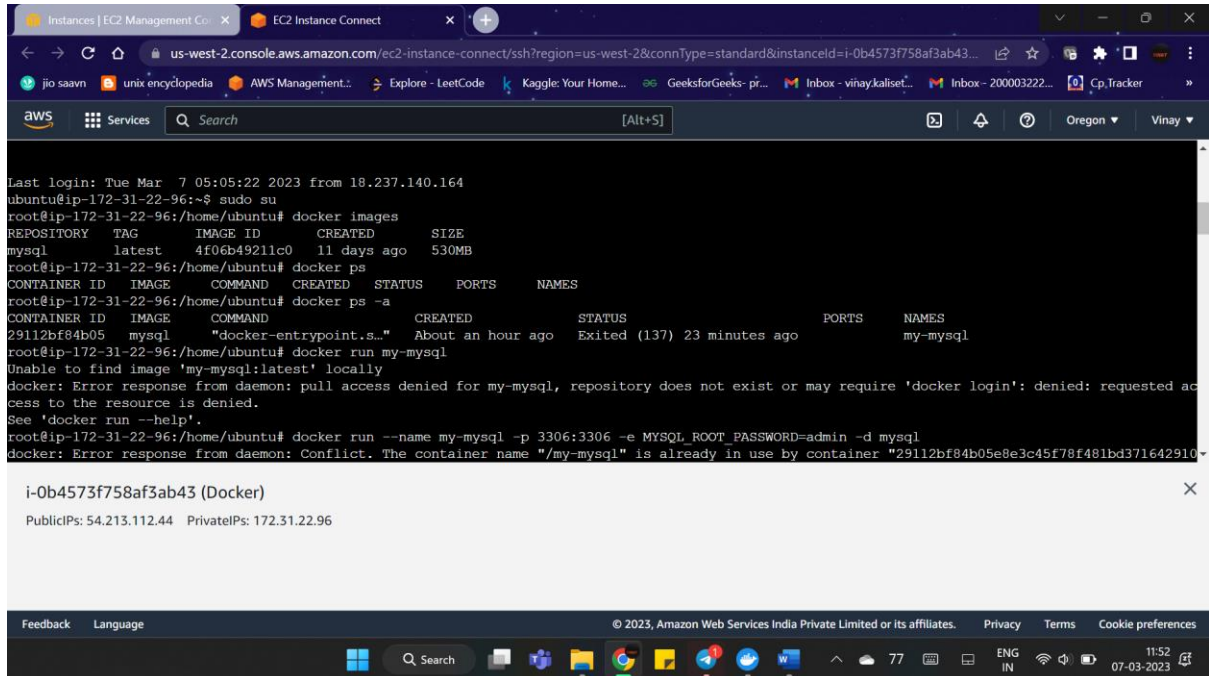


# Perform MySQL Operations

1. After installing docker, go to docker machine using command “sudo su”



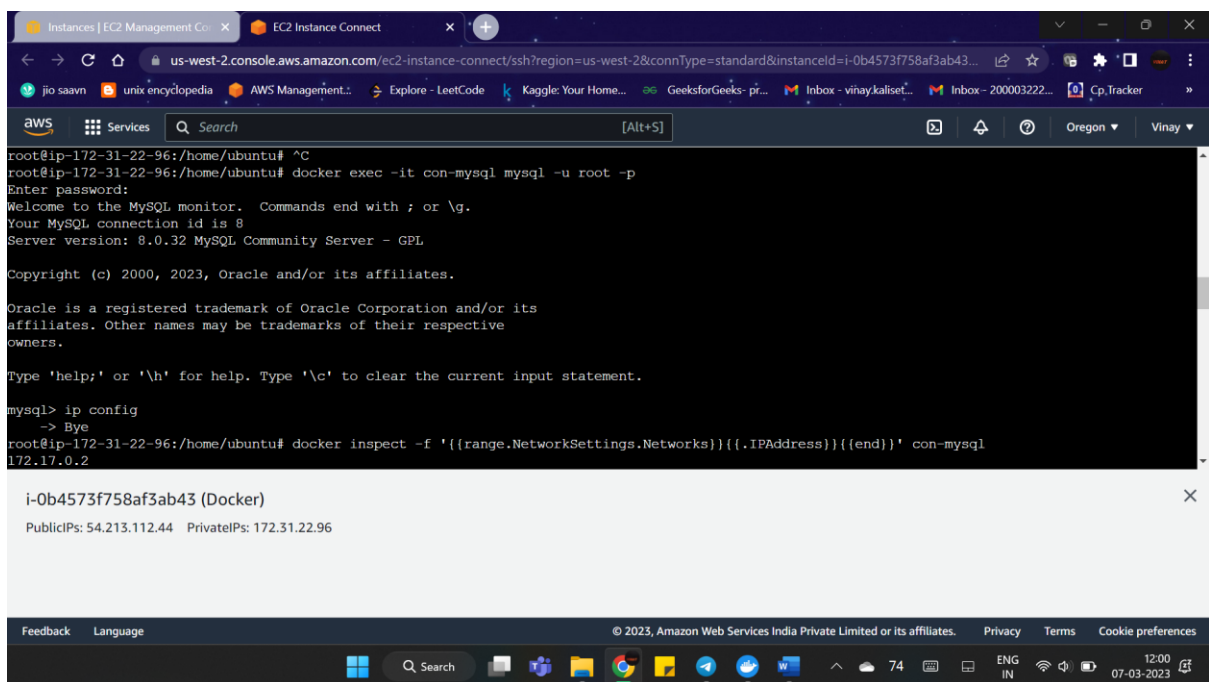
The screenshot shows a terminal window connected to an EC2 instance via AWS EC2 Instance Connect. The terminal displays the following commands and output:

```
Last login: Tue Mar 7 05:05:22 2023 from 18.237.140.164
ubuntu@ip-172-31-22-96:~$ sudo su
root@ip-172-31-22-96:/home/ubuntu# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
mysql          latest    4f06b49211c0   11 days ago    530MB
root@ip-172-31-22-96:/home/ubuntu# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
root@ip-172-31-22-96:/home/ubuntu# docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
29112bf84b05   mysql    "docker-entrypoint.s..." About an hour ago Exited (137)   23 minutes ago my-mysql
root@ip-172-31-22-96:/home/ubuntu# docker run my-mysql
Unable to find image 'my-mysql:latest' locally
docker: Error response from daemon: pull access denied for my-mysql, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.
root@ip-172-31-22-96:/home/ubuntu# docker run --name my-mysql -p 3306:3306 -e MYSQL_ROOT_PASSWORD=admin -d mysql
docker: Error response from daemon: Conflict. The container name "/my-mysql" is already in use by container "29112bf84b05e8e3c45f78f481bd371642910". You can re-use this name with --force if you are certain you wish to overwrite the existing container.
```

Below the terminal output, a Docker container information box is visible:

```
i-0b4573f758af3ab43 (Docker)
PublicIPs: 54.213.112.44 PrivateIPs: 172.31.22.96
```

2. Now pull a mysql image using the command “docker pull mysql”
3. Run the image in a container using the following command:  
**docker run --name <container-name> -p 3306:3306 -e MYSQL\_ROOT\_PASSWORD=<password> -d mysql**



The screenshot shows a terminal window connected to an EC2 instance via AWS EC2 Instance Connect. The terminal displays the following commands and output:

```
root@ip-172-31-22-96:/home/ubuntu# ^C
root@ip-172-31-22-96:/home/ubuntu# docker exec -it con-mysql mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.32 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> ip config
-> Bye
root@ip-172-31-22-96:/home/ubuntu# docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' con-mysql
172.17.0.2
```

