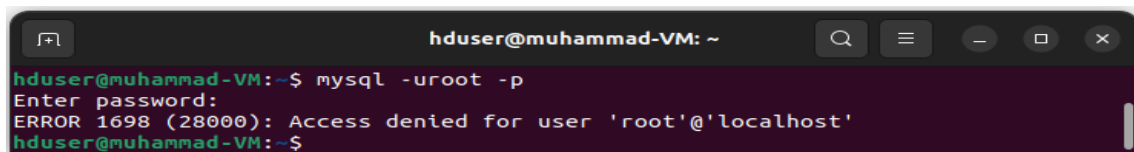# Tutorial 4 (Part I)
MySQL Installation

1) Open a terminal in Ubuntu OS. Install required packages as mentioned below using **sudo** commands. Set password to **password** when prompted.

```
$sudo apt update
$sudo apt install mysql-server
$sudo apt install mysql-client
$sudo apt install libmariadb-java
```

2) Create database **Test** and **testtable** table.

```
$mysql -uroot -p
```

Considering that MySQL doesn't currently have a password. Any password will result in an error, therefore, **finish step 4** before continuing to set the password for MySQL. We are using "password" to login for MySQL.

After completion of step 4, at the MySQL command prompt, Create the table in MySQL by using the following commands as

```
mysql>create database Test;
mysql>use Test;
mysql>CREATE TABLE testtable (id INTEGER PRIMARY KEY,
description VARCHAR(255));
mysql>show tables;
```

3) Exit the mysql session.

4) **Reset Root Password**
If you are facing any error during the login of mysql session
For MySQL 8 or above version and you can check the version by using (**$mysql --version**) on Ubuntu, run following commands as shown in the provided in the text format and the screenshot.

```
$sudo mysql
mysql>UPDATE mysql.user SET authentication_string=null WHERE User='root';
mysqL>flush privileges;
mysql>ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY
'password';
```
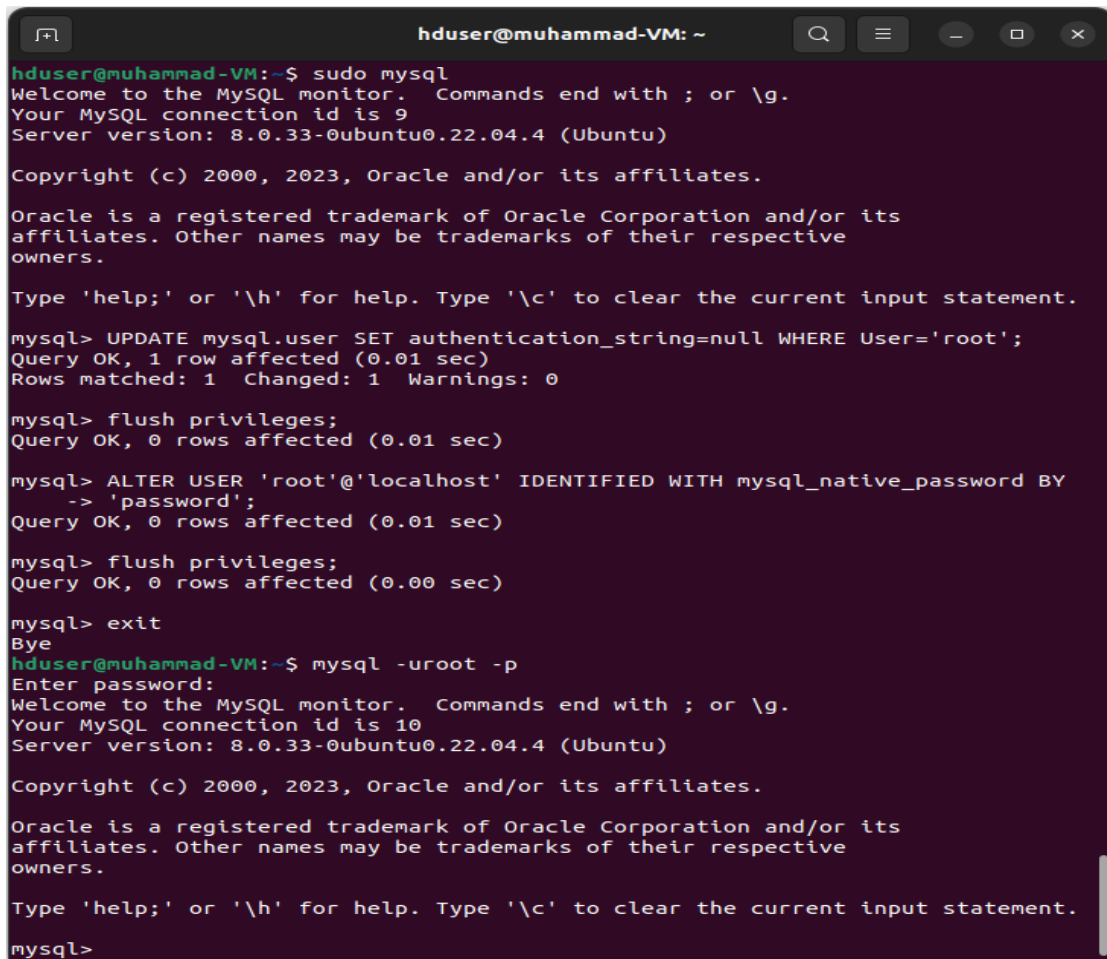
Flush privileges again.

```
mysql>flush privileges;
```

Exit MySQL.

```
mysql>exit
```

`$mysql -uroot -p`


```
hduser@muhammad-VM:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.33-0ubuntu0.22.04.4 (Ubuntu)

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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> UPDATE mysql.user SET authentication_string=null WHERE User='root';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> flush privileges;
Query OK, 0 rows affected (0.01 sec)

mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY
    -> 'password';
Query OK, 0 rows affected (0.01 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)

mysql> exit
Bye
hduser@muhammad-VM:~$ mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.33-0ubuntu0.22.04.4 (Ubuntu)

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owners.

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

mysql>
```

Note: When logging in to MySQL, use password as 'password'.

Reference:

https://devanswers.co/how-to-reset-mysql-root-password-ubuntu/