

Basic MariaDB

1. How to install MariaDB

Step1: Go to google chrome and search “Mariadb download”

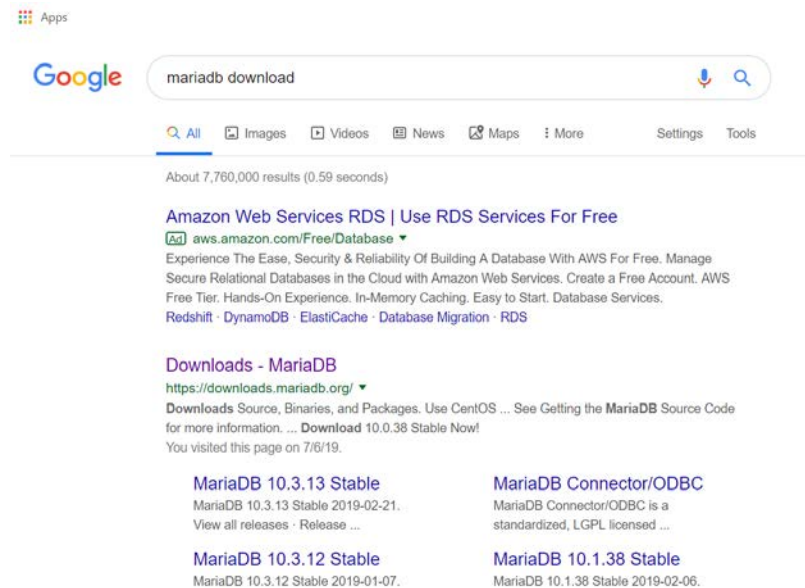


Figure1

Step2: Click on second webpage “Downloads-MariaDB”

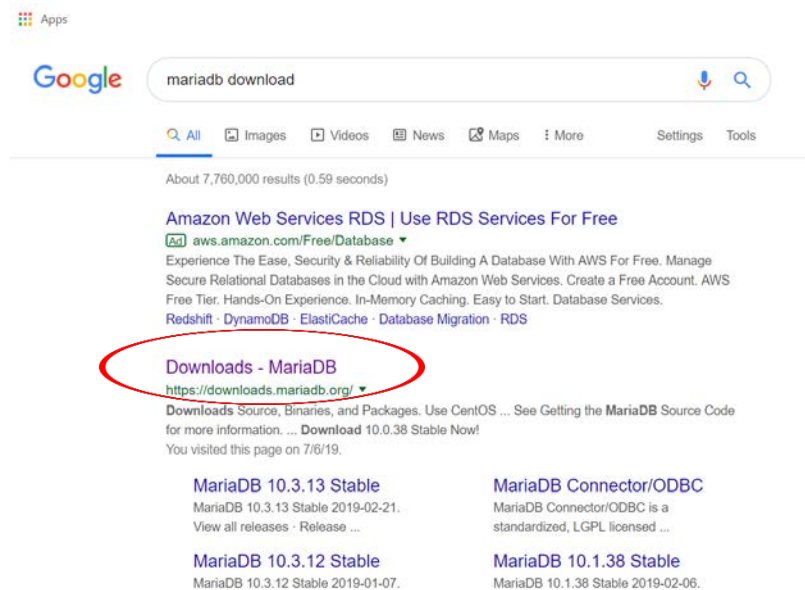


Figure2

Step3: Now, you are in Mariadb website

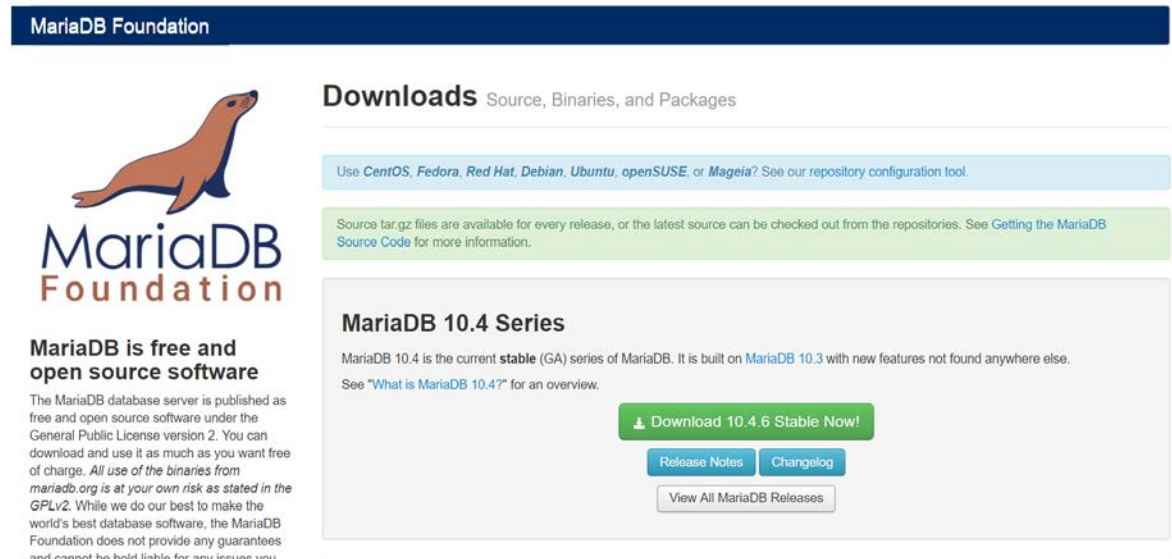


Figure3

Step3.1: Scroll down, you have to download Mariadb 10.2 Series. Then, click for download it.

different kinds of guarantees based on the support contract you purchase from them. If you are a customer of any of the MariaDB support providers, please use the certified binaries they have provided you.

