

## Task 5:

- a. Introduction to Amazon EC2
- b. Introduction to Amazon Simple Storage Service (S3)

### a. Introduction to Amazon EC2

#### Description:

- **Amazon Elastic Compute Cloud (EC2)** is a web service that provides resizable compute capacity in the cloud. It allows you to launch and manage virtual servers (called instances) in AWS data centers.

#### Launch an EC2 Instance:

##### 1. Sign in to AWS Management Console:

- Go to the [AWS Management Console](#).
- Sign in with your AWS account.

##### 2. Navigate to EC2 Dashboard:

- In the AWS Management Console, search for **EC2** in the services menu and click on it.

##### 3. Launch an Instance:

- Click the **Launch Instance** button.
- Choose an **Amazon Machine Image (AMI)** (e.g., Amazon Linux 2 or Ubuntu).
- Select an **Instance Type** (e.g., t2.micro for free-tier eligibility).
- Configure instance details (e.g., number of instances, network settings).
- Add storage (default is usually sufficient for basic tasks).
- Add tags (optional, e.g., Name: MyEC2Instance).
- Configure security groups (e.g., allow SSH access from your IP).
- Review and click **Launch**.

##### 4. Create a Key Pair:

- When prompted, create a new key pair or use an existing one.
- Download the **.pem** file (required for SSH access).

##### 5. Access the EC2 Instance:

- Once the instance is running, note its **Public IP**.
- Use SSH to connect to the instance:

```
ssh -i /path/to/key.pem ec2-user@[PUBLIC_IP]
```

- Replace /path/to/key.pem with the path to your key file and [PUBLIC\_IP] with the instance's public IP.

##### 6. Terminate the Instance (Optional):

- After completing the lab, terminate the instance to avoid unnecessary charges:
  - Go to the EC2 Dashboard.
  - Select the instance and click **Instance State > Terminate**.

## **b. Introduction to Amazon Simple Storage Service (S3)**

### **Description:**

- **Amazon S3 (Simple Storage Service)** is a scalable object storage service designed to store and retrieve any amount of data from anywhere.

### **Create an S3 Bucket and Upload a File**

#### **1. Sign in to AWS Management Console:**

- Go to the [AWS Management Console](#).
- Sign in with your AWS account.

#### **2. Navigate to S3 Dashboard:**

- In the AWS Management Console, search for **S3** in the services menu and click on it.

#### **3. Create a Bucket:**

- Click the **Create Bucket** button.
- Enter a **Bucket Name** (must be globally unique).
- Choose a **Region** (e.g., us-east-1).
- Configure settings (e.g., versioning, encryption, tags).
- Click **Create Bucket**.

#### **4. Upload a File:**

- Select the bucket you just created.
- Click the **Upload** button.
- Add files from your computer and click **Upload**.

#### **5. Set Permissions (Optional):**

- To make the file publicly accessible:
  - Select the file and click **Actions > Make Public**.
- To restrict access:
  - Use bucket policies or IAM roles.

#### **6. Access the File:**

- Once uploaded, note the file's **Object URL**.
- Open the URL in a browser to access the file (if public).

#### **7. Delete the Bucket (Optional):**

- After completing the lab, delete the bucket to avoid charges:
  - Select the bucket and click **Delete**.
  - Confirm the deletion.