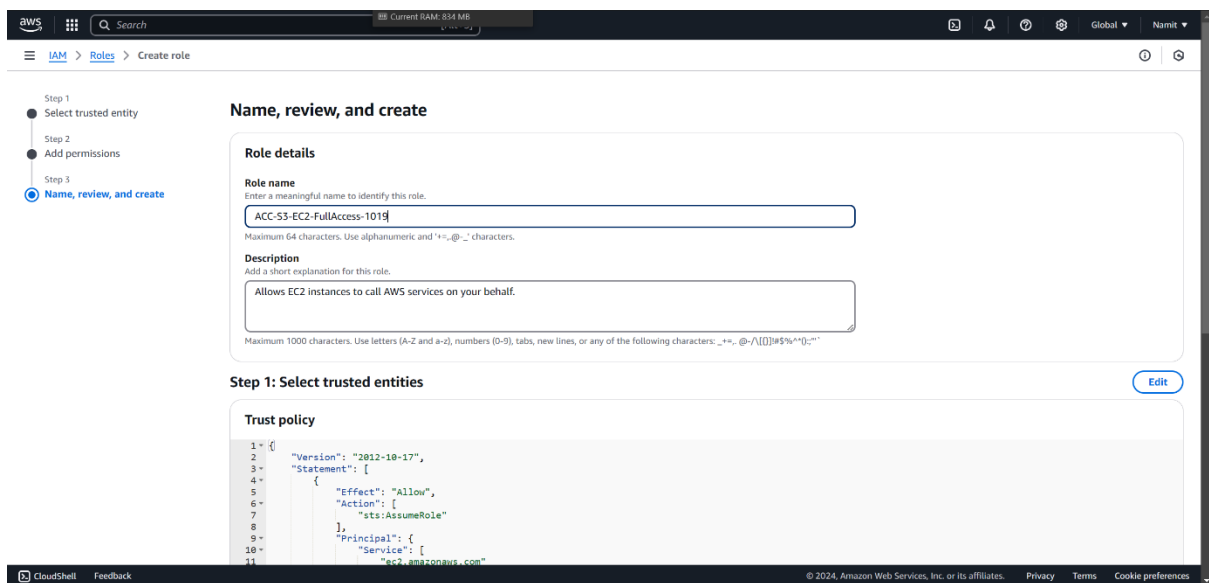3. In the **Add Permissions** section, search for S3FullAccess and select the policy, then click **Next**.

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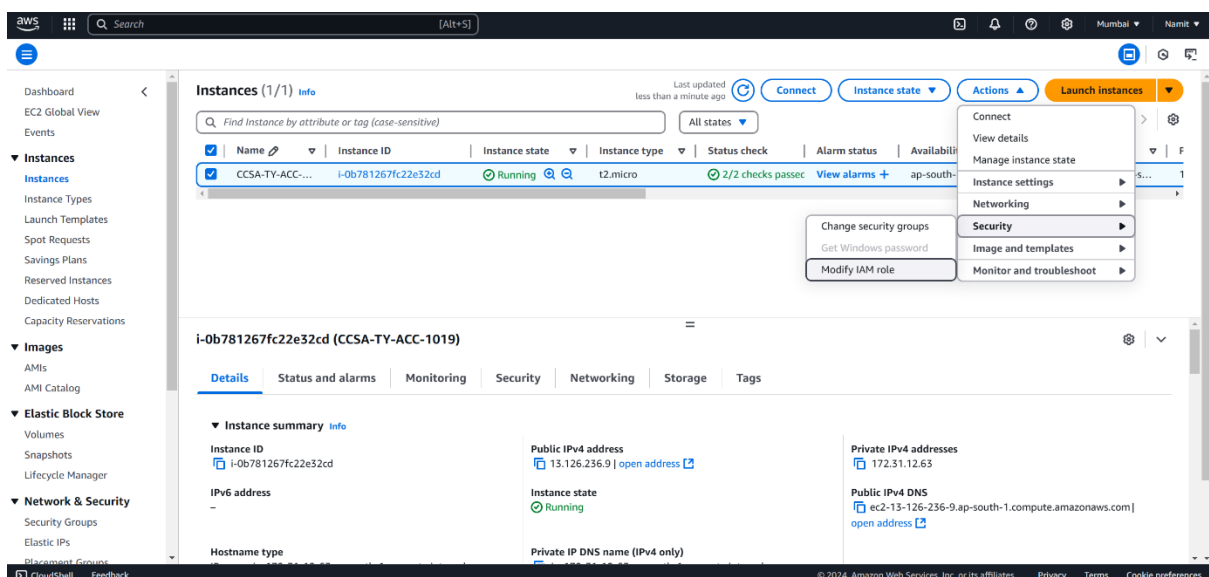
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4. **Name your IAM role**, then click **Create Role**.