If you have a Red Hat or SUSE subscription and you install the MariaDB binaries from your Linux distribution vendor, then your current contract may also cover MariaDB.

If you run a mission critical database, please make sure you have some kind of support relationship with any of the MariaDB support providers.



Figure4

Step3.2: Choose maraidb-10.2.25-win64.msi (It depends on how many bits in your computer-64 bits or 86bits?) Note: you can check it by go to start, search for system and then, check system type.

The MariaDB database server is published as free and open source software under the General Public License version 2. You can download and use it as much as you want free of charge. All use of the binaries from mariadb.org is at your own risk as stated in the GPLv2. While we do our best to make the world's best database software, the MariaDB Foundation does not provide any guarantees and cannot be held liable for any issues you may encounter.

The MariaDB Foundation does not provide any help or support services if you run into troubles while using MariaDB. Support and guarantees are available on commercial terms from multiple [MariaDB vendors](#). There are many resources you can use to [learn](#) MariaDB and support yourself or get peer support online.

Supported and certified binaries available from commercial vendors

There multiple MariaDB vendors that provide different kinds of guarantees based on the support contract you purchase from them. If you are a customer of any of the MariaDB support providers, please use the certified binaries they have provided you.

If you have a Red Hat or SUSE subscription

File Name	Type	OS / CPU	Size	Meta
mariadb-10.2.25.tar.gz	source tar.gz file	Source	72.0 MB	Checksum Instructions
Galera 25.3.26 source and packages				
For best results with RPM and DEB packages, use the Repository Configuration Tool .				
mariadb-10.2.25-winx64-debugsymbols.zip	ZIP file	Windows x86_64	131.1 MB	Checksum Instructions
mariadb-10.2.25-winx64.zip	ZIP file	Windows x86_64	65.0 MB	Checksum Instructions
mariadb-10.2.25-winx64.msi	MSI Package	Windows x86_64	52.7 MB	Checksum Instructions
mariadb-10.2.25-winx86.zip	ZIP file	Windows x86	56.1 MB	Checksum Instructions
mariadb-10.2.25-win32-debugsymbols.zip	ZIP file	Windows x86	102.2 MB	Checksum Instructions
mariadb-10.2.25-win32.msi	MSI Package	Windows x86	47.4 MB	Checksum Instructions
mariadb-10.2.25-linux-x86_64.tar.gz	gzipped tar file	Linux x86_64	458.0 MB	Checksum Instructions
mariadb-10.2.25-linux-systemd-x86_64.tar.gz (for systems with systemd)	gzipped tar file	Linux x86_64	651.8 MB	Checksum Instructions

Want to learn more about MariaDB? Check out our [whitepapers](#).

Operating System

- ☐ DEB Package
- ☐ Generic Linux
- ☐ RPM Package
- ☐ Source Code
- ☐ Windows

Package Type

- ☐ MacOS pkg
- ☐ DEB Package
- ☐ RPM Package
- ☐ MSI Package
- ☐ ZIP file
- ☐ source tar.gz file
- ☐ source zip file
- ☐ gzipped tar file
- ☐ java source jar

Figure5

Step4: Then, install Mariadb. Click next.

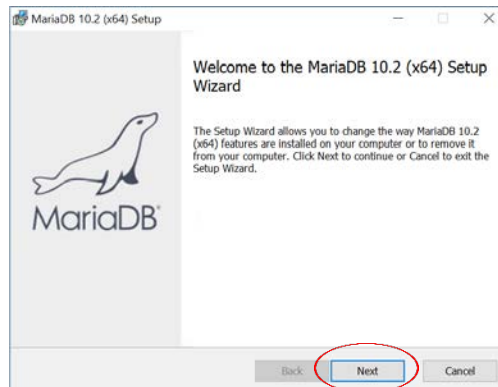


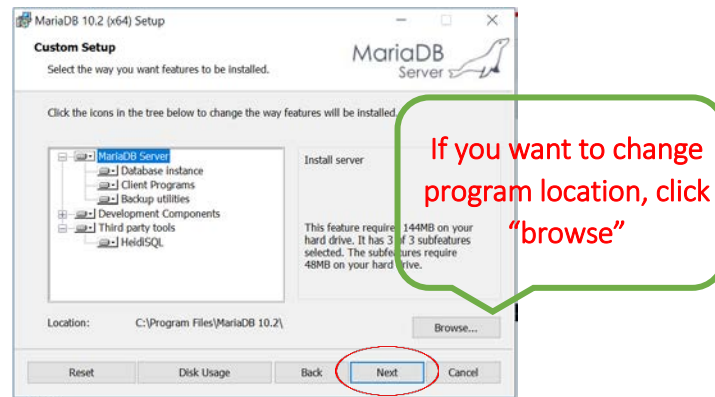
Figure6

Step5: Choose accept and click next.