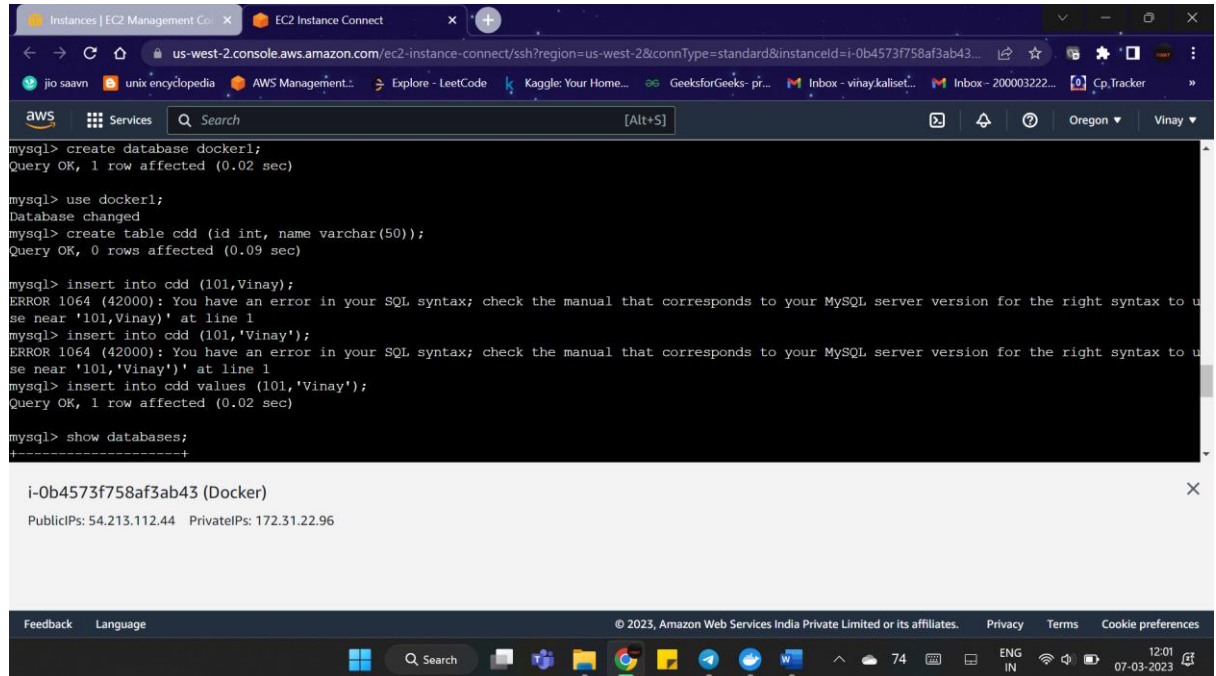
Below the terminal output, a Docker container information box is visible:

```
i-0b4573f758af3ab43 (Docker)
PublicIPs: 54.213.112.44 PrivateIPs: 172.31.22.96
```

4. Now, when the container is running connect to mysql using the command:

**`docker exec -it con-mysql mysql -u root -p`**

5. Now, Enter the password for establishing a connection.



The screenshot shows a terminal window connected to an AWS EC2 instance. The terminal displays the following MySQL commands and their outputs:

```
mysql> create database docker1;
Query OK, 1 row affected (0.02 sec)

mysql> use docker1;
Database changed
mysql> create table cdd (id int, name varchar(50));
Query OK, 0 rows affected (0.09 sec)

mysql> insert into cdd (101,Vinay);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '101,Vinay)' at line 1
mysql> insert into cdd (101,'Vinay');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '101,'Vinay')' at line 1
mysql> insert into cdd values (101,'Vinay');
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
i-0b4573f758af3ab43 (Docker)
PublicIPs: 54.213.112.44 PrivateIPs: 172.31.22.96
```

The terminal window is titled "i-0b4573f758af3ab43 (Docker)" and shows the public and private IP addresses. The bottom of the window displays the AWS Management Console interface with a search bar and navigation links.

6. Now create a database using the command

**`create database <database-name>`**

7. Go to the database using the command:

**`use <database-name>`**

8. Create a table using the command:

**`create table tablename(id int, name varchar(50));`**

The screenshot shows a web browser window with the AWS Management Console URL. The terminal session is connected to an EC2 instance with ID i-0b4573f758af3ab43. The terminal output shows the following commands and results:

```
se near '101,'Vinay')' at line 1
mysql> insert into cdd values (101,'Vinay');
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| docker1  |
| information_schema |
| mysql    |
| performance_schema |
| sys      |
+-----+
5 rows in set (0.00 sec)

mysql> use docker1;
Database changed
mysql> show tables;
```

Below the terminal output, the instance details are shown:

i-0b4573f758af3ab43 (Docker)  
PublicIPs: 54.213.112.44 PrivateIPs: 172.31.22.96

The bottom of the screenshot shows the Windows taskbar with the Start button, search bar, and various application icons. The system tray shows the date and time as 12:04 on 07-03-2023.

9. Insert values into database using the command:  
**insert into cdd values (id,'name');**