

Práctica 05 Contenedor Docker para MySQL

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GRIC3091

1.- Descargar contenedor Docker de MySql

```
Actividades Terminal 28 de jun. 16:31
treyes@treyes-PC: ~$ sudo docker pull mysql
Using default tag: latest
latest: Pulling from library/mysql
46ef68baacb7: Pull complete
94c1114b2e8c: Pull complete
ff05e3f38802: Pull complete
41cc3fc09912: Pull complete
078acdb0ff52a: Pull complete
6d88f8372da9: Pull complete
cf5c7d5d33f7: Pull complete
9db3178a2a66: Pull complete
feae6b277a9: Pull complete
cf91e7784414: Pull complete
b177b6b1c329: Pull complete
Digest: sha256:15f069202c46cf861ce429423ac3f8dfa6423306fbf399eae36094ce30dd75c
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
treyes@treyes-PC: ~$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
mysql latest 91b3e2624b4 10 days ago 565MB
treyes@treyes-PC: ~$
```

2.- Ingresar al contenedor.

```
Actividades Terminal 28 de jun. 16:41
treyes@treyes-PC: ~$ sudo docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql mysql:latest
b23b729104e3d6dc31f2b3c34e320f8d59e3a22f85d226ad1f76551bcb1a
treyes@treyes-PC: ~$ docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql mysql:latest
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post "http://n2fvarn2f2run2fdocker.sock/v1.24/containers/create?name=mysql-demo": dial unix /var/run/doc
var.sock: connect: permission denied.
See 'docker run --help'.
treyes@treyes-PC: ~$ sudo apt install mysql-client -y
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
mysql-client ya está en su versión más reciente (8.0.33-0ubuntu0.22.04.2).
0 actualizados, 0 nuevos se instalarán, 0 para eliminar y 18 no actualizados.
treyes@treyes-PC: ~$ mysql -version
mysql Ver 8.0.33-0ubuntu0.22.04.2 for Linux on x86_64 ((Ubuntu))
treyes@treyes-PC: ~$ docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' mysql-demo
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://n2fvarn2f2run2fdocker.sock/v1.24/containers/mysql-demo/json": dial unix /var/run/docker.sock: connec
t: permission denied
treyes@treyes-PC: ~$ sudo docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' mysql-demo
172.17.0.2
treyes@treyes-PC: ~$ mysql -h 172.17.0.2 -P 3306 --protocol=tcp -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33 MySQL Community Server - GPL

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

mysql>
```

```
Actividades | Terminal
```

26 de jun. 16:50 ↕

sreyes@Reyes-PC: ~
[]

sreyes@Reyes-PC: ~
[] [] []

```
sreyes@Reyes-PC: ~$ sudo docker network create network-mysql-pract05
8bd935c2a2fe3281ab34ba58b8c43891dc47a87e6be1456e9f50cb0ecfa120f1
sreyes@Reyes-PC: ~$ sudo docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql --network network-mysql-pract05 mysql:latest
docker: invalid reference format.
See 'docker run --help'.

sreyes@Reyes-PC: ~$ sudo docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql --network network-mysql-pract05 mysql:latest
fb2d5b5eb69b195ae6713d669e0e2e4d0bcd8e47db924fb6e8caeef25a776a24
sreyes@Reyes-PC: ~$ sudo docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' mysql-demo
172.19.0.2
sreyes@Reyes-PC: ~$ mysql -h 172.19.0.2 -P 3306 --protocol=tcp -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33 MySQL Community Server - GPL

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

mysql>
```