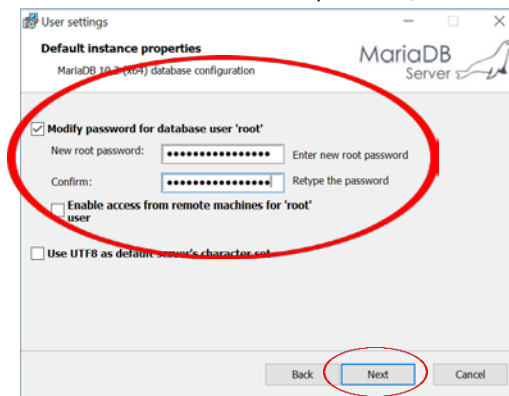


Figure7

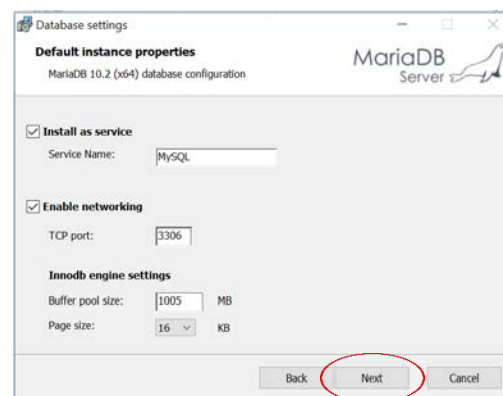
Step6: Click next.



Step7: Create a password and confirm it. (For require password every time when the user want to access to Mariadb) Then, click next.



Step8: Click next.



Step9: Click next.

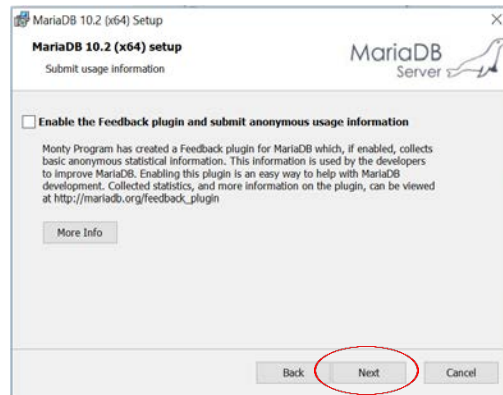


Figure11

Step10: Now, you are already finish Mariadb installation.

2. How to use Mariadb in basic

2.1 Show data in database

Step1: Open Mariadb. Choose “MySQL Client (MariaDB 10.2 (x64))”

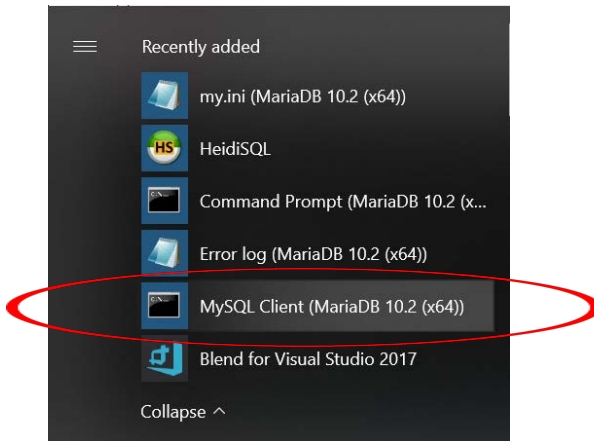


Figure12

Step2: Enter your password (you set it when installation)

