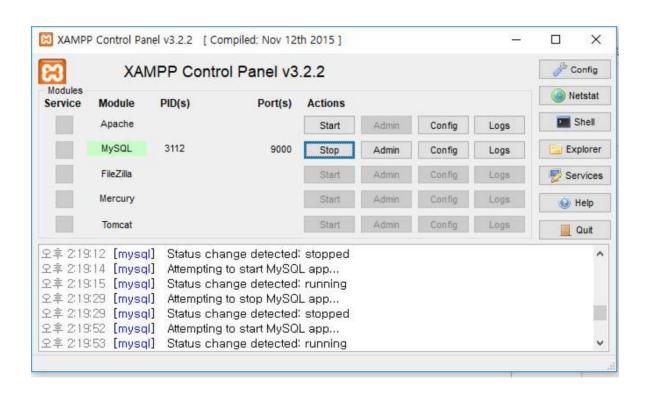
## MYSQL Basics Demo

## Make sure the server is running..



## Connecting to MySQL Server

```
C:\text{Wxampp\text{Wmysql\text{\text{\text{Wbin}>mysql}} -uroot -p -P9000} Enter password:

Welcome to the MariaDB monitor. Commands end with; or \text{\text{\text{\text{\text{\text{Wg}}}}}. Your MariaDB connection id is 8} Server version: 10.1.31-MariaDB mariadb.org binary distribution.

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

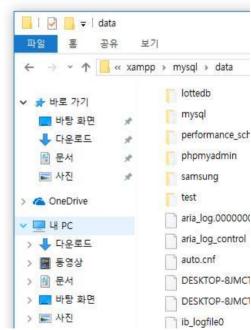
Type 'help;' or '\text{\text{\text{\text{\text{Wh}'}}} for help. Type '\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{
```

## CREATING a database

MariaDB [(none)]> CREATE DATABASE samsung; Query OK, 1 row affected (0.00 sec)

MariaDB [(none)] > SHOW DATABASES;

Database
information\_schema
lottedb
mysql
performance\_schema
phpmyadmin
samsung
test



## CREATING A TABLE

```
customers

id int(10)
lastname varchar(30)
firstname varchar(30)
phone varchar(15)
birthday date
credit_limit int(10)
```

```
MariaDB [lottedb]> CREATE TABLE customers
   -> ( id int(5), lastname VARCHAR(30),
   -> firstname VARCHAR(30), phonenumber VARCHAR(15),
   -> credit_limit int(10) );
Query OK, 0 rows affected (0.02 sec)
```

MariaDB [lottedb]> DESCRIBE customers;

	Field	   Type	<del> </del>   Null	   Key	Default	+   Exti
	id lastname firstname phonenumber	int(5) varchar(30) varchar(30) varchar(15)	YES YES YES YES YES		NULL NULL NULL NULL	

### ALTER TABLE

customers

id int(10)

lastname varchar(30)

firstname varchar(30)

phone varchar(15)

birthday date

credit\_limit int(10)

C:\Windows\system32\cmd.exe - mysql -uroot -p -P9000

MariaDB [lottedb] > ALTER TABLE customers

-> ADD birthday DATE

-> AFTER phonenumber;

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

#### MariaDB [lottedb] > DESCRIBE customers;

4		<u> </u>		L	<b> </b>	<b></b>
	Field	Туре	Null	Key	Default	Ex
	id lastname firstname phonenumber birthday credit_limit	int(5) varchar(30) varchar(30) varchar(15) date int(10)	YES YES YES YES YES YES		NULL NULL NULL NULL NULL NULL NULL	

## CREATING another table

```
employees

id INT (5)

lastname VARCHAR(10)

firstname VARCHAR(10)

salary INT (5)

birthday DATE
```

```
MariaDB [lottedb]> CREATE TABLE employees
  -> (id int(5), lastname VARCHAR(30), firstname VARCHAR(30),
  -> salary INT(10), birthday DATE);
Query OK, 0 rows affected (0.02 sec)
```

MariaDB [lottedb]> DESCRIBE employees;

Field	Type	Null	Key	Default	Extra
id lastname firstname salary birthday	int(5) varchar(30) varchar(30) int(10) date	YES YES YES YES YES YES		   NULL   NULL   NULL   NULL	

## SHOW TABLES

```
MariaDB [lottedb]> SHOW TABLES;

+------+
| Tables_in_lottedb |
+-----+
| customers |
| employees |
+-----+
2 rows in set (0.00 sec)

MariaDB [lottedb]>
```

## DROP TABLE

#### INSERTING A RECORD

id	lastname	firstname	salary	birthday
1	KIM	JASON	1000	1999.10.25
2	KIM	YUNA	2000	2001.5.15
3	KIM	JOHN	1500	1995.4.04

```
int(5)
                            YES
 id
                                         NULL
                            YES
            varchar(30)
 lastname
 firstname
             varchar(30)
                            YES
             int(10)
                            YES
 salary
                                         NULL
                            YES
 birthday
             date
                                         NULL
5 rows in set (0.01 sec)
MariaDB [lottedb] > INSERT INTO employees
   -> (id, lastname, firstname, salary, birthday)
   -> VALUES
   -> ('1', 'Kim', 'Jason', '1000', '1999-10-25')
   ->
Query OK, 1 row affected (0.00 sec)
```

