1)

Je m'assure que mon systeme est à jour en faisant : sudo apt update et upgrade.

Apres ça j'installation de mariadb :

```
pi@pi205-11:~ $ sudo apt install mariadb-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  acl colord-data hplip-data libcolorhug2 libgusb2 libieee1284-3 libncurses5
  libprotobuf17 libsane-common libsnmp-base libtext-template-perl
  printer-driver-postscript-hp python-mysql.connector python-protobuf
  python3-pexpect python3-ptyprocess python3-renderpm python3-reportlab
  python3-reportlab-accel tcl update-inetd
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  mariadb-client-10.3 mariadb-client-core-10.3 mariadb-server-10.3
  mariadb-server-core-10.3
Suggested packages:
  mailx mariadb-test tinyca
The following packages will be REMOVED:
  mariadb-client-10.0 mariadb-client-core-10.0 mariadb-server-core-10.0
The following NEW packages will be installed:
  mariadb-client-10.3 mariadb-client-core-10.3 mariadb-server
  mariadb-server-10.3 mariadb-server-core-10.3
0 upgraded, 5 newly installed, 3 to remove and 217 not upgraded.
6 not fully installed or removed.
Need to get 14.6 MB of archives.
```

L'instalaltion terminer je regarde si il démarre bien grace à : sudo systemctl status mariadb :

```
pi@pi205-11:~ $ sudo systemctl status mariadb
🌎 mariadb.service - MariaDB 10.3.34 database server
   Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor preset:
   Active: active (running) since Wed 2022-09-14 14:00:30 BST; 29s ago
     Docs: man:mysqld(8)
           https://mariadb.com/kb/en/library/systemd/
 Main PID: 9284 (mysqld)
   Status: "Taking your SQL requests now..."
   Tasks: 31 (limit: 2062)
   CGroup: /system.slice/mariadb.service
            -9284 /usr/sbin/mysqld
Sep 14 14:00:30 pi205-11 systemd[1]: Started MariaDB 10.3.34 database server.
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9319]: Upgrading MySQL tables i
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: /usr/bin/mysql_upgrade:
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: Looking for 'mysql' as:
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: Looking for 'mysqlcheck'
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: This installation of Mar
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: There is no need to run
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9322]: You can use --force if y
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9330]: Checking for insecure ro
Sep 14 14:00:30 pi205-11 /etc/mysql/debian-start[9334]: Triggering myisam-recove
```

Vu que tout vas bien, j'installe mysql:

```
pi@pi205-11:~ $ sudo mysql secure installation
NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
      SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!
In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
you haven't set the root password yet, the password will be blank,
so you should just press enter here.
Enter current password for root (enter for none):
OK, successfully used password, moving on...
Setting the root password ensures that nobody can log into the MariaDB
root user without the proper authorisation.
You already have a root password set, so you can safely answer 'n'.
Change the root password? [Y/n] y
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
 ... Success!
```

L'installation terminée je vérifie les port d'écoute du service Mysql :

Grâce à ce check-up je sasi que mon processu mysql est bien en marche et fonction correctment. Ou alors je peut utilisée la commande : netstat -tlnp

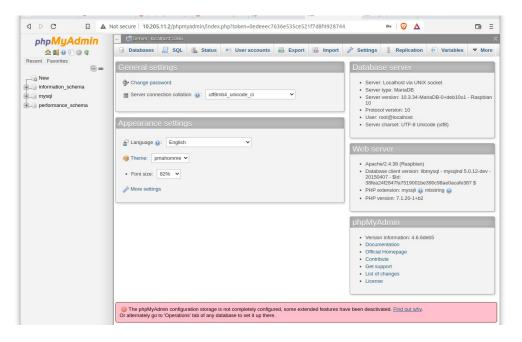
Je peut me connecter en local à mysql:

```
pi@pi205-11:~ $ sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 52
Server version: 10.3.34-MariaDB-0+deb10u1 Raspbian 10
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
MariaDB [(none)]>
```

Maintenant je met en place l'interface web mysql phpmyadmin :

```
pi@pi205-11:~ $ sudo apt install php phpmyadmin apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.38-3+deb10u8).
php is already the newest version (2:7.3+69).
phpmyadmin is already the newest version (4:4.6.6-5).
The following packages were automatically installed and are no longer required:
 acl colord-data hplip-data libcolorhug2 libgusb2 libieee1284-3 libncurses5
 libprotobuf17 libsane-common libsnmp-base libtext-template-perl
 printer-driver-postscript-hp python-mysql.connector python-protobuf
 python3-pexpect python3-ptyprocess python3-renderpm python3-reportlab
 python3-reportlab-accel tcl update-inetd
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 217 not upgraded.
pi@pi205-11:~ $
```

J'ai reussi à me connecter a ma base de données en interface graphique en 'root' :



Je crée la BDD vu en TD1:

J'ai importée les deux table puis j'ai recupéré les id. J'ai crée la premier etable avisFrançais Pas eu le temps pour les autres table.