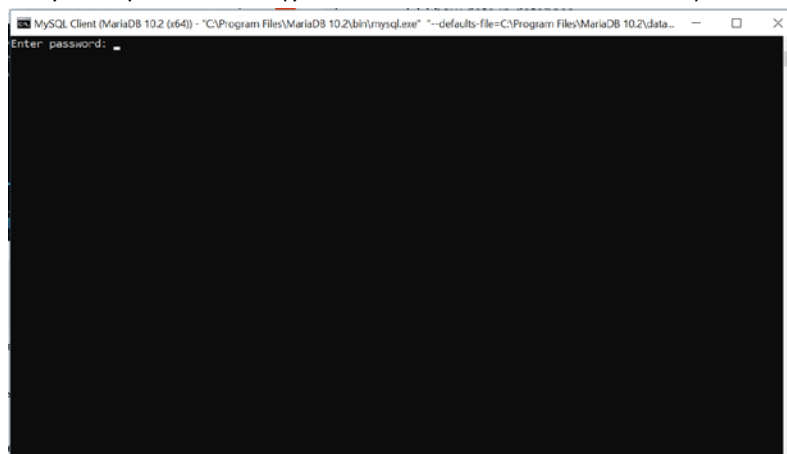


Figure13

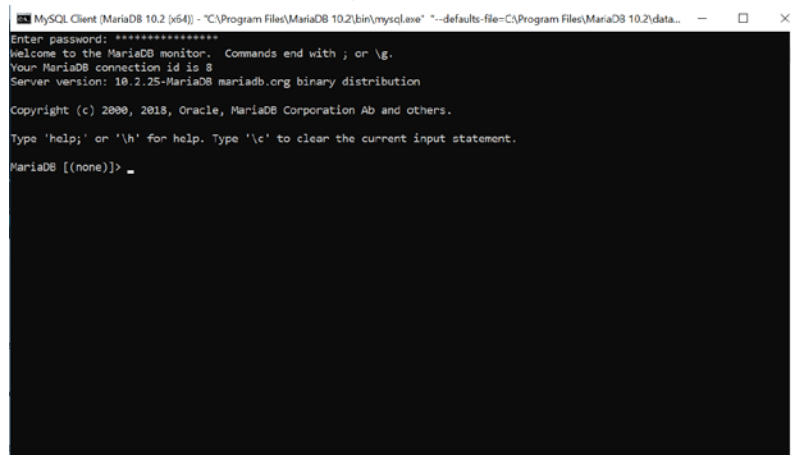
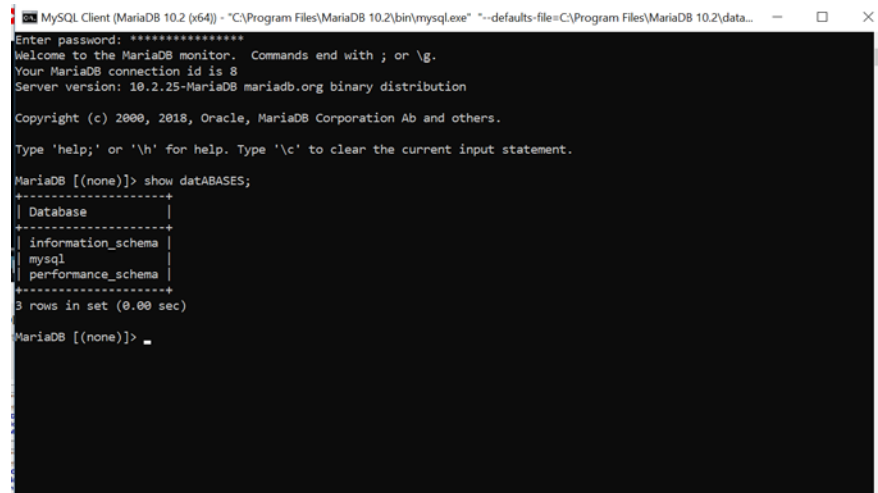


Figure13.1

Step3: Use command “**show datABASES;**” for shoe database now and check how many database in folder now.



```
MySQL Client (MariaDB 10.2 (x64)) - "C:\Program Files\MariaDB 10.2\bin\mysql.exe" --defaults-file=C:\Program Files\MariaDB 10.2\data...
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.2.25-MariaDB mariadb.org binary distribution

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)]> show datABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql      |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]>
```

Figure14

Step4: Now, you will see there are 3 folder in database.

2.2 Create database and create table in database

Step1: Go to the Mariadb folder location for checking folder (C:\Program Files\MariaDB 10.2\data) then, you will see what folder are there.

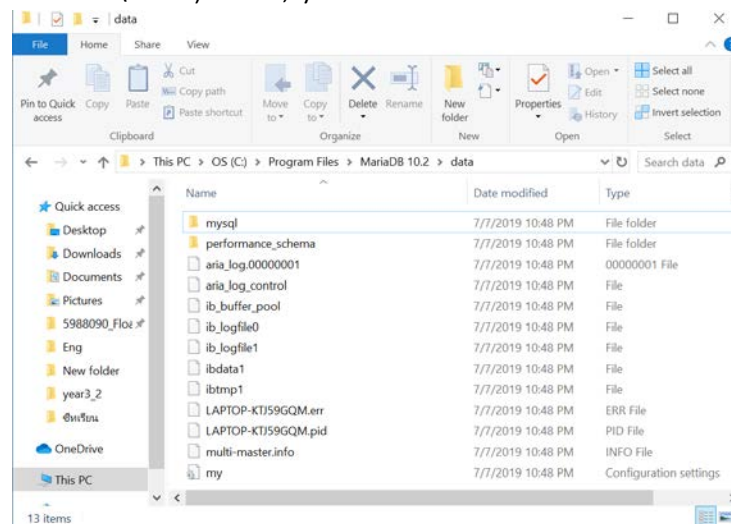


Figure15

Step2: Back to Mariadb MySQL Client and use command” **create table example;**”

```

MySQL Client (MariaDB 10.2 (x64)) - C:\Program Files\MariaDB 10.2\bin\mysql.exe
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.2.25-MariaDB mariadb.org binary distribution

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)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]> create database example;
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]>

```

Figure16

Note: command structure

create	database	name
command		To create folder name

Step3: Go to the Mariadb folder location for checking that Mariadb already create database folder name “**example**”

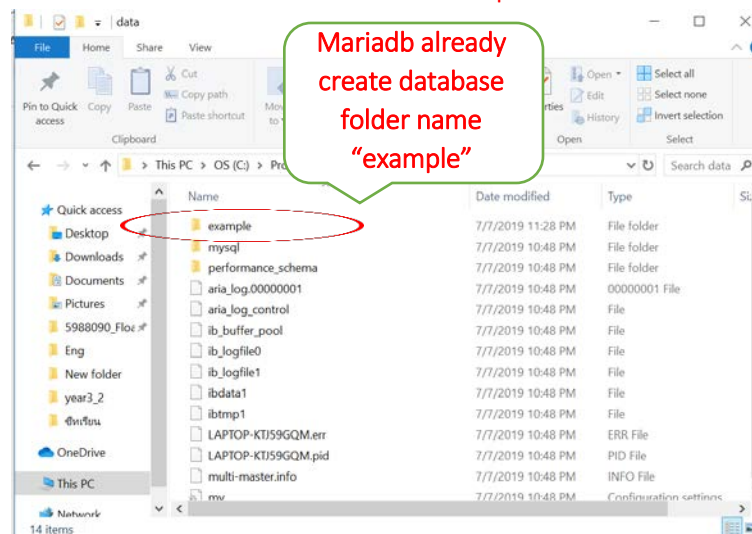


Figure17

Step4: Back to Mariadb MySQL Client and use command” **create example;**” for telling Mariadb that you want to use example folder.


```

MySQL Client (MariaDB 10.2 (x64)) - "C:\Program Files\MariaDB 10.2\bin\mysql.exe" --defaults-file=C:\Program Files\MariaDB 10.2\data...
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.2.25-MariaDB mariadb.org binary distribution

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)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]> create database example;
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> use example;
Database changed
MariaDB [example]>

