✎ Module 9 - Assignment

Problem Statement:
You work for xyz organization. Your job work is to manage Linux-based servers.

You have been asked to:

1. Install MySQL on CentOS
2. Create a database with two tables - table1 & table2
3. Create a shell script which can be used to insert 4 rows of data into table1 & table2

Update packages:

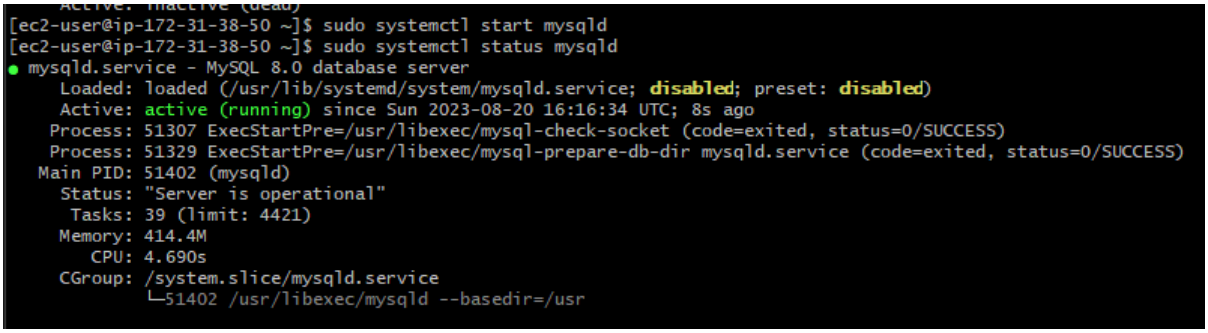
```
sudo yum update -y
```

Install mysql:

```
sudo yum install mysql-server -y
```

Start the service and confirm it is up

```
sudo systemctl start mysqld
sudo systemctl status mysqld
```



Run `mysql_secure_installation` for security-related operations like configuring a password

```
sudo mysql_secure_installation
```

Log in to the MySQL shell as the root user: `mysql -u root -p` using previously configured password

```
[ec2-user@ip-172-31-38-50 ~]$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.32 Source distribution

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Step 1: Create a Database

```
CREATE DATABASE mydatabase;
```

Step 2: Create Tables

```
USE mydatabase;

CREATE TABLE table1 (
  id INT PRIMARY KEY AUTO_INCREMENT,
  name VARCHAR(255),
  age INT
);

CREATE TABLE table2 (
  id INT PRIMARY KEY AUTO_INCREMENT,
  product VARCHAR(255),
  price FLOAT
);
```

```
mysql> CREATE DATABASE mydatabase;
Query OK, 1 row affected (0.01 sec)

mysql> USE mydatabase;
Database changed
mysql>
mysql> CREATE TABLE table1 (
    ->   id INT PRIMARY KEY AUTO_INCREMENT,
    ->   name VARCHAR(255),
    ->   age INT
    -> );

CREATE TABLE table2 (
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql> CREATE TABLE table2 (
    ->   id INT PRIMARY KEY AUTO_INCREMENT,
    ->   product VARCHAR(255),
    ->   price FLOAT
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
```

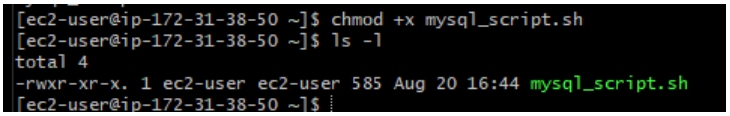
3. Create a Shell Script for Inserting Data:

Created script named `mysql_script.sh` with the following content using `vi`:

```
#!/bin/bash

# Log in to the MySQL server and insert data into table1 and table2
mysql -u root -p -D 'mydatabase' <<EOF

INSERT INTO table1 (name, age) VALUES ('Alice', 30);
INSERT INTO table1 (name, age) VALUES ('Bob', 40);
INSERT INTO table1 (name, age) VALUES ('Charlie', 50);
INSERT INTO table1 (name, age) VALUES ('Dave', 60);

INSERT INTO table2 (product, price) VALUES ('Laptop', 1000);
INSERT INTO table2 (product, price) VALUES ('Phone', 500);
INSERT INTO table2 (product, price) VALUES ('TV', 1500);
INSERT INTO table2 (product, price) VALUES ('Camera', 800);

EOF
```

Giving script execution permissions:

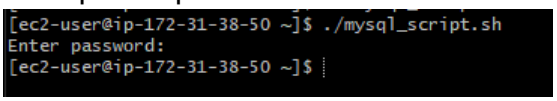
```
chmod +x insert_data.sh
```



Executing the script:

```
./insert_data.sh
```

Prompts for password



Confirming input:

1. Logging to MySQL shell as the root user:

```
mysql -u root -p
```

prompted for password

2. Switch to database:

```
USE mydatabase;
```

3. Checking data in `table1`:

```
SELECT * FROM table1;
```

4. Checking data in `table2`:

```
SELECT * FROM table2;
```