**Lab 1: Amazon RDS Setup and Usage**

**Step 1: Create an RDS Instance**

1. Go to the **AWS Management Console**, navigate to **RDS**.
2. Click on **Create database**.
3. Select the **Standard Create** option.
4. Choose **MySQL** or any other engine you'd like to use.
5. For **Templates**, choose **Free tier** (if available).
6. Configure the **DB instance identifier**, **Master username**, and **Master password**.
7. Set **DB instance size** to a free-tier eligible size like **db.t2.micro** (for testing purposes).
8. Configure **Storage** settings, selecting **General Purpose (SSD)** with a default storage allocation.
9. For **Connectivity**, make sure to select **Public access** to access your database publicly (or configure VPC settings if needed).
10. In **Additional configuration**, enter **Initial database name**.
11. Click on **Create database**.

**Screenshot**: Capture the configuration summary before creating the database.

**Step 2: Connect to Your RDS Instance**

1. After the database instance is available, find the **Endpoint** in the instance's **Connectivity & Security** tab.
2. Use a MySQL client (like MySQL Workbench) to connect:
   * Hostname: RDS Endpoint.
   * Port: Default 3306 for MySQL.
   * Username and password you configured earlier.

**Screenshot**: Capture the MySQL client showing a successful connection.

**Step 3: Create a Sample Table and Insert Data**

1. Run a SQL script in the MySQL client:

sql

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CREATE TABLE Users (

ID INT PRIMARY KEY AUTO\_INCREMENT,

Name VARCHAR(100),

Email VARCHAR(100)

);

INSERT INTO Users (Name, Email) VALUES ('Alice', 'alice@example.com'), ('Bob', 'bob@example.com');

1. Run a SELECT \* FROM Users; query to see the inserted data.

**Screenshot**: Capture the SQL client showing the inserted data.

**Lab 2: Amazon DynamoDB Setup and Usage**

**Step 1: Create a DynamoDB Table**

1. Go to the **AWS Management Console**, navigate to **DynamoDB**.
2. Click on **Create table**.
3. Enter **Table name** (e.g., UsersTable) and a **Partition key** (e.g., UserID with data type String).
4. Use default settings for **Provisioned capacity** for free-tier usage or set **On-demand** if needed.
5. Click on **Create table**.

**Screenshot**: Capture the configuration page before creating the table.

**Step 2: Insert Data into DynamoDB Table**

1. Go to the **Items** tab in your DynamoDB table.
2. Click **Create item**.
3. In the JSON editor, enter:

json

Copy code

{

"UserID": "1",

"Name": "Amit",

"Email": "amit@ow.com"

}

1. Click **Save** to add the item.
2. Repeat to add another item, changing the UserID, Name, and Email values.