```

Figure18

Step5: Use Command “create table test (id int);” for create table

```

MySQL Client (MariaDB 10.2 (x64)) - "C:\Program Files\MariaDB 10.2\bin\mysql.exe" --defaults-file=C:\Program Files\MariaDB 10.2\data...
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.2.25-MariaDB mariadb.org binary distribution

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)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

MariaDB [(none)]> create database example;
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> use example;
Database changed
MariaDB [example]> create table test(id int);
Query OK, 0 rows affected (0.08 sec)

MariaDB [example]>

```

Figure19

Note: command structure

create	table	test	(id int)
command	to create table	table name	Inside table name, there are id in int data type

Step6: Go to the Mariadb folder location for checking that Mariadb already create table database in folder name “example”

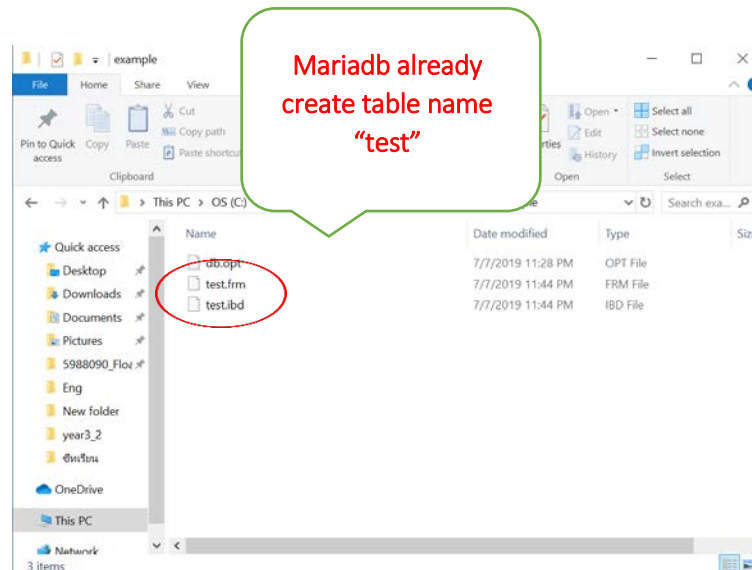


Figure20

Step7: Open “HeidiSQL” (HeidiSQL come with Mariadb installation so, you don’t need to download)

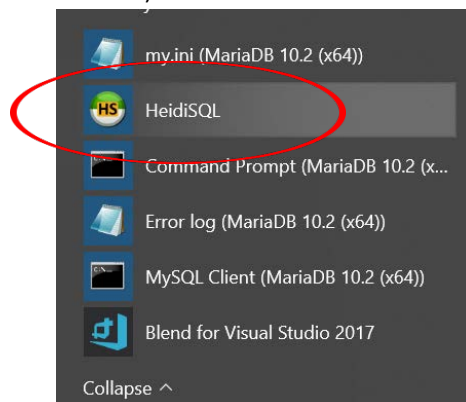


Figure21

Step8: click new for create new session database, put your password then, click open.

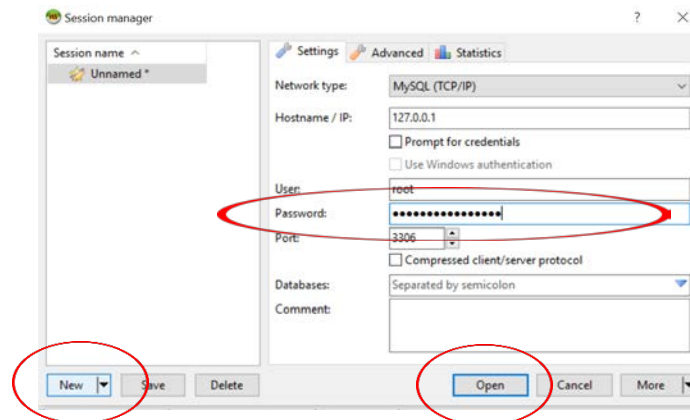


Figure22

Step9: Go to example folder and click test. Now you already have a table name test.

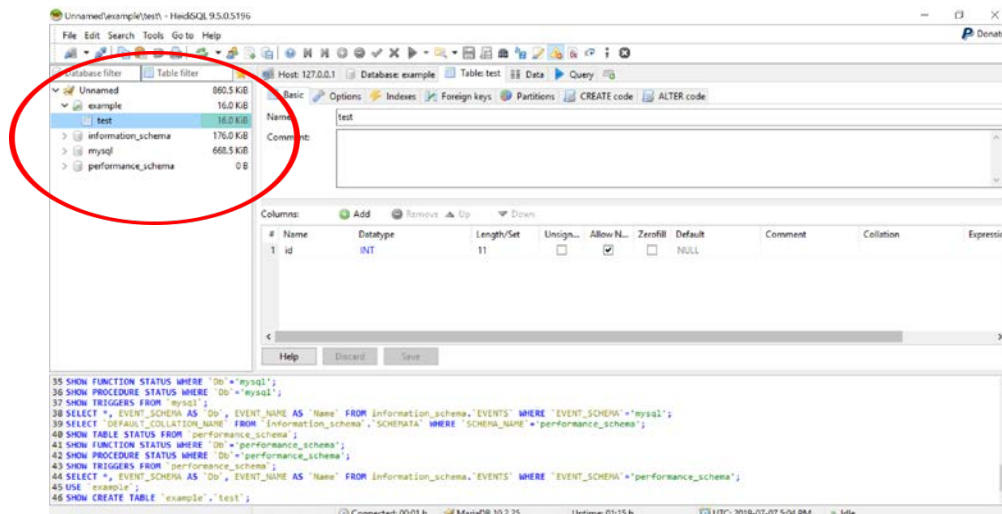


Figure23

2.3 Grant select permission on Table

Step1: use command
“**show databases;**”
for checking
database.

