installing mariaDb on raspberry Pi

1. sudo apt-get install mariadb-server

   add a password for root when prompted

2. mysql –u root –p <enter>

   enter password:<enter the password you set during install>

3. create database <dbname> ;

   note ; at the end of the command

4. use <dbname>;

   selects <dbname> as the current database to use (obvious?)

5. create table <tablename> { col1 datatype,col2 datatype,col3 datatype…);

   Look up the syntax if you need to specify a primary key

Creating users with passwords

If you plan to allow remote access change 'localhost' to '%' in the following lines. Also note that when you create the user the username is converted to LOWERCASE. If you try to remote connwect with a capitalised username the connection will be rejected.

1. create user '<user>'@'localhost' identified by '<password>';
2. grant all privileges on *.* to '<user>'@'localhost' identified by '<password>';

   NOTE: you may want to restrict what a user is allowed to do and which database etc they can do it with so use:-

   ```
   GRANT SELECT,INSERT, UPDATE,DELETE,CREATE,DROP on …
   ```

Enabling remote access

By default only local access is allowed. You need to edit the configuration files and restart the server

1. nano /etc/mysql/my.cnf

   find the line which contains **bind-address 127.0.0.1** and comment it out

2. sudo service mysql restart

Connecting with Python

Basic connection program :-

```
import mysql.connector
```

```
dbHost="database server ip or name"
dbUser=”lowercase-username"
dbPassword="password"
dbName="your-database-name"

mydb=None  # attempts to use, if connect fails, will throw an error

try:
    mydb = mysql.connector.connect(
    host=dbHost,
    user=dbUser,
    passwd=dbPassword,
    database=dbName
    )
    print("Connected ok")
    mycursor = mydb.cursor()
except Exception as e:
    print("Error connecting to the database")
    print(e)
```

Now you can do something with mycursor..