Step 6: Attach IAM Role to the EC2 Instance

1. Go to the **EC2 service**, select the instance, and click on the **Actions** dropdown.
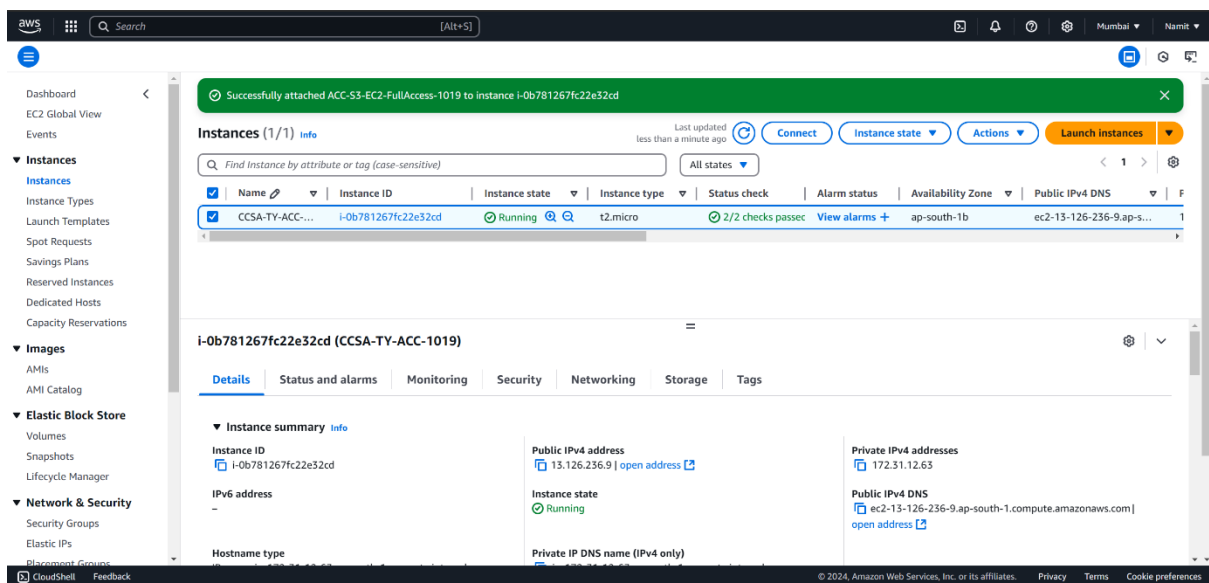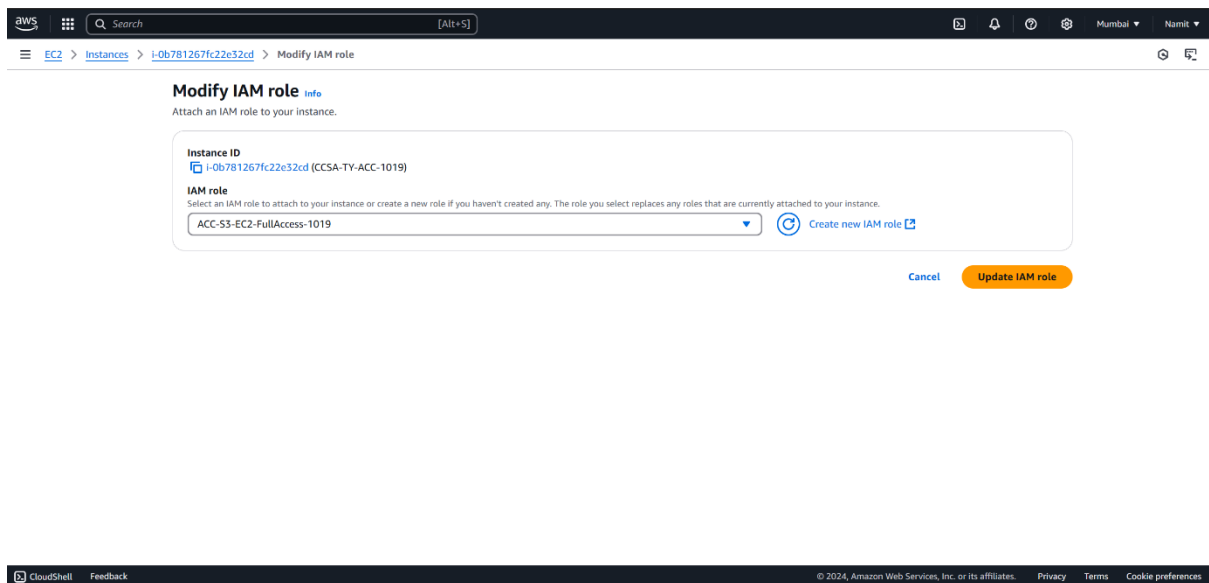
2. Click on **Security**, then select **Modify IAM Role**.