Step3: use command
“**use example;**” and
“**show tables;**” for
indicate to use
example folder and
look the table that
was created in
example.

Step5: exit from
database and login
again for selecting
database.

Step7: use command
“**Select * from test;**”
for looking data
inside test table.

Step2: use command “**CREATE user**
‘tb’@‘localhost’ identified by ‘123’;”
for set password before select
database.

Step4: use command “**GRANT Select**
ON example.test to ‘tb’@‘localhost’;”
for to ask for permission on test table.

Step6: check data in database by using
command “**show datABASES;**” “**use**
example” “**show tables;**”

```
MySQL Client (MariaDB 10.2 (x64)) - mysql -u tb -p
Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> use example;
Database changed
MariaDB [example]> create table test(id int);
Query OK, 0 rows affected (0.00 sec)

MariaDB [example]> create database TB;
Query OK, 1 row affected (0.01 sec)

MariaDB [example]> show databases;
+-----+
| Database |
+-----+
| example |
| information_schema |
| mysql |
| performance_schema |
| tb |
+-----+
5 rows in set (0.00 sec)

MariaDB [example]> CREATE user 'tb'@'localhost' identified by '123';
Query OK, 0 rows affected (0.00 sec)

MariaDB [example]> use example;
Database changed
MariaDB [example]> show tables;
+-----+
| Tables_in_example |
+-----+
| test |
+-----+
1 row in set (0.00 sec)

MariaDB [example]> GRANT Select ON example.test to 'tb'@'localhost';
Query OK, 0 rows affected (0.00 sec)

MariaDB [example]> exit
Bye

C:\Program Files\MariaDB 10.2\bin>mysql -u tb -p
Enter password: *****
ERROR 1045 (28000): Access denied for user 'tb'@'localhost' (using password)

C:\Program Files\MariaDB 10.2\bin>mysql -u tb -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 11
Server version: 10.2.25-MariaDB mariadb.org binary distribution

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)]> show databases;
+-----+
| Database |
+-----+
| example |
| information_schema |
+-----+
2 rows in set (0.00 sec)

MariaDB [(none)]> use example;
Database changed
MariaDB [example]> show tables;
+-----+
| Tables_in_example |
+-----+
| test |
+-----+
1 row in set (0.00 sec)
```

Figure24

Note: in test table, there are no
data base so, it shows, empty.

2.4 Import/export data

2.4.1 Import data

The screenshot shows a MySQL Client window with the following steps and commands:

- Step1:** Check data inside database by using command `"show datABASES;"`
- Step2:** Use command `"use (database name)"` for call database that you select
- Step3:** Create table employees. Inside table, including id, name and city in varchar datatype, salary in decimal unit
- Step4:** Select table by using by using command `"select * from table name;"` for show output
- Step5:** call database that you want to import by using command `"load data infile 'file location' into table name"`
- Step6:** Select table by using by using command `"select * from table name;"` for show output

```
MySQL Client (MariaDB 10.2 (x64)) - "C:\Program Files\MariaDB 10.2\bin\...
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 21
Server version: 10.2.25-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show database;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual
that corresponds to your MariaDB server version for the right syntax to u
se near 'datABASE' at line 1
MariaDB [(none)]> show datABASES;
+-----+
| Database |
+-----+
| example  |
| information_schema |
| mysql    |
| new_database |
| performance_schema |
| tb       |
+-----+
6 rows in set (0.00 sec)

MariaDB [(none)]> use example
Database changed
MariaDB [example]> create table employees
-> (
-> id int not null primary key auto_increment,
-> name varchar(50),
-> city varchar(50),
-> salary decimal
-> );
Query OK, 0 rows affected (0.04 sec)

MariaDB [example]> select * from employees;
Empty set (0.01 sec)

MariaDB [example]> load data infile 'C:/Program Files/MariaDB 10.2/data/my
sql/employees.csv' into table employees fields terminated by ',' lines ter
minated by '\n' (name,city,salary);
Query OK, 3 rows affected, 2 warnings (0.01 sec)
Records: 3 Deleted: 0 Skipped: 0 Warnings: 2

MariaDB [example]> select * from employees;
+----+-----+-----+-----+
| id | name | city  | salary |
+----+-----+-----+-----+
| 1  | Tick | Bangkok | 1998 |
| 2  | Pan  | Japan  | 2010 |
| 3  | Hy   | Tokyo  | 2019 |
+----+-----+-----+-----+
3 rows in set (0.00 sec)
```

id	name	city	salary
1	Tick	Bangkok	1998
2	Pan	Japan	2010
3	Hy	Tokyo	2019

Figure25

Step7: Open HeidiSQL to check the output by select 'data tab'