5.- Una vez ingresado al gestor de MySql deberá de crear base de datos llamada practica04

```
Actividades Terminal 26 de jun. 16:53
sreyes@Reyes-PC: ~
sreyes@Reyes-PC: ~$ sudo docker network create network-mysql-pract05
88d935c2a2fe3281ab34ba58b8c43891dc47a87e6be1456e9f50cb0ecfa120f1
sreyes@Reyes-PC: ~$ sudo docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql --network network-mysql-pract05 mysql:latest
docker: invalid reference format.
See 'docker run --help'.
sreyes@Reyes-PC: ~$ sudo docker run --name mysql-demo -e MYSQL_ROOT_PASSWORD=demo -d -v mysql-demo:/var/lib/mysql --network network-mysql-pract05 mysql:latest
fb2d5b5ab69b195a6c713d669e0e2e4d0bdc8e47db924fb6e8caae25a776a24
sreyes@Reyes-PC: ~$ sudo docker inspect -f '{{range.NetworkSettings.Networks}}{{.IPAddress}}{{end}}' mysql-demo
172.19.0.2
sreyes@Reyes-PC: ~$ mysql -h 172.19.0.2 -P 3306 --protocol=tcp -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33 MySQL Community Server - GPL

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owners.

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

mysql> create database practica04
->
Query OK, 1 row affected (0.02 sec)

mysql> show database;
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 'database'
at line 1
mysql> show databases;
+-----+
| Database |
+-----+
| automiza |
| information_schema |
| mysql |
| performance_schema |
| practica04 |
| sys |
+-----+
6 rows in set (0.00 sec)

mysql>
```

6.- Crear al menos una tabla sobre información proporcionada por el equipo de desarrollo. Por ejemplo, Eventos, Usuarios, Productos.

```
Actividades Terminal 26 de jun. 16:59
sreyes@Reyes-PC: ~
sreyes@Reyes-PC: ~$ mysql use practica04
Database changed
mysql> create table usuarios (
-> id int primary key auto_increment,
-> nombre varchar (30),
-> apellidos varchar (50),
-> username varchar (10),
-> sexo varchar (20)
-> );
Query OK, 0 rows affected (0.10 sec)

mysql> show table;
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 '' at line 1
mysql> show tables;
+-----+
| Tables_in_practica04 |
+-----+
| usuarios |
+-----+
1 row in set (0.01 sec)

mysql>
```

7. Ejecutar operaciones:

- o Insertar al menos cinco registros distintos a la tabla recién creada en paso anterior.
- o Listar todos los registros de la tabla.
- o Modificar al menos dos registros
- o Eliminar el último registro insertado en la tabla

```
Actividades Terminal 26 de jun 17:10
sreyes@Reyes-PC: ~
mysql> insert into usuarios(nombre, apellidos, username, sexo) values("salvador", "reyes", "sreyes", "masculino");
Query OK, 1 row affected (0.06 sec)

mysql> select * from usuarios;
+----+-----+-----+-----+-----+
| id | nombre | apellidos | username | sexo |
+----+-----+-----+-----+-----+
| 1 | salvador | reyes | sreyes | masculino |
+----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> insert into usuarios(nombre, apellidos, username, sexo) values("angel", "cantero", "acantero", "masculino");
Query OK, 1 row affected (0.06 sec)

mysql> insert into usuarios(nombre, apellidos, username, sexo) values("daniel", "duarte", "dduarte", "masculino");
Query OK, 1 row affected (0.06 sec)

mysql> insert into usuarios(nombre, apellidos, username, sexo) values("maria", "guadalupe", "mguadalupe", "femenino");
Query OK, 1 row affected (0.02 sec)

mysql> insert into usuarios(nombre, apellidos, username, sexo) values("monse", "martinez", "mmartinez", "femenino");
Query OK, 1 row affected (0.01 sec)

mysql> select * from usuarios;
+----+-----+-----+-----+-----+
| id | nombre | apellidos | username | sexo |
+----+-----+-----+-----+-----+
| 1 | salvador | reyes | sreyes | masculino |
| 2 | angel | cantero | acantero | masculino |
| 3 | daniel | duarte | dduarte | masculino |
| 4 | maria | guadalupe | mguadalupe | femenino |
| 5 | monse | martinez | mmartinez | femenino |
+----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> update usuarios set username="reyes"
-> where id=1;
Query OK, 1 row affected (0.06 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update usuarios set username="duarte" where id=3;
Query OK, 1 row affected (0.06 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> delete from usuarios where id=5;
Query OK, 1 row affected (0.01 sec)

mysql>
```

```
mysql> select * from usuarios;
+----+-----+-----+-----+-----+
| id | nombre | apellidos | username | sexo |
+----+-----+-----+-----+-----+
| 1 | salvador | reyes | reyes | masculino |
| 2 | angel | cantero | acantero | masculino |
| 3 | daniel | duarte | duarte | masculino |
| 4 | maria | guadalupe | mguadalupe | femenino |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> █
```