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Step 7: Access the S3 Bucket from EC2

1. **List the buckets**:

aws s3 ls

2. **List the contents of a specific S3 bucket**:

aws s3 ls s3:// s3-1019-ccsa-ty

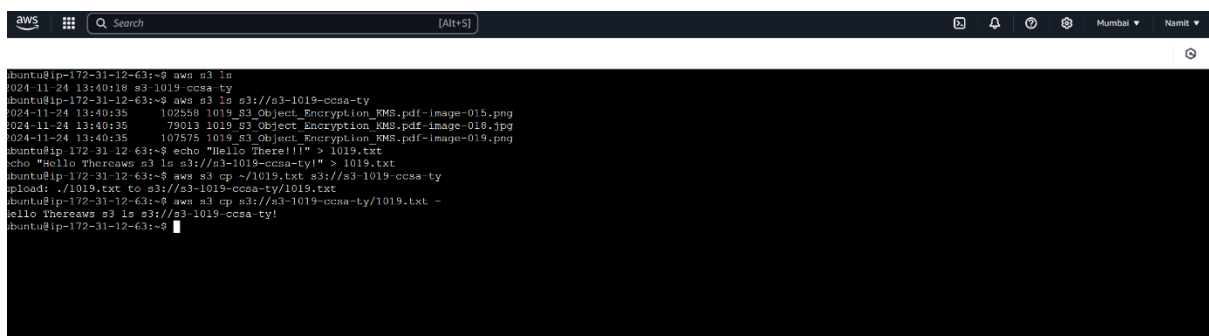**Step 8: Write Data to S3 Bucket**

1. Create a file on the EC2 instance:

echo "Hello There!!!" > 1019.txt

2. **Upload the file to S3**:

aws s3 cp ~/1019.txt s3://s3-1019-ccsa-ty

3. **Read the file from S3**:

aws s3 cp s3:// s3-1019-ccsa-ty /1019.txt -