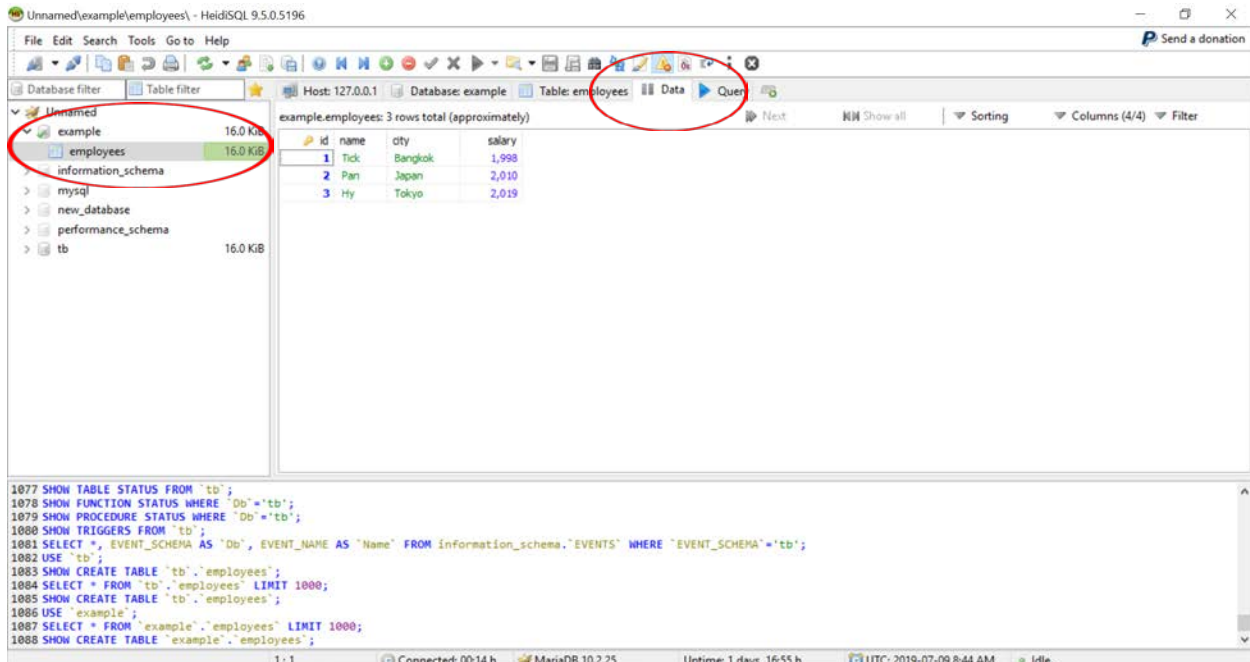


Figure26

2.4.2 Export data

Step1: Open HeidiSQL and go to file that you want to export. Then, right click and select 'Export database as SQL'

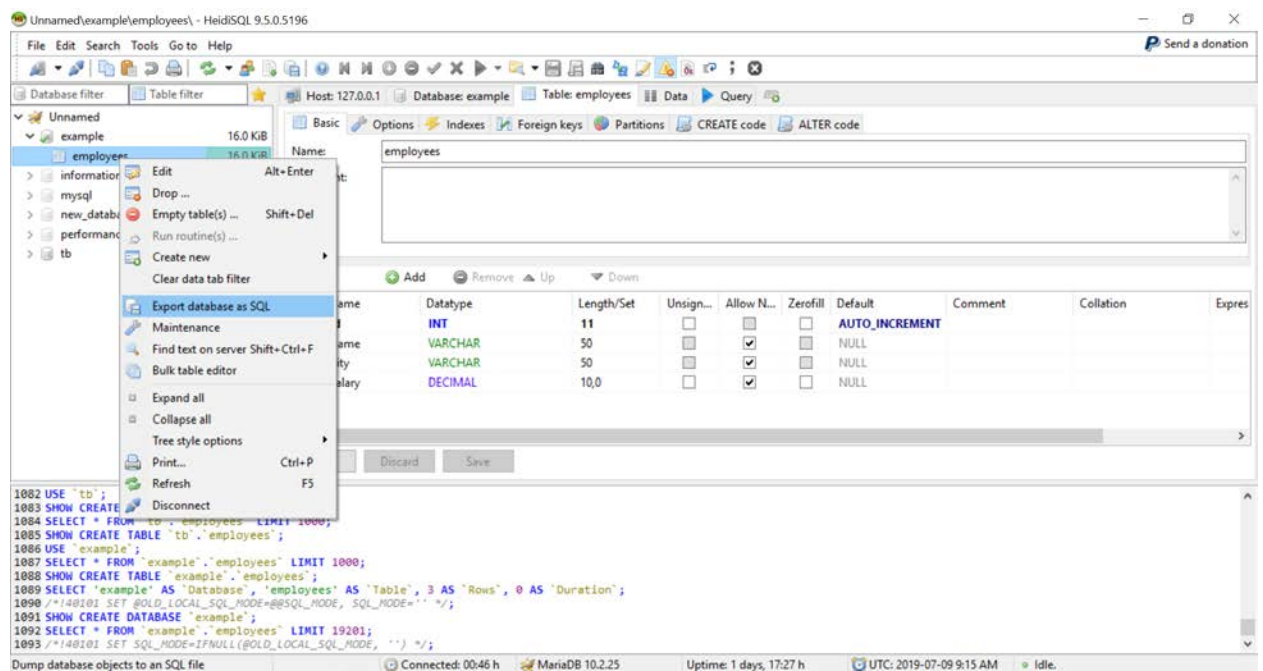


Figure27

Step2: setting as same as picture below.