TP2:

Je continu de configurer mes base de données...

Partie 2)

1 ) J'ouvre la conenction en ligne de le base de données en desactivant dans le fichier mariadb.conf.d>50-server.cnf>la ligne 'bind-address = 127.0.0.1' je rejoute # devant.

Ensuite je me connect à mysql et tape les deux commande suivant pour permettre la connection à BDD depuis l'extérieur :

```
mysql> use mysql ;
mysql> update db set Host='10.205.%' where Db='DBJU';
mysql> update user set Host='10.205.%' where user='DBJU';
```

- 2) Je crée un identifiant et le profile profdeMath avec un mots de passe facile : create user 'profdeMath'@'10.205.%' identified by 'test' ;
- 3) Je m'y connect via mon pc, 'mysql -u profdeMath -p -h 10.205.13.2':

```
13987 1194.8123688... 10.205.13.2
                                                   10.205.13.1
                                                                                         142 Server Greeting
                                                                                                                   Error 1130
                                                                            MySQL
MySQL
MySQL
14963 1478.6397613...
                                                   10.205.13.1
                                                                                         142 Server Greeting
14984 1484.2287457...
                                                   10.205.13.1
                        10.205.13.2
                                                                                         142 Server Greeting
                                                                                                                   Error
                                                                                                                          1130
14998 1490.5454853.
                                                   10.205.13.1
                                                                                         142 Server Greeting
                                                                                                                   Error
15041 1505.1083747...
                        10.205.13.2
                                                   10.205.13.1
                                                                             MySQL
                                                                                         142 Server Greeting
                                                                                                                   Error
                                                                                                                          1130
                                                                                         142 Server Greeting
                                                                                                                   Error
                                                                                         142 Server Greeting
15735 1570.7091525...
                        10.205.13.2
10.205.13.2
                                                   10.205.13.1
                                                                                                                   Error
                                                                                                                          1130
16238 1676.6154216...
                                                                                         171 Server Greeting
                                                                                                                   proto=10 vei
                                                                                              Response
16244 1676.6168371... 10.205.13.1
16246 1676.6180925... 10.205.13.2
                                                  10.205.13.2
10.205.13.1
                                                                            MySQL
MySQL
                                                                                         105 Request Query
150 Response TABULAR Response
```

```
Frame 16240: 280 bytes on wire (2240 bits), 280 bytes captured (2240 bits) on interface any, id 0
Linux cooked capture v1
Internet Protocol Version 4, Src: 10.205.13.1, Dst: 10.205.13.2
Transmission Control Protocol, Src Port: 59934, Dst Port: 3306, Seq: 1, Ack: 104, Len: 212
MySOL Protocol
```

```
0a cd 0d 02 ea
0030
0040
                       d0 00 00 01
                                           84 a6 ff 20 00 00 00 01
        00 00 00 00 00 00 00 00
74 65 73 74 00 14 0a fc
                                                                                             test
                                           1e fc
6e 61
7f 03
65 6e
                                                            79 6a 02
76 65 5f
                         9f 0a
                                 59 30
                                                                                    · p · · Y0
                                                                                |\mysql_ native_p
assword --_os Li
        7c 5c 6d 79 73 71
61 73 73 77 6f 72
                                                   74 69
5f 6f
                                 6c 5f
                                                                        70
                                                                                assword --_os-Li
nux-_cli ent_name
-libmari adb
                                 64 00
                                                            73 05
        6e 75 78 0c 5f 63 6c 69
0a 6c 69 62 6d 61 72 69
                                                    74
                                                       5f
                                                            6e 61 6d 65
                                           61 64
                                                                                  libmari adb _pid
                                 5f 63
                                           6c 69
32 2e
                                                            74 5f
                                                                                9587 _c lient_ve
rsion 3. 2.6 _pla
        04 39 35 38 37 0f
                                                    65 6e
                                                                    76 65
                                                                70 6c 61
70 72 6f
71 6c 0c
        72 73 69 6f
                         6e 05
                                 33 2e
                                                    36 09
        74 66 6f 72 6d 06 78 38
67 72 61 6d 5f 6e 61 6d
                                           36 5f
                                                            0с
73
                                                                                tform x8 6_64 pro
                                                    36 34
                                                                                gram_nam e·mysql
        5f 73 65 72 76 65 72 5f
                                           68 6f
                                                    73 74 0b 31 30 2e
                                                                                _server_ host 10.
```

## 4) Je capture avec wireshark la transmission:

On peut voir que tout passe en clair, comme lors de cette connection avec l'utilisateur profdeMath et sont mot de passe 'test'. La sécurité est innexistante.

5)

Je me suis renseigné sur le fonctionnement des de la connexion chiffré ssl , malheureusement a cause de la reconfiguration du RPI j'ai perdu du temps et je n'ai pas pu commencé la parti 3.