## INSERTING MULTIPLE RECORDS

```
MariaDB [lottedb] > INSERT INTO employees
     -> (id, lastname, firstname, salary, birthday)
-> ('1', 'Kim', 'Yuna', '2000', '2001-5-55'), -> ('3', 'Kim', 'John', '1500', '1995-4-04'); Query OK, 2 rows affected, 1 warning (0.00 sec)
                                                                                                          firstname salary
                                                                                                                            birthday
                                                                                          lastname
                                                                                         1 KIM
                                                                                                          JASON
                                                                                                                        1000 1999.10.25
Records: 2 Duplicates: 0 Warnings: 1
                                                                                         2 KIM
                                                                                                          YUNA
                                                                                                                        2000 2001.5.15
                                                                                         3 KIM
                                                                                                          JOHN
                                                                                                                        1500 1995.4.04
```

MariaDB [lottedb] > SELECT \* FROM employees;

id	lastname	   firstname	   salary	birthday
1	Kim	Jason	1000	1999-10-25
1	Kim	Yuna	2000	0000-00-00
3	Kim	John	1500	1995-04-04

3 rows in set (0.00 sec)

## UPDATE RECORD(s) – without condition

```
MariaDB [lottedb] > UPDATE employees
    \rightarrow SET id = 2;
Query OK, 3 rows affected (0.00 sec)
Rows matched: 3 Changed: 3 Warnings: 0
MariaDB [lottedb]> SELECT * FROM employees;
  id
          lastname
                     firstname
                                  salary
                                            birthday
                                    1000
         Kim
                     Jason
                                            1999-10-25
                                    2000
                                            0000-00-00
         Kim
                     Yuna
                                            1995-04-04
                                    1500
         Kim
                     John
3 rows in sat (0 00 sac)
```

## UPDATE RECORD(s) – with condition WHERE clause

```
MariaDB [lottedb]> UPDATE employees 
-> SET id = '1'
    -> WHERE firstname = 'Jason';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [lottedb] > SELECT * FROM employees;
  id
                     firstname
                                            birthday
          lastname
                                  salary
         Kim
                                     1000
                                            1999-10-25
                     Jason
                                            0000-00-00
                     Yuna
                                     2000
         Kim
                                     1500
                                            1995-04-04
         Kim
                     John
  rows in set (0.00 sec)
```

## DELETING A RECORD without condition

#### - ALL RECORDS are DELETED

```
WariaDB [lottedb]>
WariaDB [lottedb]>
WariaDB [lottedb]> DELETE FROM employees;
Query OK, 1 row affected (0.00 sec)

WariaDB [lottedb]> SELECT * FROM employees;
Empty set (0.00 sec)

WariaDB [lottedb]>
```

## TABLE STRUCTURE

MariaDB [lottedb] > DESCRIBE employees;

	Field	Туре	   Null	Key	Default	+   Extra
	id lastname	int(5) varchar(30)	YES YES		NULL NULL	

## ADDING A KEY when CREATING A TABLE

```
MariaDB [lottedb]> CREATE TABLE employees
   -> (ID int(5) PRIMARY KEY AUTO_INCREMENT,
   -> lastname VARCHAR(30),
   -> firstname VARCHAR(30),
   -> salary int(10),
   -> birthday DATE);
Query OK, O rows affected (0.02 sec)
```

#### MariaDB [lottedb] > DESCRIBE employees;

Field	Type	Null	Key	Default	Extra
ID lastname firstname salary birthday	int(5) varchar(30) varchar(30) int(10) date	NO YES YES YES YES	PRI       	NULL NULL NULL NULL NULL	auto_increment

### ADDING A KEY in EXISTING TABLE

birthday

date

```
MariaDB [lottedb] > ALTER TABLE employees
    -> MODIFY id INT(5) PRIMARY KEY AUTO_INCREMENT;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
MariaDB [lottedb]> DESCRIBE employees;
  Field
                                          Default
              Type
                             Null
                                    Key
                                                     Extra
              int(5)
                             NO
                                    PRI
                                          NULL
                                                     auto_increment
  id
              varchar(30)
                             YES
                                          NULL
  lastname
              varchar(30)
                             YES
                                          NULL
  firstname
              int(10)
                             YES
                                          NULL
  salary
```

NULL

YES

# ADDING RECORDS with AUTO\_INCREMENT

## SQL EXERCISE #1

id	lastname	firstname	sex	salary	birthday
1	Kim	Jason	M	1000	1999.10.25
2	Park	Yuna	F	2000	2001.5.15
3	Lee	John	M	1500	1995.4.04
4	Park	Mina	F	2500	1999.10.25
5	Lee	Yuna	F	3500	1994.5.25
6	Kim	Mina	F	2000	2000.12.15
Create this	s table in <b>Ki</b>	a Database.	lame of	the table is	ilgwon
MAKE sure	e that <b>id</b> is /	AUTO_INCREM	<b>MENT</b>		