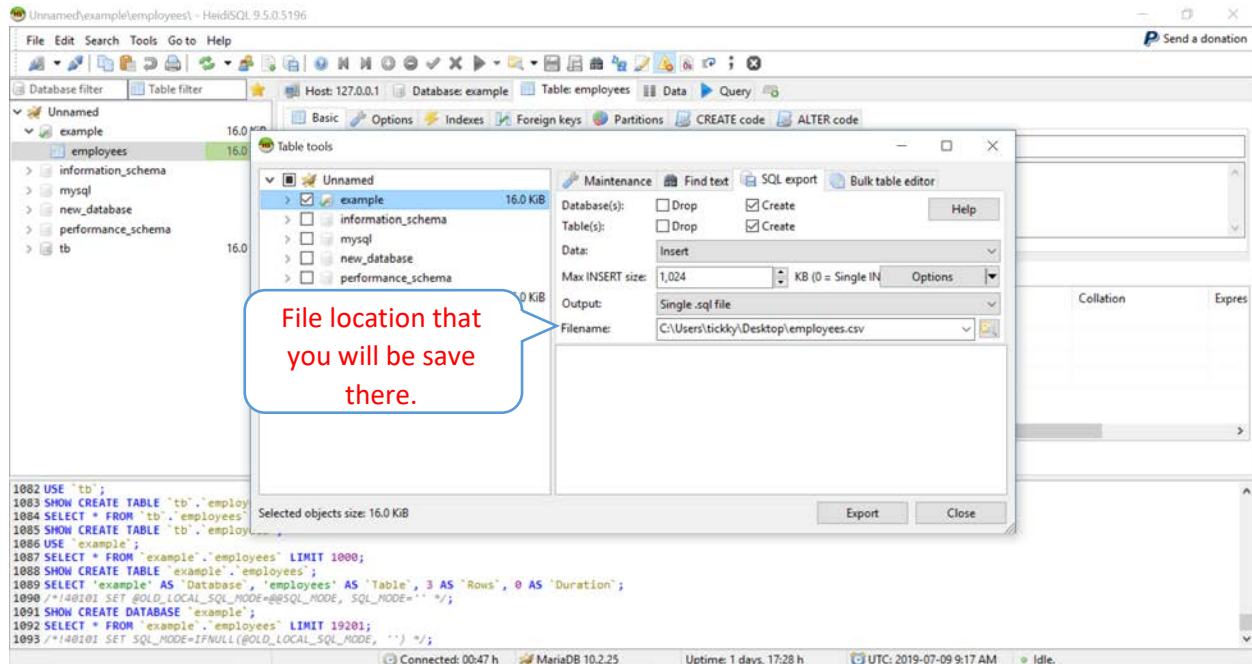


Figure28

Step3: Check output

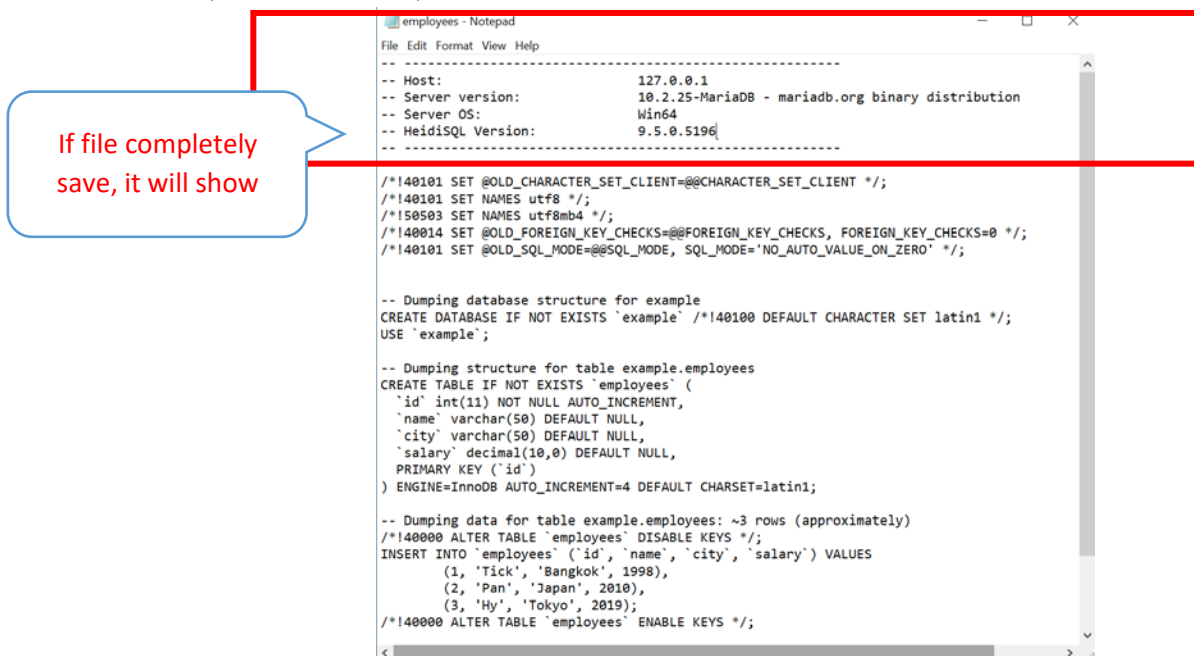


Figure29

Exercise

1. Try to database file in MariaDB.
2. Try to create table in MariaDB.
3. Create table name "Sport" in MariaDB and make the table in MariaDB like this.

ID	Sport_Name	Number_of_Player	Calories_Burn
1	Volleyball	12	340
2	Tennis	2 to 4	480
3	Football	12	660
4	Basketball	10 to 20	288
5	Badminton	2 to 4	500

4. Export data in the table into your computer.